
Liquidity Risk

Overview

This course provides a detailed introduction to the measurement and management of liquidity risk. The fundamentals of a liquidity risk management framework are discussed in the context of contemporary regulatory requirements. Further, the course throws light on the effects of liquidity squeezes and the availability of risk capital in the broad market.

Learning Outcome Statements

- The effects of liquidity risk on securities pricing and funding
- The challenges of building a successful framework for liquidity risk management
- The regulatory requirements for liquidity
- Effective liquidity stress testing and contingency planning
- The techniques for modeling liquidity risk within a treasury framework

Key Contents

- Understanding the Nature of Liquidity Risk
 - The universe of investable instruments
 - Pools of liquidity and benchmark securities, off the run and illiquids
 - Normal market sizes, bid-offer, block trades
 - Repo and the funding of illiquid instruments
 - Liquidation and "fire-sales"
 - Liquidity risk in banking, securities trading and insurance
- Securities Pricing in the Presence of Illiquidity
 - Random walks and the assumption of continuous trading
 - Gap risk
 - The effect of jumps on the pricing framework
 - Risk premiums and risk neutrality
 - Impact on derivatives pricing and mark to market
- Building a Framework for Liquidity Management
 - Mismatch approach
 - Foreign currency liquidity management
 - Internal controls for liquidity risk management

- stress testing
 - scenario analysis
- Double default and the analysis of collateralized transactions
- Basel and liquidity risk
- New stresses and rules post credit crunch
- Contingent Liquidity Risk
 - The need for contingency planning
 - Written contingency plans
 - Crisis management plans for assets
 - Crisis management plans for liabilities
 - Internal and external communications
 - Other crisis management issues
- Liquidity Stress Testing
 - Why stress test liquidity?
 - Empiricism versus rocket science
 - General considerations
 - Current stress test priorities
 - Assumption sensitivity
 - Additional considerations
- Liquidity Risk in the Treasury Framework
 - Metrics and measures of liquidity risk
 - Liquidity gap analysis and the bank's liquidity profile
 - Expected and unexpected loss analysis in the presence of illiquidity
 - Liquidity management policy
 - Regulatory requirements for liquidity management
 - The use of conduits
 - Contingent liquidity
- Measuring Market Risk: Liquidity-Adjusted Value-at-Risk
 - Definitions
 - Using liquidity-adjusted VAR to manage risk
 - Limitations of standard VAR measures to assess liquidity
- Systemic Changes in Liquidity and Volatility
 - Risk capital and illiquidity
 - The effect of VAR models on liquidity cycles
 - Liquidity and volatility
 - Predicting volatility changes: GARCH models
 - The perspective from implied volatility
 - Implied probability distribution and tail risk