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Managing Banking Risks in Australian and Chinese Banking Systems: Managing Banking Liquidity and Market Risks

Prof Kevin Davis

Director, Melbourne Centre for Financial Studies

The global sub-prime crisis of 2007-8 has emphasized the importance of liquidity management in banking (and other organizations) and the potentially disastrous risks which exist. The Basel Committee has issued (June 2008) its “Principles for Sound Liquidity Management and Supervision”.¹

Liquidity management involves financial institutions implementing strategies of “self-insurance” or “purchased insurance” against shortfalls of cash required to meet current and forthcoming obligations in a variety of ways. The optimal mix will reflect the relative costs incurred in using each approach and the risks associated with each.

Determining the scale of potential liquidity needs is an ongoing daily activity with a number of dimensions. These include:

- Ensuring adequate “cash” is available at customer outlets (branches, ATMs) to meet withdrawals;
- Having sufficient settlement account balances to meet overnight settlements;
- Projecting likely net withdrawals/inflows (due to maturing deposits, loan draw-downs, customer transactions etc) on future dates such that actions can be taken to ensure the availability of adequate liquidity as these dates approach. As the time horizon involved gets longer, liquidity management morphs into “funding” and capital management arrangements.

There are a range of techniques available for these purposes, but an important component is that of “stress testing”. One such test which most regulators will require is for financial institutions to demonstrate that they are able to survive a “name crisis” in which their ability to access key sources of funds dries up for a number of days.

¹ In February 2008 it published “Liquidity Risk Management and Supervisory Challenges”

Potential sources of liquidity include the following:

- Holding “cash” or near-cash assets. This is generally perceived to be expensive – because providers of funds to the institution do not adjust downwards their required rates of return sufficiently to reflect the lower risk associated with higher liquidity. As financial markets have developed, cash holdings have fallen as a form of liquidity management – although there has been clear evidence of a flight to cash (such as Central Bank deposits) during the uncertain times of the sub-prime crisis.
- Holding readily marketable securities (financial assets). The sub-prime crisis has exposed the shortcomings in such a strategy for coping with market wide liquidity crises. It involves taking on market risk (due to volatility in the market prices of those assets), with the risk of having to sell into a depressed market. In a time of crisis, when many organizations are pursuing the same strategy, the cost can be significant – and particularly so if markets freeze up as has happened during the crisis.
- Holding securities which can be pledged as collateral for short term borrowings. The repurchase (repo) market, in which securities are sold and simultaneously repurchased for delivery at a future date, has become an important tool for liquidity management of this sort.
- Having in place lines of credit or other arranged borrowing facilities. The ability to draw on a committed line of credit or overdraft facility from another institution will typically involve incurring some cost for establishment and maintenance of that facility in addition to the cost of borrowing. Another option is to have facilities in place which enable the organization to issue securities (such as commercial paper) into the capital market. In some cases this may also be achieved by having an option attached to existing securities on issue which enables the issuer to extend their maturity.
- Having at-call or short term loans outstanding to other entities which can be called to provide cash when needed. The risk here is that such loans involve counterparty risk – and calling such loans may increase the likelihood of default if there is widespread stress in the financial market. Often, such loans may be collateralized by marketable securities pledged by the borrower against the loan (such as via a loan made as a reverse repo). This reduces the risk of the borrower defaulting, but leads to potential exposure to market risk if default occurs and the value of the security has declined. Consequently, ensuring that margin requirements are continually met and the value of collateral maintained above the loan value becomes an important operational requirement.
- Having sufficient credit rating and standing with potential counterparties to be able to borrow at short notice in inter-bank markets. This is an important component of daily liquidity management in which banks with projected surpluses and deficits in their desired settlement account balances at the Central Bank trade with each other to correct those imbalances.

- For banks, the ability to access “Lender of Last Resort” loans or use discount window facilities at Central Banks provide further potential, albeit costly, sources of liquidity.

Liquidity risks can arise from specific individual products or business lines, meaning that an overall framework is required for total liquidity management. Some of these risks can arise from contingent commitments – which may be contractual or non-contractual (where the reputational costs of not meeting that commitment are sufficiently severe as to make them effectively contractual). Liquidity risks and credit counterparty risks are inherently interrelated, and liquidity risk can easily transform into solvency risk for an institution.

Some questions which financial institutions need to address in examining their liquidity management arrangements include the following:

- How is liquidity risk of new (and existing) products to be measured?
- What liquidity risk costs should be incorporated into the funding costs of products (and how do internal systems achieve this)?
- How are all potential liquidity risks (such as contingent commitments and lines of credit provided) appropriately incorporated into centralized liquidity planning and management?

For Central Banks questions which warrant attention include:

- What are the appropriate structures for liquidity support facilities which Central Banks provide to individual institutions (lender of last resort, rediscount window etc)?
- How should system liquidity management techniques be designed (such as use of securities lending v repos; allowable collateral etc)?
- Can liquidity creation outside the banking sector and based on activities such as repos and securities loans be adequately controlled by use of traditional central Banking weapons?