

Treasury Valuation & Risk Workshop, (Two Days)

This practical workshop addresses the valuation and risk management issues associated with wholesale financial products. Increasingly regulatory standards and accounting practices require appropriate independent validation of price and risk data for dealing rooms. This workshop is designed for finance, middle office and administration staff and provides an introduction to the techniques associated with product valuation and risk management.

The course will cover:

- Zero curve methodology
- Why correct valuation is important
- Problems with valuation
- The main risks in treasury
- How risk can be measured

Below is a summary of the workshop content. The content of each day has been placed in a logical sequence and emphasis will be placed on practical case study examples.

Day One

Introduction

-Short review of financial products

Review of financial mathematics

-Discount factors, present / future value / internal rate of return
-zero coupon discount factors

Accounting techniques

-Accrual
-Mark-to-market
-Similarities & differences

Product valuation

-Why accurate valuation is important
-P&L
-Market risk
-Credit exposures
-Collateralisation
-Importance of segregation of duties

Valuation methodologies

-How we value derivatives
-Market price/derived price

Problems with valuation

-Validation of data
-Market liquidity
-Credit differentials
-Independence

Product Valuation case studies:

1. Interest rate swaps

-cash flows
-present value
-treatment of floating side

2. Currency swaps

-cash flows
-present value
-problems with basis swaps

3. Interest rate futures

-variation margin

4. Fixed income securities

-Market price
-Price derived from asset swap spread
-Comparison with credit derivatives

5. Floating rate notes

-Discount margin

6. Interest rate options

-Using a Black model
-Implied volatility

7. Complex products

-Pricing models
-Validation & testing
-Problems associated with valuing risks embedded in bonds

8. Where valuation has gone wrong

-case studies where incorrect valuation has led to financial loss

Day Two

Main risks

-FX risk
-Interest rate risk
-Credit risk
-Liquidity risk

Risk reporting

-Timeliness/availability
-Understanding
-Validity of data
-Accuracy
-Reporting of excesses and action

Measuring interest rate risk

-Forward interest rates
-Basis point value
-Effect on cash flow valuation
-Interest rate risk of bonds
-Short dates/long dates
-Low coupon/high coupon
-Non-parallel shifts in yield curve
-Duration
-Simple Hedge ratios

Value at Risk

-What it is
-Why it is used
-Examples
-Strengths & weaknesses
-Importance of validation & testing
-Importance of stress testing

End of workshop and review

