
Credit Risk

Overview

This course aims to review both traditional and modern approaches to credit risk management in banking. The latest credit risk models such as the Asset Based Model, Neural Network Model, KMV Model are covered in this course.

Learning Outcome Statements

- Have a better understanding of basic tools of risk analysis
- Understand Basel III accords and their implications
- Understand the importance of Objective Risk Management
- Understand how obligators are rated
- Become familiar with the process of moving from ratings to default probabilities
- Understand portfolio risk analysis
- Learn about the recent credit risk measurement techniques

Key Contents

- Elements of Credit Risk Measurement
 - Financial statement analysis
 - Rating models
 - Portfolio models
 - Mean –variance analysis
 - Efficient frontier analysis
- Multiple random variable measurement process
 - Covariance
 - Correlation coefficient
 - Correlation risk
 - Correlation matrix
 - Variance of two(multiple) risk factors
 - Individual risk and portfolio risk
 - Application of matrices to calculate variance of multiple risk factors
- Lending principles
 - 5 C's of credit
 - Preliminary analysis
 - Sources of additional information
 - Credit policy
 - Credit procedures

- Basel III
 - BASEL III and its Risk Management Consequences
 - Key recommendations of BASEL III accord
 - Approaches to measure credit risk
 - Standardized Approach
 - Internal Ratings Based (IRB) Approach
 - Foundation Methodology
 - Advanced Approach
 - Basel III - Implementation challenges
- Development of ratings models and their parameters
 - Mapping Ratings to default Probability
 - Altman Z Score
 - Principal Component Analysis
 - Credit Risk Exposures & Default probability models
 - Asset based models
 - Concept of distance to default
 - Credit ratings
 - Marginal and cumulative defaults
 - Transition probabilities
 - Recovery rates
 - Bond prices, spreads, liquidity & risk premiums
- Risk Based Pricing
 - Portfolio Analysis
 - Volatilities and Correlations
 - Systematic and Non-systematic risk
 - Stress Testing
 - Loss distribution
 - Expected & unexpected loss
 - Economic Capital & Regulatory Capital
 - Performance Attribution & Component loss analysis
 - Marginal Analysis