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ACCOUNTING AND FINANCE | COURSE

Credit Risk Assessment, Modelling and Management

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Course content

Why Attend

This Credit Risk Assessment course gives participants a comprehensive overview of the key concepts and methodologies in understanding the drivers of credit risk, modelling tools used for the measurement of credit risk, and current best practice in credit risk management techniques.

The course focuses on the actual practice of credit risk assessment within financial institutions as well as on the quantitative and methodological tools and procedures that are at the cutting edge of measuring, mitigating and managing credit risk.

Treatment of credit risk has shifted greatly since the global financial crisis of 2008. Prior to then, it was considered almost inconceivable that major investment banks and global insurers could default and create a systemic credit and liquidity crisis. Since the crisis, there has been a universal re-thinking of most aspects of legacy risk management techniques. Financial regulators and the Basel Committee on Banking Supervision have placed significant emphasis on the need for innovative and more robust methods of modelling financial stress and the kinds of credit market deterioration that was witnessed during the crisis.

This course utilizes Excel models for credit analysis, individual calculation exercises, team activities and plenary discussion.

By the end of the course, participants will be able to:

• Identify the key elements of credit risk

• Analyze the micro-financial drivers of credit risk and macro-economic factors which impact system-wide credit risk

• Explain modelling techniques for assessing credit risk

• Demonstrate proficiency with different methods and tools for credit scoring

• Demonstrate the usage and risks of credit derivatives

• Apply collateral management techniques to credit derivatives exposures

This course is beneficial for banking personnel in all areas of credit risk. Others who will benefit include, but are not limited to, asset allocators, portfolio strategists, sovereign wealth fund managers and research staff, risk managers/controllers, private investors and senior back office personnel.

The course is also valuable for those interested in credit modelling and those engaged in compliance with all applicable regulations regarding credit risk in financial institutions.



Course content

Why Attend

- Credit risk modelling
- Assessment of credit requests
- Assessment of funding loans and credit facilities
- Compliance with all regulations regarding credit
- Management of a credit committee and risk committee

Course outline

Fundamentals of Credit Risk

- The key macro and micro financial concepts behind, and drivers of, credit risk
- Measurement of credit risk and adverse outcomes
- Assessing credit risk and default probability of loan portfolios
- Key determinants for managing credit risk:
- Probability of default (PD)
- Exposure at default (EAD)
- Loss given default (LGD)
- Credit migration and transition matrices
- Fundamental analysis of financial statements, key ratios, qualitative characteristics of the balance sheet
- Off balance sheet and contingent credit risk
- Market-based approaches, bond spreads, swap rates
- Counter party credit risk
- Credit scoring, credit risk modelling, risk profiling and assessing creditworthiness

Credit Ratings Methodologies and Application



Course content

Course outline

• Review of ratings classifications systems of the major Credit Ratings Agencies (CRAs)

• The principal credit ratings agencies – Moody's, Standard & Poor's, Fitch

• Overview of the ratings methodologies – issuer analysis, historical data, business cycles

• Commercial paper ratings

• Sovereign ratings – approach to developed markets and emerging markets

• Conflicts of interest - representing credit issuers but designed to protect credit purchasers

• Why did the CRAs perform so poorly in the rating of collateralized debt obligations (CDOs) and other derivatives?

• Ratings migration matrices – use by banks in determining credit risk value at risk (VaR)

• Impact of upgrades/downgrades on market perceptions of creditworthiness

• Dodd-Frank Act de-emphasis on reliance by financial firms on external ratings

Capital Charges and Accounting Principles

• Review of the distinction between the banking book and the trading book

• Basel III attempts to address regulatory arbitrage

• Treatment of securitizations and off-balance sheet exposures

• Available for Sale issues – impacts on liquidity, high-quality liquid assets (HQLA), rigidity of balance sheets

• Detailed examination of IFRS 9 – implementation timetable, further revisions?

• Recognition of expected losses and early warning of asset impairment

• Amortized cost – held to maturity requirements

• Fair value through other comprehensive income (FVOCI)

• Fair value through profit or loss (FVPL)



Course content

Course outline

Counter-Party Credit Risk

• Examine the various facets of credit risk which hinge on losses sustained from failure of an obligor to honour contractual obligations

• Distinguish the separate components of credit risk:

• Probability of default by obligor – how reliably can it be estimated?

• Probability of downgrade or widening credit spreads of counter party

• Recovery rate – what percentage of obligation can be recovered after default?

• Credit exposure – estimating loss magnitude in relation to capital buffers

• Determination of a credit default event, ISDA Master Agreement, Credit Support Annex

• Understand the concepts of credit rating and scoring and critical examination of how useful such techniques are for determining actual risk of default?

• New components in the Basel III framework for addressing issues related to default and deterioration of the credit quality of counter parties

• Credit Valuation Adjustment (CVA) and Debt Valuation Adjustment (DVA)

• Explanation of key concepts of Expected Exposure (EE), Expected Positive Exposure (EPE), Wrong Way Risk (WWR)

Measuring Credit Risk and Techniques for Credit Risk Modelling

• Credit Metrics, credit scoring and credit rating systems

• Quantitative modelling of credit risk using stochastic processes

• Estimating probability of default – KMV Model, distance to default techniques

• Explain how debt and equity can be understood as options on the firm

• Techniques for modeling default risk of CDO's, CMO's and other structured vehicles

• Lessons from SIVs and other off-balance sheet financing on credit risk management



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Course outline

- Adapting VaR measures to include a metric for default value at risk
- Credit Migration matrices - scaling over different time frames
- Integrating Credit VaR (CVaR) and Market VaR
- Portfolio CVaR – joint probabilities of default – copula techniques
- Techniques for estimating LGD and recovery rates

Sovereign Credit Risk

- Principal factors used to determine creditworthiness of a sovereign
- Issues relating to sovereign bonds under different jurisdictional frameworks
- Deterioration in public balance sheets –high debt/GDP ratios
- Linkage between sovereign risk and risks to local banking system
- Macro-economic drivers of ratings - global imbalances, surplus/deficit nations
- Role of sovereign Credit Default Swap (CDS) market – is it still vital or declining?
- Sovereign debt re-structuring- bail outs/bail-ins
- Protection to different stakeholders – seniority of claims, preferred status of central banks
- Collective Action Clauses (CACs)
- Sovereign domino thesis and financial contagion

Stress Testing Methods, Benefits and Limitations

- Overview of sensitivity of credit to market risk, interest rate risk, systemic risk
- Explanation of the techniques for conducting stress tests
- Back testing using historical returns
- Stress testing using hypothetical returns
- Explanation of Principal Components Analysis



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Course outline

• Sizes of historical samples – are they sufficiently large to include wide variety of conditions?

• Benefits of more loosely coupled systems as less fragile.

Interpreting Credit Related Market Data

• Monitoring government bond yields and changes to the term structure of interest rates for US dollar, euro, sterling, and yen

• Theories of the yield curve

• Liquidity premium

• Safe-haven premium

Credit spreads for investment grade and high yield instruments relative to government issue and inter-bank rates

• Over Treasuries, over bunds, over gilts

• SOFR, SONIA, ESTER, overnight indexed swap (OIS), Euro Overnight Index Average (Eonia)

• Option Adjusted Spreads (OAS)

• Credit Default Swap (CDS) rates – estimation of probabilities of default

• Measuring market sentiment – investor confidence indices, contrarian indicators

Credit Assessment and Financial Ratio Analysis

• Financial Statement Analysis

• Credit Assessment based on detailed analysis of corporate balance sheets, income statements and cash flow statements

• Impact of Corporate actions - capitalization or consolidation, rights issues

• Financial ratios - Profitability, Liquidity, Asset turnover, Gearing

• Liquidity ratios, pay-out ratios, financial stability ratios, operational gearing



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Course outline

- Dividend Policy, Return on Equity (ROE), Return on Capital Employed (ROCE)
- Earnings per share, P/E Ratios (historic and prospective)
- Dividend yield, Dividend/interest cover, Price/book
- Ratio based Methods for Determining Credit Stress and Defaults
- Altman's Z score model, KMV Model, Moody's Analytics,
- Ohlson financial distress model, Risk Metrics, McKinsey Credit Portfolio View

Managing Credit Risk and Regulatory Capital Charges for Credit Risk

- Mechanics of credit derivatives and how they can be used for hedging portfolio credit risk
- Single name credit derivatives (unfunded and funded structures)
- Basket and Tranche CDS, index based CDS
- Impact on regulatory capital from use of, and exposure to, credit derivatives
- ISDA documentation and legal framework for interest rate (IR) swaps, Credit Support Annex (CSA)
- Regulatory capital under Basel III
- New approaches to capital charges for credit risk under Basel III
- Stress testing – how to conduct stress testing with Monte Carlo Simulations

Calculating capital charges for credit exposures

- Standardized approach
- Foundation internal ratings based approach
- Advanced internal ratings based approach

Credit Value Adjustment (CVA) and collateral Management

- Definition Credit Value Adjustment (CVA)



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Course outline

- Defining credit exposure in relation to market risk impact on derivatives
- Expected positive exposure and worst-case exposure
- Nature of collateralization – ISDA treatment
- Benefits of effective collateral management
- Impact of netting and collateral on CVA
- Eligible hedging instruments – no nth to default structures
- Bilateral counter party risk and collateral
- Over-collateralized positions and risk of counter party default



Seminar dates

Available seminar dates

Live dates and pricing for Credit Risk Assessment, Modelling and Management generated from the course details page.

Date	Location	Format	Fee
14 - 18 December 2026	Frankfurt - Germany	Classroom	**€2,600.-**
18 - 22 January 2027	Istanbul - Turkey	Classroom	**€2,280.-**
15 - 19 February 2027	Cape Town - South Africa	Classroom	**€3,400.-**
15 - 19 March 2027	Barcelona - Spain	Classroom	**€3,080.-**
19 - 23 April 2027	Paris - France	Classroom	**€3,600.-**
17 - 21 May 2027	Frankfurt - Germany	Classroom	**€2,600.-**
21 - 25 June 2027	Barcelona - Spain	Classroom	**€3,080.-**
19 - 23 July 2027	Frankfurt - Germany	Classroom	**€2,600.-**
16 - 20 August 2027	Istanbul - Turkey	Classroom	**€2,280.-**
20 - 24 September 2027	Vienna - Austria	Classroom	**€3,400.-**
18 - 22 October 2027	Barcelona - Spain	Classroom	**€3,080.-**
15 - 19 November 2027	Paris - France	Classroom	**€3,600.-**
20 - 24 December 2027	Frankfurt - Germany	Classroom	**€2,600.-**

Live online option	Online delivery is available at €1,850.-.