

# Interest Rate & Currency Swaps, (One Day)

This workshop explains how interest rate and foreign exchange risk can be managed using interest rate swaps, currency swaps and FX swaps. Emphasis will be placed on using the derivatives from a hedging perspective.

The course will explain how the products are priced, how the structures work and the risks that can be encountered. It is designed for staff working in the treasury and also those who work in risk and administration roles supporting the dealing team.

Training will be in a workshop format. This will include a mixture of presentation and case study material. The course is designed for up to ten staff.

Below is a summary of the workshop. The content has been placed in a logical sequence and addresses the products, mechanics, methodologies, practical uses and risks.

## Morning

**Basic financial mathematics:** This section is designed as a basic introduction to the techniques that are helpful in understanding how derivatives are used.

- Discount factors, present / future value
- Construction of the zero coupon model
- Yield curves and market conventions
- Swap spreads / government debt markets

**Generic interest rate swaps:** This will involve simple structuring and pricing for:

- Spot starts
- Forward starts
- Amortising structures

**Liability swaps:** This will introduce short and long term fixed and floating rate debt. It will address the motivations for both issuers and investors and how borrowers arrive at a cost of funding.

- New issues
- How they work
- Calculating the all-in-price for both fixed rate and floating rate liabilities

**Swap valuation:** Valuation is important for both accounting and calculating the potential cost of breakage. This section will show how this is done together with simple techniques that can be used to measure interest rate risk.

- Mark-to-market
- Basis point value

**Asset swaps:** Investors can convert fixed rate bonds to floating rate notes. This section will show how this is done and how the Libor return is determined.

- Selecting bonds
- Calculating margins
- Premium / discount structures

## Afternoon

**Foreign Exchange:** Foreign exchange markets are used by issuers to convert issuance proceeds from one currency to another. This section will introduce the following products. It will also show how short term liabilities can be swapped from one currency into another using an FX swap.

- Spot
- Cross rates
- Forward points
- Outright forwards
- FX swaps

**Pricing Medium Term Foreign Exchange:** This section will show how forward FX risks can be managed using spot transactions, FX swaps and interest rate swaps. It is an important step in understanding the next section on currency swaps.

**Using Currency Swaps:** Currency swaps can be used to hedge new issues; they allow borrowers to reduce funding costs and diversify their source of funding. This section will show how the following work and the influence the basis swap has on pricing.

- Fixed / fixed
- Fixed / floating
- Hedging new issues
- How the basis swap influences the price

## **End of workshop & review**