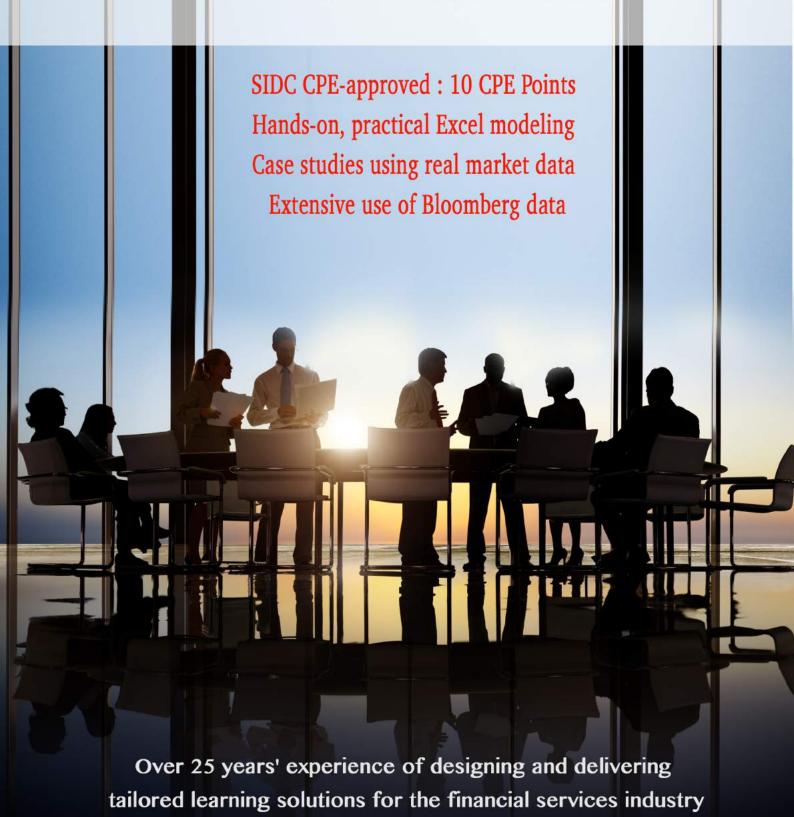


# Measuring and Hedging Interest Rate Risk



### Measuring interest rate risk – Duration

- Calculating the DV01 for a simple bond
- Duration as a measure of the "average life" of a bond
- Duration as a metric of yield sensitivity
- The drivers of duration maturity, coupon and yield
- Risk and DV01 versus duration
- Hedge ratios

# Overview of plain vanilla interest rate swaps

- · Day count conventions
- Modified following and holiday conventions
- · Adjusted and unadjusted
- · Calculating cash flows

### Overnight index swaps

- Basic structure
- Bloomberg examples
- OIS rationale
- Swap payments and P&L calculations

### Introduction to yield curves

- · Drivers of the yield curve
- Shapes of the yield curve through the economic cycle
- How the yield curve moves, twists and butterflies
- German and Malaysian curve through the economic cycle

### Modelling an interest rate swap

- What does LIBOR represent?
- Calculating cash flows and discount factors using LIBOR
- Calculating discount factors using FRAs
- Building out the curve
- Forecasting fixed leg
- · Bootstrapping the curve
- Forecasting the floating leg

# Forward starting swaps

- Non generic swaps
- Conventions for forward starting swaps
- Pricing by hedging

# Using futures to hedge interest rate risk

- Review of the futures markets and contract specifications
- Short term interest futures global examples
- 3 month KLIBOR contract

