Enterprise Risk Management

Overview

This course provides an overview of the key elements in creating and executing an effective enterprise risk management (ERM) system. The course provides the tools necessary for using risk management as a transparency-enhancing mechanism. The course will cover the essential elements required for risk-based pricing (credit, market and operational risk assessment) and will demonstrate with examples at both the senior management and technical implementation level

Learning Outcome Statements

- Essential technical and non-technical elements necessary for establishing the ERM programme "from the top" and implementing it from below
- Key line management elements related to establishing and utilizing risk-based pricing with respect to market, credit and operational risk exposures
- How to set and execute portfolio management objectives along with allocating portfolio capital
- How to utilize essential risk-transfer mechanisms including financial derivatives, credit derivatives, synthetic securitizations and operational risk insurance within an ERM framework
- Essential risk-analytic components associated with developing internal models of market, credit and operational risk that support risk-based pricing, risk-transfer and transparency
- Data concerns in respect to managing inputs to risk-analytic models as well as the control of information internal to the organization
- Key issues surrounding the management of stakeholders within the ERM environment

Key Contents

- The motivation for ERM: inside and outside
    - Outside motivations
    - Basel II, Basel III Sarbanes-Oxley and IFRS compliance issues as they relate to companies
    - Inside Motivations
    - Profitability and transparency benefits
    - Examples from the Basel III realm
- Hurdles to ERM establishment and implementation
    - High-level difficulties
    - Senior-management buy-in
    - Conglomerate nightmares
    - Merger problems/benefits

- Technical difficulties
- Getting model results for market, credit and operational risk to coincide
- Difficulties with combining model inputs
- Difficulties in combining model outputs

- Solutions and methods for overcoming hurdles
  - Coordination of business units and merger "partners"
  - Concerted methods of obtaining senior management buy-in
  - Exhibiting the benefits to ERM using the bottom line
- Corporate governance management
  - Establishing a risk-appetite, capital leverage and a desired credit rating
  - Determining the presence of internal risk management skills on-hand
  - Establishing an organisational structure
  - Overseeing risk assessment and auditing processes
  - Shaping the risk culture from the top
  - Providing organisational incentives for learning from mistakes
  - Risk-based pricing and line management
- Risk adjusted performance measurement (RAPM): a primer
  - Various RAPM measures compared and objectives defined
  - Risk-adjusted Return On Capital (RaROC)
  - Risk-adjusted-Return On Risk-Adjusted Capital (RaROROC)
  - RAPM from an individual perspective
  - RAPM from a portfolio perspective
  - RAPM using capital allocations for market, credit and operational risks
- Credit risk assessment
  - Assigning ratings via scoring
  - Basel requirements for financial institutions
  - Quantitative approaches
  - Qualitative approaches
  - Probability of Default (PD) and Probability of Event (PE) assignment
  - Scoring facilities
  - Loss Given Default (LGD) and Exposure At Default (EAD) assessment
- Expected Loss (EL) and Unexpected Loss (UL) assessment
  - EL and UL: provisioning and capital allocation for single exposures
  - EL and UL: provisioning and capital allocation for portfolio exposures
- Market risk assessment
  - Establishing and using market VaRs
  - Calculating VaR: brief expositions and examples
  - Parametric methods
  - Historical methods
  - Monte Carlo methods
  - Allocating capital in a market risk framework
  - Individual exposures
  - Portfolio-level exposures
  - Examples in Excel
  - Operational risk assessment
  - Establishing and Operational VaR (OpVaR)
  - Calculating the OpVaR
  - Parametric approaches
  - Loss distribution approaches
  - Establishing EL and UL estimates
  - Allocating provisions, insurance and capital
- Risk transfer mechanisms
  - Traditional, financial derivatives
  - Credit derivatives and more exotic products

    - Securitisations and synthetic Collateralised Debt Obligations (CDOs)
- Behaving like a fund manager in establishing objectives and targets
- Using RAPM
- Portfolio management in the entire process of making profits
- Data and IT concerns