



STRUCTURED PRODUCTS & FINANCIAL ENGINEERING

THE BENEFITS AND PERILS OF FINANCIAL INNOVATION



CURRICULUM

TOPIC 01 Introduction to Structured Financial Products

- The genesis of structured financial products
- The case for and against structured financial products
- The key driving forces behind the development of structuring and financial innovation
- Comparative advantage in bond and loan markets - The drivers of the first interest rate swaps
- Decision tree for selection of appropriate structured products: Capital Protection, Yield Enhancement, Participation products, Leveraged products

2 Hours

TOPIC 03 Pricing Techniques for Derivatives & Structured Products

- Binomial and trinomial trees
- Monte Carlo simulation
- Closed form solutions

2 Hours

TOPIC 05 The Fundamentals of Credit Derivatives

- Credit risk framework
- The credit triangle
- Credit default swaps
- Cash flows on a credit default swap
- Using credit default swaps to take a view on changes in credit quality

2 Hours

TOPIC 07 Securitization & Collateralized Debt Obligations

- The process of securitization
- The benefits of securitization for banks and loan originators
- The R.O.S.E. securitization of NatWest Bank Insurance securitization and Catastrophe Linked bonds (CAT Bonds)
- Collateralized Debt Obligations - Their characteristics and structure
- The Waterfall Structure and rules governing the priority of payments
- Managing extreme risks: technical issues & distributions

2 Hours

Day 1

TOPIC 02 Successful Practical Applications of Structured Products & Financial Engineering

- A classic case of a structured financial transaction: The world's first ever cross currency swap between IBM and the World Bank
- Structuring a hybrid bond where principal is guaranteed by a highly rated supranational but coupons are guaranteed by the government of an emerging market economy
- Case study on pricing bonds using first principles: A Yankee Bond issue by ONGC, in which the principal was guaranteed by the Asian Development Bank and the coupons were guaranteed by the Republic of India

2 Hours

TOPIC 04 Practical Applications of Complex Structured Deals

- Practical application of how to use a complex "cross-asset barrier option" to help a client reduce their cost of hedging jet fuel, interest rate and foreign exchange risks in an integrated manner
- Practical illustration of how a major global investment bank designed a new bond issue for a sovereign issuer along with the use of asset swaps to identify market mis-pricings, thereby creating an arbitrage

2 Hours

Day 2

TOPIC 06 Complex Credit Derivatives & their Applications

- Digital or binary default swaps
- Basket default swaps
- Credit linked notes
- Credit spread options
- Applying asset swaps to create a pure credit play from a fixed rate bond
- Practical case of structuring a tax arbitrage using credit derivatives

2 Hours

TOPIC 08 Open Discussion on the Role of Collateralized Debt Obligations in the Financial Crisis of 2007-2008

- The sub-prime mortgages and their role in the start of the crisis
- What happened at Citigroup and the role of Meredith Whitney in unbundling the complex Citigroup balance sheet
- Goldman Sachs and AIG financial products The Big Short

2 Hours