Structured Fixed Income Solutions

Course description

Aim

The seminar aims to provide an overview of structured fixed income investments. It will cover motivation, sources of value, example transactions, as well as the associated risks and returns.

Topics

Building block concepts

- Different types of yield curve movement
- Deriving forward rates and forward prices
- The role of forwards in the investment decision

Building block products

- Forwards
- Swaps
- Options
- Constant maturity structures
- Interest rate options
- Exotic options – binary options

Risk management concepts

- Understanding the main option Greeks
  - Delta
  - Gamma
  - Vega
  - Theta
- Understanding the different types of volatility

Monetising views on the yield curve

- Curvature traders
  - CMS floaters
- Cross currency trades
  - Spread structures
- Range bound views
  - Range accruals
- Volatile markets
  - Fly notes

Framework for analysis

- Establishing a framework for analysis

Objectives

By the end of the session the participant will be able to:

Yield curve building blocks

- Outline the different ways in which interest rates could move (directional movements, steepening and flattening, range movements, volatility, cross currency movements)
- Define a forward curve and interpret its significance

Product building blocks

- Outline the main features of:
  - Constant Maturity Rates
  - Swaps
  - Caps. Floors, Swaptions
  - Binary options

Risk management concepts

- Define and interpret the main risk metrics associated with fixed income solutions
  - Delta
  - Vega
  - Correlation
- Define the main types of volatility and how they are related
  - Historical
  - Implied
  - Historic implied
  - Actual / spot / future
  - Seasonal
  - Forward
  - Normalised

- Explain why implied volatility determined the price of an option and future volatility is a reflection of the value of an option

Steepening / flattening

- Describe the main features, relative merits and risks of CMS floaters

Cross currency trades

- Describe the main features, relative merits and risks of Atlantic Spread Notes

Volatility trades

- Describe the main features, relative merits and risks of Fly Notes

Range trades

- Describe the main features, relative merits and risks of Range Accrual Notes

Analysing market structures

- Develop a framework to be able to analyse a structured solution
    - What investment restrictions exist?
    - What is the desired cashflow?
    - What is the view on the market that is trying to be expressed? (direction, volatility, timing)
    - What is the attitude to risk? (capital guarantee vs. enhanced yield vs. loss of principal)
    - Has the universe of risks for a particular structure been identified?
    - Do current conditions suggest a favourable entry point?
    - Have extreme market movements been considered?
    - Is there any particular tax or accounting issues that need to be addressed?

Is this the right course for you?

In order to get the most out of this course you should be able to answer the following questions:

1. What is the difference between a spot and a forward contract?
2. What are the basic features of a swap structure?
3. What is the difference between a call and a put option?
4. What are the main principles of option valuation?

This course is not for you if you know the answer to the following questions:

1. Why is a forward rate a breakeven rate?
2. What are the different ways to interpret a delta value?
3. Why is it possible for the implied volatility of an option to change without their being an associated movement in the spot rate?
4. Under what circumstances would a CMS floater show a profit?
5. When pricing a spread option what additional market factor needs to be taken into account?
6. How is a range accrual structure engineered?

Duration

2 days