

# FUNDAMENTALS OF CREDIT DERIVATIVES

## Overview

This course not only explains the basics of credit derivatives but also the mathematics used in the pricing of the more complex correlation structures in an understandable manner. It includes a variety of examples showing how banks, corporates, hedge funds, and asset managers use these credit derivatives for hedging or investing purposes. This course also involves an analysis of the key technical legal aspects of credit structures as well as the relevant issues relating to the ISDA documentation. It focuses not only on the bespoke products but also on the standardization of the vanilla products and the advantages of the increasing use of central counterparties.

## Target Audience

A foundation level risk-focused course for capital markets, risk, credit analysts, origination, corporate and bank treasurers, investment management and regulatory professionals who need a better understanding of the practical day to day risks involved in different types of derivatives. The risk focus of the workshop makes it complementary to product skills learned elsewhere.

## Objectives

- Learn about the key credit derivative products, including some of the more complex products such as single tranche synthetic CDOs, credit spread options and others.
- Master the key issues regarding credit derivative products and their applications.
- Analyse the risks and rewards of different structures and transactions.
- Determine the advantages and disadvantages of a number of more complex transactions.
- Gain an understanding of the legal aspects and the documentation.
- Obtain a thorough understanding of the pricing of the instruments.
- Be able to measure market risk in credit default swaps.

## COURSE CONTENTS

### Introduction and recap of basic products and applications

- Overview of market
  - Basic products descriptions
  - Q&A session
- Current market developments
  - Market size and growth
  - Instruments used
  - Central Counterparty use
- Structural changes in the Credit Derivatives market
  - Impact of new regulations
  - Risk issues
- Discussion of product range and applications
- Single name
  - The mechanics
  - Concept of a credit event
  - Payout computation
- Correlation trading
  - The impact of correlation
  - Practical computation aspects

- Current challenges facing the market
- Exercises - multiple-choice Q&A – recap on basics

### Complex Credit Derivatives

- Beyond single name products
- Credit Linked Notes - CLNs
  - The use of SPVs - Special Purpose Vehicles
  - The mechanics of the structure
  - Legal issues
- Nth Loss and Nth Default
  - Correlation impact
  - Pricing advantages
- Complex products structuring
  - Adding more credit-linked underlying
  - Increasing the number of reference entities
  - Re-allocating the risk into different tranches
- CDOs and Synthetic CDOs

- Single Tranche Synthetic CDOs.
- Credit Spread Options
- Capital Structure Arbitrage
- Index Products
  - Link with ETFs - Exchange Traded Options
  - I-Traxx and other indices
- Risk Considerations
  - Correlation volatility
  - Jump risk.

- The general standardized coupons pricing approach
- The use of Master Confirmations
- Settlement and valuation procedures
- Novation protocols
- Outstanding issues
- Necessary changes for tailor-made transactions

Case study: analyzing and correcting a single name CDS term sheet.

### User Application

- Risk management
- Trading applications
- Investment practicalities
- User rationale:
  - Line and limits management
  - Risk management
  - Capital and balance sheet
  - Trading strategies
  - Investor benefits
- Transactions for different user groups:
  - Bank,
  - Insurance company,
  - Corporates
  - Funds and hedge funds

**Case Studies:** Putting it all together: worked examples by participants.

### Legal and Documentation

- Legal environment and documentation in the credit derivatives market
- Recent developments
- ISDA CDS Standard model
- Standardization of termination dates
- Analysis of actual Credit Events
- Mechanics of the fixed coupon and upfront payment model
- Detailed analysis of 2014 Definitions
- Key differences with the 2003 Definitions
- Matrix supplement

### Pricing single obligor credit derivatives

- Examination of the pricing of single obligor credit derivatives
- Pricing links with credit spreads.
- Relationship with asset swaps and Floating Rate Notes - FRNs
- 2 main theoretical approaches
- The firm value approach.
- The reduced form approach.
- Calibration of model to market prices
- Worked example – valuing a credit default swap.

**Case study:** valuing a credit-linked note – a discussion of the correct solution.

### Pricing basket credit derivatives

- Pricing of multi-obligor credit derivatives
- A firm's value basket model
- A reduced form (copula) basket model
- Case study: valuing a first to default basket swap.
- Discussion of the correct solution
- Documentation issues
- Valuation of a Collateralized Debt Obligation - CDO
- The key role of the equity piece
- Mezzanine, senior tranches and risk issues
- Pricing issues for CDO tranche
- The correlation cascade.

Case studies: important considerations for running a credit derivative business

### End of Course & Closure.

COURSE DURATION	DELIVERY MODE	DELEGATE CLASS SIZE	COURSE FEE/PARTICIPANT
3 DAYS	In-Plant	8 (Guaranteed Minimum)	For quote, please click <a href="http://demvros.com/contact/">http://demvros.com/contact/</a>
Discount is available for class size above the minimum. Please visit <a href="http://www.demvros.com">www.demvros.com</a> or call 08056154199 or e-mail for enquiries.			