Liquidity Risk Management in Banks

Objectives

Liquidity risk was one of the main drivers of the recent credit crisis. This workshop will give an overview of the challenges of managing liquidity risk as well as recommendations to address this important risk. Participants will be equipped to:

- Review liquidity management lessons learned from the recent crisis
- Use a structured approach to assess liquidity risk management, asset and liability management and funding strategy
- Understand how banks forecast, control and stress-test their liquidity sources and uses (on and off balance sheet) and build a contingency funding plan to address stress cash outflows
- Identify banks with weak liquidity and contingency planning within the context of the bank's role within the financial system
- Assess changing regulations and supervisory guidance on the management of bank liquidity.

Content

Analytic Overview

The aim of this section is to introduce the concept of liquidity risk and explore how it affects banks' business models.

- Defining liquidity risk: funding and market liquidity
- Key drivers: asset liquidity and funding needs, funding strategy
- Perception of the relative importance of liquidity risk among bankers
- Impact of liquidity crisis: deposits, creditors and systemic issues
- Fundamental principles (Basel Principle 1): risk management framework within the overall risk management of a bank
- Inter-relationships among liquidity, credit, market, operational, legal and reputation risks
- Supervisory role: expectations and remedial actions
- **Case study**: reviewing liquidity position and liquidity risk management at a major banking institution.

Governance

The governance section aims to identify the differing sensitivities and tolerances to liquidity risk for differing bank business models, and how this affects the approach to liquidity risk management taken by individual institutions.

- Liquidity risk tolerance (Basel Principle 2) given different business models, e.g. retail and wholesale banks, multi-nationals and investment banks
- Strategies, policies and practices (Basel Principle 3)
- Liquidity costs, benefits and risks (Basel Principle 4)
- Early warning signals of unacceptable risk tolerance
- Depositor Insurance schemes; underpinning liquidity in the retail market
- Banks which failed due primarily to weak liquidity management
- **Case study**: illustration of the impact double leverage has on liquidity management in an operating company/holding company structure
- **Exercise**: costs associated with failure to adequately price for liquidity.

Asset Liquidity and Funding Needs

The aim of this section is to develop quantitative and qualitative techniques for assessing the liquidity risk of financial institutions.

Identifying and forecasting needs

- Asset and liability management goals: practical considerations
- Liquidity of assets under stressed market conditions
- Contingent liquidity obligations - securitisation, conduits and derivatives
- Stability of funding and appropriateness for asset base
- Defining minimum risk assets and liquid assets
- Key matrices to measure asset liquidity and funding needs
- Forecasting funding needs: key assumptions of asset growth, inflows and outflows, contingency funding needs
- Fair value asset pricing hierarchies (Level I, 2, 3 assets under SFAS 157 & IFRS 7)
- Collateral assessment: haircuts / margin, available collateral for access to funding, client balances, Central Bank eligibility criteria
- **Exercise**: illustration of liquidity risk in a commercial bank caused by excessive contingent liquidity exposures to special-purpose vehicles.

Stress liquidity needs

- Early warning signals: illiquidity spirals, institution specific and market wide stress scenarios
- Interaction between liquidity and other risks: market and credit risk, interest rate, legal, operational and reputation risks
- Systemic risk and impact on market and funding liquidity
- Stress-tests: key scenarios relating to business activities, products and funding sources
- Trigger events: rating changes, market disruption, trigger events in a securitisation
- **Case study**: liquidity risk in a complex banking group. This case demonstrates the volatility of a complex banking group's funding model and the consequent reliance on asset liquidity.

Funding Strategy

This section aims to demonstrate the importance of a bank's funding strategy and its critical relationship to the bank’s business model.

Asset and liability management

- Funding appropriate for the risk profile and commercial needs of the assets, products and business lines
- Issues: stability, diversity and tenor matching of funding sources
- Refinancing risk of bonds and money market funding
- Key issues: off balance sheet, derivatives, securitisation, intraday
- Gap management across tenor and currency buckets
- Cash capital techniques to fund illiquid assets and stress outflows
- Key matrices for measuring funding strategy and refinancing risk
- Forecasting funding cash-flows over different time horizons: intraday, day to day, under and over a year
- **Case study**: weak funding strategies and gap management
- Contingency funding plan and stress-testing
- Stress-testing market access, stress market outflows
- Contingency funding plan: sufficient liquidity to meet the potential demands of stress outflows
- Back up liquidity: unencumbered assets, liquidity pool, committed facilities, Central Bank’s marginal lending facilities.

Monitoring and controls

- Funding and liquidity mismatch limits across legal entities, business lines, currencies and jurisdictions
- Cumulative contractual cash-flow mismatch limits, based on risk tolerance, balance sheet size, depth of market, funding structure
- Operational management of intraday payments and settlements: due diligence.

Supervision

This section is to identify the regulatory treatment of liquidity risk from both the Basel perspective as well as new US requirements, and how approaches taken by individual national regulators within this framework may differ.

- Inter-relationship between liquidity regulation, capital adequacy and other prudential measures
- Comparison across regulatory regimes: qualitative and quantitative standards
- Liquidity risk tolerance given systemic risk: importance of bank within payment and settlement systems
- Role of deposit insurance in a liquidity crisis
- Regulatory responses to liquidity problems: guarantees, insurance, recapitalisation, bad banks
- Remedial actions: required actions from bank to strengthen liquidity risk management and contingency planning, restrictions
- Due diligence synopsis
- Basel II: pillar III disclosure requirements on liquidity
- Basel III developments: Liquidity Coverage Ratio and the Net Stable Funding Ratio
- **Exercise**: principles of calculating the Net Stable Funding ratio
- **Exercise**: examining regulatory responses and options to bank resolution in a crisis
- **Case study**: calculation of liquidity coverage ratio as defined by the Basel III accord.

Peter Chudy

Peter Chudy has recently joined Fitch Learning following an extensive career in risk management at large global banks. Mr. Chudy's course work can be tailored for the client to meet strategic initiatives and regional issues. His course range includes: Financial Institution Analysis, Corporate Credit Analysis, Real Estate, Securitization, and Regulatory & Risk Management. Mr. Chudy has a strong understanding of regulatory requirements and has had to develop and oversee projects, which met credit, market and operational risk requirements. Specialized topics include Building and Managing Teams of Risk Professionals and Managing through a Crisis.

Mr. Chudy has proficiently formed the skills of risk professionals over many years. He has developed and presented educational materials to risk, sales, and trading staff and has made presentations on strategic information to Board Members and Regulators. As Chairman of the Capital Markets Credit Analyst Society, he managed educational programs for industry professionals. His deep involvement with numerous financial crises provides interesting narratives that support course materials. Mr. Chudy has delivered training on over 12 different Fitch Learning Courses, which have covered financial institution analysis, traded products, and regulatory and risk management related to Credit, Market and Operational risks.

Prior to joining Fitch Learning, Mr. Chudy spent 12 years as a Managing Director at UBS, including the role of Chief Risk and Operating Officer of the asset manager for the SNB StabFund. He helped in establishing the fund, which provided Swiss Government support to UBS for $38 billion of global exposures related to the 2008 financial crisis. Prior to that role, he was the Global Chief Risk & Credit Officer for Real Estate and Securitization, and previously had been Chief Credit Officer for the Americas at Nomura.

Mr. Chudy holds an MS in Finance from Boston College, has earned the CFA charter, and completed the Chase Manhattan Bank's Corporate Finance Training Program. He has managed teams of professionals based in New York, London, Tokyo, and Sydney.