SalmonThrust

Financial Training for Investment Professionals

Basel III – Liquidity Risk Management for Risk Professionals

3 Days

COURSE OVERVIEW

The market turmoil that began in mid 2007 has served to highlight the importance of effective liquidity management. Recently The Basel Committee on Banking Supervision has focused efforts directed to strengthening liquidity risk management. Two publications are directly relevant: *Principles for Sound Liquidity Risk Management and Supervision, September 2008*, and *International Framework for Liquidity Risk Measurement, Standards and Monitoring, December 2009*.

This three day course is a program designed for risk professionals. It begins with the basics and explains liquidity risk and the concepts and techniques used to manage liquidity. It enables teams that support liquidity risk professionals to understand their aims and constraints and it enables liquidity risk teams to understand the operations of their support teams, and brings to the forefront the benefits of a bank-wide risk culture. For liquidity risk professionals this course broadens perspectives and provides an understanding of how senior managers use the information they provide and how liquidity risk support units achieve their goals.

LEVEL

Intermediate - Advanced

WHAT WILL I GET OUT OF IT?

By the end of the programme participants understand:

- What liquidity is; how illiquidity arises
- The forms of liquidity risk
- The metrics used for liquidity risk measurement and management
- How to determine the Liquidity Coverage Ratio, Net Stable Funding Ratio and the four common metrics
- How to determine the processes and procedures used for determination of liquidity risk ratios and metrics and the impact on the IT architecture
- The strengths and limitations of the liquidity risk management, measuring and monitoring
- Liquidity risk, liquidity risk policy and liquidity management methodology options
- The regulatory mandates which support liquidity risk management
- The bank-wide importance of liquidity risk
- The scope of Basel III

WHO'S IT FOR?

- Chief Risk Officers
- Members of the Board of Directors
- CIOs
- CFOs
- Auditors
- Treasury Head
- Senior Risk Managers
- Credit, Market and Operational risk professionals who wish to understand liquidity risk in a bank-wide context

PRE-REQUISITE

- General banking knowledge and concepts
- General knowledge of Basel II
- General knowledge of financial instruments
- General knowledge of numerical methods

EXERCISES AND CASE STUDIES

- Group exercises and case studies will be undertaken in groups and a participant, different in each case, will present the findings to the class for discussion

- For individual exercises and case studies, three individuals, different in each case, will present their findings to the class for discussion

COURSE CONTENT

Day 1

Module 1: Historical Significance

- The 1970s and what banks did and did not do well
- The Basel Accords, Basel I and Basel II; the Three Pillars
- The role of the supervisor, the supervised and disclosure
- Risk based capitalization and the Capital Requirements Directive; Basel type models
- Building a stronger risk management culture
- Risk Appetite; allocating capital to support risk; Risk and Return and Shareholder Value
- Defining liquidity and liquidity risk
- Liquidity risk in context:
    - Market risk
    - Credit risk
    - Operational risk
    - Implementing Basel II

Exercise in Groups
Participants construct a matrix of departments, activities and transactions and identify and categorize expected risks across a broad spectrum of risks. A skeleton is provided and a group matrix "take away" is developed

Module 2: Principles for Sound Liquidity Risk Management

- The historic context, and the financial problems which began in mid 2007
- Liquidity risk at a more granular level. Funding liquidity risk and market liquidity risk
    - Foreign currency issues
    - Mismatches
- Liquidity risk management, what is it? What does it achieve? Where the vulnerabilities are to be found
- Early warnings, liquidity evaporates and illiquidity can be sustained. Why and how? The flight to quality, Pools of liquidity
- Liquidation fire sales
- Cash, the repo market and its importance, haircuts, a refresher
- Liquidity risk tolerances
- Contingency liquidity risk planning
- Stress and scenario testing; financial stability under stress tests, including severe and plausible scenarios.
- Systemic Risk

Exercise in Groups
Participants review liquidity cross currency matrix and determine the liquidity hotspots. Prudent actions, including entering the repo market are reviewed and resolution actions proposed. Costs are determined.

Day 1 Lunch

Module 3: Mid 2008 Financial Crises

- Ineffective management of liquidity risk
- No tools to measure liquidity risks in products, business lines and no risk tolerance assessments
- Stress testing failures; lacking contingency funding plans
- Inadequacies of asset valuations and capital adequacy provisions
- Irregularity in meeting standards; standards not continuously maintained

Case Study in Groups
Participants review the 2008/2009 crisis and build a set of monitoring tools which would have alerted the management of Lehman and Merrill Lynch earlier. Participants review the minutes of the bailout discussions and determine alternatives actions. Participants review the alternative actions given a contingency funding plan and comment on the adequacies of the valuations provided by models

Module 4: Concepts of Liquidity Risk Management

- Recent documentation: *Principles* September 2008 and *Framework* December 2009
- What is sound liquidity risk management, what is a robust liquidity risk management framework?
- Adequate levels of liquidity, cushions, high quality liquid assets; contingent liquidity risk
- What is meant by supporting a range of stress events
- A summary of the Principles; must be adhered to
- Two regulatory standards
    - Promote short term resiliency: Liquidity Coverage Ratio
    - Promote longer term resiliency: Net Stable Funding Ratio
- Minimum standards; supervisors and jurisdictional enhancements; standards met continuously
- Common metrics
    - Contractual maturity mismatch
    - Concentration of funding
    - Available unencumbered assets
    - Market related monitoring tools

Case Study Groups
Participants identify, throughout the life of various transactions the sorts of events that impact liquidity and then identify mitigation techniques and procedures. The ratios, LCR and NSFR are calculated and maintained. The common metrics are utilized. A skeleton is provided.

Day 2

Module 5: Implementation of Liquidity Coverage Ratio

- Goals and objectives
- Definition of the ratio
- The Defence: High Quality Liquid Assets; stocks of liquid assets; the test for quality; what counts?
- Monetizing as a test of liquidity
- Foreign currency implications
- Corporate bonds, covered bonds
- Fundamental and market characteristics
- Net cash outflows: what counts; conditions and scenarios; the categories
- Requirement to meet continuously, how to ensure; reporting and currencies
- Potential mismatches; how to assess
- What systematic shocks are indications of problems: idiosyncratic and market shocks
- LCR Scenarios, and scenario parameters
- Bank's conduct stress tests, including sharing and testing at far dated horizons
- Survival and correction with a 30 day horizon

Exercise in Groups
Participants define what counts as High Quality Liquid Assets, and provide justifications and reasons for inclusions and exclusions. Participants determine LCR based upon different definitions of HQLA and NCO

Module 6: Implementation of Net Stable Funding Ratio

- Goals and objectives
- Definition of the ratio
- Available Stable Funding: definition
- Categories, stable and less stable
- Composition of Asset Categories
- Required Stable Funding: definition
- Composition of Asset Categories, encumbered categories
- Composition of Asset Categories, OBS
- Requirement to meet continuously, how to ensure; reporting and currencies
- NSFR Scenarios, and scenario parameters

Exercise in Groups
Participants define what counts as Available Stable Funding, and provide justifications and reasons for inclusions and exclusions. Participants determine NSFR based upon different inclusions and exclusions.

Day 2 Lunch

Module 7: Implementation of the Common Metrics

- Objectives, definition, application and utilization
- Contractual maturity mismatches
- CMM supervisor use
- Buckets
- Concentration of Funding
- Horizon significance
- Available Unencumbered Assets (market, central bank)
- Monetization tests
- Market Related Monitoring Tools; asset prices, spreads
- Data types
- Supervisor's right to review, enhance standards and take actions

Exercise Individuals
Participants suggest and analyze examples of each metric, review the significance of horizons and review how monetization requirements can be addressed, given implicit market risks. Market data sources are reviewed and analyzed and propose ways in which it can be utilized.

Day 3

Module 8: Supervisors Role

- Policy
- Assess both the adequacy and a bank's liquidity risk management system and the levels of liquidity
- Minimum standards
- Public disclosure
- Terms upon which the supervisor can intervene
- Harmonization; standards to be applied consistently, internationally, given supervisors set jurisdictional parameters
- Increasing frequency and operational requirements
- Prompt actions

- Protecting depositors
- Enhancing the stability of the financial system
- Intraday liquidity

Exercise in Groups
Participants design regulatory reporting formats and comment on why the selections and reported items were incorporated and upon the frequency of generation. Granularity as options are to be incorporated and justified.

Module 9: The Value of Using the Standards and Metrics as Liquidity Risk Management Tools

- Limitations of ALM and traditional risk management tools
- Using the standards and the metrics
- Allocation of liquidity risk management costs
- Globalization issues
- Translating policy into management tools

Exercise in Groups
Participants show, by example, the value of the two standards and common metrics by comparing with traditional ALM and risk management tools. Participants propose a methodology for the allocation of liquidity risk management costs. Participants estimate the costs and comment on allocation requirements.

Module 10: Your Liquidity Risk IT Risk Architecture (for Non-IT Professionals)

- Computational cycle
- Processes and Procedures
- Operational requirements for cycle enhancements
- Slicing and dicing issues
- Dealing with fat tails and exceptional market conditions
- Securing your data
- Organizational issues and separation of function

Case Study Groups
Participants propose procedures for the shortening of reporting, and analyze how the operational cycles are impacted, including how personnel are affected. Participants determine how fat tails may affect liquidity and how slice and dice techniques may enhance reporting in times of stress. Participants summarize the major factors affecting the management of liquidity risk, and propose who is targeted for reporting, frequency and granularity.

Day 3 Lunch

Module 11: Presenting the Results

- Who needs to know what? Granularity
- Reporting by email, comments and reformatting; graphs
- Executive management and Board, Risk Management Department responsibilities and interaction with other departments
- Being aware is no excuse, but how do we make this easy
- Issues for systemic risk
- Policy and methodology

- Issues for Intraday liquidity risk

Exercise Individuals
Participants propose a solution for the implementation of Basel III and analyze strengths and weaknesses of the solution. All aspect of the two ratios and the common metrics are to be addressed, together with costs and implementation road maps and implementation times.

Module 12: Basel III in a Wider Context

- Absorbing shocks, improved risk management and governance, transparency and disclosures
- Micro prudential and macro prudential measures
- Capital quality and common equity. Quality also counts
- Underpinning the regime with a leverage ratio and sanity checks
- Capital buffers, conservation and countercyclical buffers
- Global liquidity standards
- Northern Rock
- Pricing Liquidity
- Corporate Governance and Board oversight