

Counterparty Credit Risk in Derivatives

A three-day workshop for credit risk, derivative and finance professionals to assess counterparty risk in derivative transactions. It imparts the skills needed to assess the types and amounts of credit exposure in the major derivative products and to mitigate risk using lessons learned from the recent crisis.

TARGET AUDIENCE

Risk managers, bankers, analysts, controllers and regulators who need to understand how derivative credit risk is measured, mitigated and accounted for in an increasingly complex world. A basic understanding of derivative product structures is required.

COURSE OBJECTIVES

Specifically, participants will be equipped to:

- Understand the various types of counterparty credit risk occurring in derivative products and repurchase agreements (repos)
- Assess in detail the counterparty credit risks in interest rate, foreign exchange, credit derivative, equity, and repo products
- Structure transactions to reduce counterparty risk and, in doing so, apply lessons learned from the current crisis
- Calculate the counterparty credit risk of a portfolio of transactions
- Analyse and reverse engineer complex derivative transactions to determine counterparty risk.

BACKGROUND

Derivative markets continue to grow in size, in product range, and in complexity. Credit risk professionals are now required to recommend and approve credit limits for derivative transactions based on a detailed understanding of each transaction. Consistent with this, the course assesses transactions in depth and considers, amongst other things:

- The cash-flows of the deal
- What underlying rates drive the risks in the transaction
- The counterparty's understanding of the risks it is assuming
- The pricing of the credit risk in the transaction
- The potential for the traders to roll a loss-making transaction or otherwise lend money
- The potential benefit from offsetting risks when combining two or more derivative transactions.

Credit departments now play a far more active role in assessing and mitigating risks as part of the approval process. For this reason, basic concepts, such as understanding how a confidence level is used and its implications for credit limits, need to be well understood. These finer points of derivative analysis, and many more, need to be mastered. This course has at its core the assessment of the credit risk of the most common derivative types. But it goes much further, covering:

- Correct uses, cash-flows, and hidden dangers of each product
- Other risks such as market, legal, operational, liquidity and reputation
- Shape of the pre-settlement credit exposure curve over time
- Numerous ways to mitigate credit risk in derivative transactions
- Credit risk in a portfolio of transactions and in complex trades.

It is understandable that many are over-awed by derivative product complexities. The course aims to demystify them and to enable participants to enter into discussions with traders on an equal footing. The course does not over-emphasise the mathematical aspect of the topic - we do not develop the Black Scholes model from first principles or use long equations with Greek symbols!! However, we do assess many option types and the related mathematical computations, but a reasonable level of numeracy will suffice for this.

CONTENT

OVERVIEW

- Differentiating derivative credit risk from other credit risk types
- Defining the six major categories of derivative credit risk
- Identifying and measuring these risks
- Contrasting credit risk and market risk.

PRODUCT ANALYSIS

FX forwards, swaps, and options

- The credit risks, risk drivers and estimation approaches
- Settlement risk: definition and risk mitigation approaches
- Warning signals such as barrier options, embedded loans and wrong-way trades

Interest rate derivatives

- Covering vanilla and structured swaps, caps, floors & swaptions
- Warning signals such as embedded loans and deferred premiums

Credit derivatives

- (a) Credit default swaps ("CDS") and (b) Replication products such as total return swaps
- Specific CDS issues such as credit event definitions, settlement methods, and documentation deficiencies
- Unwind and settlement issues arising from the "Credit Crunch"

Equity derivatives

- Product structures and the impact on credit risks
- Specific risks in equities e.g. event risk, correlation / wrong way exposures, legal and regulatory issues
- Volatility and variance swaps

Repos

- Product structure and credit risks
- Comparing repos with buy / sellbacks and secured loans.

STRUCTURING AND MANAGING EXPOSURES

Documentation

- Legal documentation, including the ISDA Master and CSA
- Credit issues arising when negotiating legal agreements
- Considerations in the event of a default

Credit mitigation

- Covering collateral, netting, early termination, cash settlement, resets, etcetera
- Understanding initial/variation margin agreements and threshold arrangements

Combining exposures

- Understanding the key issues in exposure aggregation (different maturities, offsetting exposures, etcetera) and limit management

Assessing complex transactions

- Decomposing a complex trade into its component parts
- How to handle complex trades that cannot easily be decomposed.

