

Interest Rate Hedging Workshop, (Two Days)

This workshop is designed for sales teams selling interest rate derivatives. The purpose of the course is to improve technical understanding in order to facilitate derivative hedging solutions for customers. The workshop will use selected internal transactions in order to demonstrate how the bank's systems price, report and manage these trades. The course will cover the following:

- Yield curve construction & zero coupon discount factors
- How discount factors are used to price transactions
- Using swaps to hedge both assets & liabilities
- Valuation techniques & cancellations
- Market risk measures, what they are, how they work, their strengths & weaknesses
- Currency swaps and their use
- Interest rate options, pricing and the "Greeks"
- An introduction to credit default swaps, what they are, how they work & their use
- Collateral management, why it is increasingly important for over-the-counter derivatives

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. Time has been allotted for the appropriate discussion. The recommended maximum number for this workshop is 10.

Day One

Basic financial mathematics

- Discount factors, present / future value
- Construction of the zero coupon model
- Case study

Generic interest rate swaps

- Spot starts
- Interest payments Ann./SA/Q/M
- Forward starts
- Amortising/accreting/rollercoaster structures
- Case study

Liability swaps

- Hedging floating rate debt
- New issues, (overview)
- Case study

Asset swaps

- Selecting bonds
- Calculating margins
- Premium / discount structures
- Case study

Swap valuation

- Mark-to-market
- Basis point value
- Case study

Market risk measures

- Duration
- Basis point value, (DV01)
- Hedge ratios & trades

Day Two

Market risk measures cont.

- Strip hedges/stack hedges
- Convexity
- Value at risk
- Case study

Futures & FRAs

- Using futures to hedge
- Discount factors & futures
- Convexity bias
- Case study

Currency swap structures

- Fixed / fixed
- Fixed / floating
- Basis swaps
- Using currency swaps
- Credit usage
- Case study: private placement/balance sheet hedging

Interest rate options

- The models used for pricing
- What affects price
- The Greeks, delta, gamma, theta, vega
- Delta hedging and the problems
- Case study: Callable swap, extendable collar

Credit derivatives

- An introduction to credit default swaps
- How CDS are used
- Case study

Collateral & swaps

- How & why credit risk occurs with swaps
- Risk mitigation techniques
- The advantages of collateral support agreements

End of workshop & review