

Executive Summary

Korea Institute of Finance

I. Recent Experiences

The market turmoil that began in mid-2007 re-emphasized the importance of liquidity to the functioning of financial markets and the banking sector (BIS 2009). In advance of the turmoil, asset markets were buoyant and funding was readily available at low cost. The reversal in market conditions illustrated how quickly liquidity can evaporate and that illiquidity can last for an extended period of time. A credit crunch and illiquid financial markets make it hard for banks to find alternative funding sources, roll-over their debts, and mitigate maturity mismatches. So the banking system came under severe stress, and many banks struggled to maintain adequate liquidity. Unprecedented levels of liquidity support were required from central banks in order to sustain the financial system. Even with such extensive support a number of banks failed, were forced into mergers or required resolution.

II. Guidances and Recommendations

In February 2008 the Basel Committee on Banking Supervision published Liquidity Risk Management and Supervisory Challenges. And in order to account for financial market developments as well as lessons learned from the recent global financial turmoil, the Basel Committee has conducted a fundamental review of its 2000 Sound Practices for Managing Liquidity in Banking Organizations. And resulting Guidance has been significantly expanded in a number of key areas. Principle 1 is the fundamental principle for the management and supervision of liquidity risk. Principles 2 to 4 are about Governance of liquidity risk management. Principles 5 to 12 explain Measurement and management of liquidity risk. Principle 13 is about Public disclosure. Principles 14 to 17 provide guidance on the role of supervisors.

In the Turner Review, with subtitle of A regulatory response to the global banking crisis, pointed out that the way forward on liquidity risk management should reflect three considerations: First, liquidity risk has inherently systemic characteristics, with the reaction of one bank to liquidity strains capable of creating major liquidity strains for others. Second, liquidity management has become increasingly complex over time, with a widening set of potential sources of liquidity. This makes it difficult to base good liquidity regulation primarily on one or a few standard ratios. Third, at the macroeconomic and macro-prudential level, there is a tradeoff to be struck. The greater the aggregate degree of maturity transformation, the more the systemic risks.

The Geneva Report on the World Economy from International Center for Monetary and Banking Studies proposed two measures to overcome liquidity risk: The first measure is a 'mark-to-funding' accounting rule. This approach is recommending that assets should be valued and managed in a crisis, not according to the intention of the holder or the short-term vagaries of the market, but according to the capacity of the holder. The second measure to overcome liquidity risk is to impose a capital charge on it. The goal of this liquidity adjusted capital charges is to encourage banks to find long-term funding, and dissuade them from greater leverage.

There are three points in the Recommendation number 11 in the Group of 30 Report. Firstly, it recommends that base-level liquidity standards should incorporate norms for maintaining a sizable diversified mix of long-term funding and an available cushion of highly liquid unencumbered assets. Secondly, it also recommends that supervisory guidance for liquidity standards should be based on a more refined analysis of a firm's capacity to maintain ample liquidity under stress conditions, including evaluation of the quality and effectiveness of its liquidity management policies and contingency funding plan. Thirdly, it recommends that liquidity disclosure standards should complement the suggested improved disclosure practices for capital and risk profile information.

CRMG (Counterparty Risk Management Policy Group) also made recommendations in the following areas: Maximum Liquidity Outflow (MLO) stress testing, availability of unencumbered highly-liquid reserves, structural and long-term liquidity, and a more encompassing approach to liquidity management.

III. Regulation and Supervision for Sound Liquidity Risk Management in Korea

1) Crisis Prevention and Liquidity Risk

Recent events have exposed weaknesses in liquidity risk measurement and management systems at both firms and the economy level. Deficiencies include 1) insufficient holdings of liquid assets, 2) funding risky or illiquid asset portfolios with potentially volatile short-term liabilities, and 3) a lack of meaningful cash flow projections and liquidity contingency plans (FDIC 2009).

We should have a comprehensive management process for *identifying, measuring, monitoring and controlling liquidity risk*. From this point of view, liquidity risk management can be defined as the bridge between the liquidity the bank chooses to hold and the maximum it might need. Because of the critical importance to the viability of the institution, liquidity risk management should be fully integrated into

the institution's risk management processes.

2) Adoption of Bank Standards on Liquidity Risk Management

After reviewing the current systems and reflecting the characteristics of Korean financial market, the FSS produced the guidance "Bank Standards on Liquidity Risk Management" in September 2009, with a view to strengthening domestic banks' liquidity risk management and to ensuring international compatibility. The guidance contains a comprehensive treatment of liquidity risk management systems, including liquidity risk management, stress tests, and contingency funding plans. Banks are also required to assess liquidity-related costs and risks to reflect in performance evaluation and in the approval process of new products. In addition banks are to establish and operate early warning systems.

3) Supervision of Financial Institutions' FX Soundness

The maturity mismatch of banks' FX assets and liabilities is currently being addressed through the minimum FX liquidity ratio, which has been established and is being operated on a 7-day, 1-month, and 3-month basis. The current standard, however, has given rise to a question of what level efficiency can be reached during a liquidity crunch since the ratio is arrived at on the assumption that all assets would be recoverable at any given time irrespective of an asset's marketability. The plan on 'Financial Institutions' FX Soundness & Strengthened Supervision' has proposed to arrive at the liquidity ratio by reflecting the recoverable rate of FX assets.

The new 'FX Liquidity Risk Management Standards' will set mandatory guidelines on, among others, currency-specific liquidity risk management, the establishment and operations of an early warning system, estimate on capital outflow during crises, and contingency funding plans.

In order to enable institutions to respond independently to situations where FX liquidity shortages follow outflows of FX capital in times of a crisis, mandatory minimums will be set for safe FX asset holdings. For such purposes, safe FX assets is defined as government bonds rated higher than single A and deposits in the central banks of countries rated higher than single A as well as corporate bonds rated higher than single A.

FX forward transactions will thus be limited to a fixed ratio of a maximum of 125% vis-à-vis physical trade to prevent excessive FX hedging.

Current rules over mandatory reporting of foreign exchange transactions will be clarified with specific

information on reporting content, term, etc.

Financial companies' excessive asset increase and borrowing were also noted as a major culprit behind the recent crisis. To address this issue, the Basel Committee on Banking Supervision is currently reviewing the introduction of leverage ratio regulations. It was noted that similar regulations should apply to foreign asset transactions in Korea. Based on the results of the discussions of the Basel Committee and others, the FSC will specify how, what, and when to apply such regulations.

4) Derivatives Monitoring System

The FSS has completed building the Integrated Derivatives Information System with which it has commenced full systemic monitoring operations of derivative products. The completion of the new system has made it possible to closely monitor the development of derivatives market risk on a timely basis. By knowing the particular features of each transaction on a counterparty basis, the possibility of a transaction risk spreading to market systemic risk will be arrested beforehand while the degree of risk posed to market risk will be grasped by conducting stress tests and distinguishing herd behavior on particular products and counterparties.

5) Currency Crisis Early Warning System in Korea

As for the currency crisis EWS, Korea Center for International Finance (KCIF) is established on April 1, 1999 under the auspices of the Government and the Bank of Korea and began its operation. It has its own quantitative model called Fundamental-based Crisis Index Model (FCI) as well as qualitative EWS covered by three task forces including Market Monitoring Team, Market Intelligence Team and Research & Analysis Team. Every month, FCI takes macroeconomic indicators as input and reports three kinds of risk indicators: composite indicator, sector indicators, and individual indicators. Composite indicator has five levels from 'normal' to 'emergency' and each level matches a specific policy action guideline.

IV. Liquidity Pool and International Coordination

If financial crises such were at least partially caused by self-fulfilling liquidity squeezes on banks, an international lender of last resort has a positive role in overcoming a financial system's international illiquidity. The Chiang Mai Initiative Multilateralisation (CMIM) Agreement was signed on 28 December 2009, and it will take effect on 24 March 2010. With a total multilateral facility size of US\$120bil, it would provide financial support to participants through a network of currency swap transactions in order to address balance of payments and short-term liquidity difficulties.