

Bank liquidity

What you see may not be what you get

Maintenance of liquidity is fundamental to the survival of any financial institution, yet banks provide little information on their

funding policies, writes

Graham Hand. *No Australian bank publishes the maturity structure of its assets and liabilities or the mix of funding between retail and professional sources. Banks cannot afford to be complacent about their sources of funds. Competition for retail deposits is intense, and professional investors are more conscious of the risks of committing funds to particular institutions. This article examines the issues each bank must address in its liability management and proposes that investors should be aware of the degree of funding risk acceptable to a bank, and what steps are taken to manage each unique circumstance.*



Liquidity can be defined as the availability of sufficient cash, every day and under every circumstance, to pay maturing liabilities, finance asset growth and meet all other obligations.

A classic example of a liquidity crisis that a financial institution may face occurred at the US investment bank Salomon Bros in August 1991. Following irregularities (since corrected) in Salomon's bidding for US treasury notes, there was a loss of confidence in Salomon by many counterparties. Salomon's assets fell from \$US150 billion to \$97 billion in seven weeks as its funding sources were withdrawn. The investment bank stopped issuing commercial paper, and outstandings fell from \$8 billion to only \$600 million over the same period. Half of its \$17 billion of uncommitted bank facilities was lost.

The lessons are there for all institutions. Salomon was saved by the high quality of its asset portfolio, which was used as security against borrowings. This can be contrasted to the experience at Drexell Burnham Lambert, another US investment bank,

which did not survive. Drexell had relatively poor-quality assets which could not be used as collateral.

Salomon had also embarked on a program to extend the average term of its liabilities. In 1988 Salomon had only \$ 1.3 billion of long-term debt, but had increased this to \$7.4 billion by 1991. Such bedded-down funding insulates the borrower from changes in market sentiment.

It cannot be assumed that the day-to-day pattern of funding in an institution will not be thrown into turmoil, and every institution needs a plan to cope.

Developing an appropriate funding policy

A financial institution needs a funding policy which covers:

- unexpected withdrawal of deposits;
- timing differences in the maturity pattern of assets and liabilities;
- increases in demands for loans;
- shortfalls in projected cashflows or unplanned expenditure.

The most significant risk is the unexpected withdrawal of deposits. There are several examples of severe

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losses of funds by Australian financial institutions over recent years, usually as the result of unsubstantiated rumours.

The elements of a good funding policy are revealed by the guidelines given to Australian banks by the Reserve Bank of Australia (RBA). The RBA does not have mandatory rules for liquidity as it does for capital adequacy, but expects banks to:

■ **Hold adequate levels of cash and liquefiable assets.** The correct amount of liquidity should bear some relationship to the size of the institution and likely loss of funds. A low-rated institution would carry a higher ratio of cash to total assets than a highly rated.

■ **Diversify funding sources.** The exposure to any one market should be minimised by developing sources which have a variety of geographic, maturity and investor types.

■ **Develop guaranteed standby arrangements.** Usually these require the payment of a fee, but institutions should not rely on uncommitted sources which could be withdrawn at the very time they are most needed.

■ **Maintain a stable core of deposits.** Although it can be very expensive to compete in retail markets and maintain a branch network, a stable retail core is more reliable than wholesale sources.

■ **Maintain a suitably matched maturity structure.** An institution should be able to examine its expected cashflows over time and, if necessary, correct situations where liabilities maturities are expected to significantly outweigh assets.

The RBA adds: "Liability management depends on a bank's market status, the depth of the money markets and the general liquidity situation — factors which can change rapidly."

An important element of liquidity management is a snapshot of future cashflows. Consider the following hypothetical maturity profile of a financial institution. Assets and liabilities

are grouped into their maturity bands to give a mismatch picture.

The preferred picture is for more assets than liabilities to mature in each band, to ensure that any loss of liabilities can be covered by maturing assets. The RBA expects strong positive mismatches in the short maturity bands, while small negatives can be tolerated in the longer terms (note that assets and liabilities do not balance in this table since it excludes items beyond 12 months).

In compiling such a table, a financial institution needs to make assumptions on when loans are likely to be repaid, not their contractual maturity. Capital will usually be treated as a long-term liability, and off-balance-sheet cashflows should be included. Banks need to make appropriate assumptions on the maturity of savings accounts, which in theory are at-call but in reality may be treated as long-term.

In assessing the funding between retail and professional sources, it is difficult to obtain information on Australian banks. Although the RBA *Bulletin* publishes a liability breakup by bank, the categories are too aggregated to be useful for this purpose. For example, term and at-call deposits are in one category, regardless of size or origin. It is also not possible to separate short-term and long-term wholesale sources (the latter being a more comforting liquidity source).

Ratings agencies, too, publish guidelines on the funding standards expected from different types of issuers. Banks are generally viewed favourably because of their access to liquidity support from central banks. Other borrowers may need to arrange specific back-up facilities to obtain favourable ratings for short-term issuing programs, which Standard & Poor's (S&P) refers to as confidence-sensitive.

In reviewing the funding of rated institutions, S&P recognises the varying quality of different sources of funds.

S&P rates cash and equivalents highest, followed by marketable securities (provided they can be sold quickly), committed bank lines and, finally, confidence-sensitive short-term debt.

To quote S&P: "The focus of liquidity analysis for a financial institution is its own liquidity policies and the nature of its assets and liabilities. Market confidence heavily affects a bank's ability to roll over or generate new liabilities."

Liquidity risk and interest-rate risk

It is essential to establish the difference between a liquidity risk and an interest-rate risk. Confusion of the two concepts is very common in financial literature. For example, a statement such as "the transaction was funded in the swap market" is meaningless, yet is commonly reported. Bankers who claim: "We raised five-year funding to hedge our five-year interest rate exposure," are mixing two different issues.

Consider, for example, a five-year loan repriced off the three-month bank bill rate. For maturity analysis, it should be treated as a five-year commitment. However, for measurement of interest-rate exposure, it is the repricing that is important, and it should be treated as three months.

As an illustration of an interest-rate risk, contrast the Salomon example with the problems of the US savings and loans (S&L) institutions in the early 1980s. S&Ls had lent long-term at fixed rates, funded by short-term borrowings. This was fine in the 1960s and 1970s, when long-term rates were well above short-term. However, in the early 1980s interest rates increased dramatically and the cost of funds rose while the return remained fixed.

S&Ls did not have a funding outflow because their deposits effectively carried a government guarantee. The crisis was due to the enormous interest-rate risk they had taken by exposing their earnings to rising interest rates. Of the 4,000 S&Ls in existence at the end of 1980, 843 disappeared within two years.

A liability-management problem must be identified as either a liquidity risk or an interest-rate risk. It is not possible to "fund in the swap market" because a swap cannot raise any money.

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MATURITY MISMATCH PROFILE

	Next day	2-7 days	8 days-1 month	1-3 months	6-12 months	Total
Assets	200	200	100	100	100	800
Liabilities	150	150	150	50	50	650
Net	+50	+50	-50	+50	+50	+150

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A swap can be used for an interest-rate risk but not a liquidity risk. Similarly, the interest rate on a five-year loan is only hedged by a five-year liability if the interest-rate repricing frequencies are the same. It is important that banks do not confuse maturity analysis with repricing analysis. They require completely different responses.

The importance of long-term funding

Regardless of whether the RBA or ratings agencies are monitoring the activities of an institution, it is prudent financial management to ensure a proportion of the liability base is long-term. Advantages include:

- insulation from short term deterioration in a market;
- protection from adverse news directly relating to the institution;
- ensures long-term costs are known;
- avoids the costs of continuously rolling short-term debt.

The attitude of many Australian banks to bedding down long-term funds is remarkably sanguine. Although a high proportion of lending is

long-term, including the rapidly growing housing loan portfolios, most Australian banks are infrequent users of long-term bond markets.

Banks such as the Commonwealth, National and Westpac believe their retail networks provide a long-term stable core. Issuing long-term bonds at a margin over the bank bill rate is considered too costly to justify in large volumes. ANZ is more active in bond markets, showing a willingness to pay up to the bank bill rate plus 0.4 per cent for funds out to three or five years.

The second-tier banks are keen to lengthen their liability bases, being less able to be fully confident about the reliability of their retail bases. In recent months, Macquarie Bank, Advance Bank, St George Bank and Bank of Queensland have completed modest long-term borrowing programs, at a cost of 0.50 per cent to 0.60 per cent over the bank bill rate in each case.

Although it seems expensive, it is the price to pay for a better maturity structure. However, due to their limited ability to issue large amounts in

long-term markets (where investors are particularly ratings-conscious), these banks can match only a small proportion of long-term loans with borrowings.

What the analyst should look for

Any comprehensive review of a bank must cover liquidity policy in detail. Analysts should question the maturity mismatch and why the bank is satisfied when assets have much longer maturities than liabilities. The range of funding programs, mix of funding between retail and wholesale (short-term and long-term) and extent of reliance on each market should be reviewed. Bank management should have a contingency plan if a major unexpected loss of funds occurs. And any senior bank official who confuses interest-rate risk with liquidity risk does not sufficiently appreciate the business. The maturity transformation of continuously rolling over short-term debt to fund long-term loans may be considered the role of banks. But all financial institutions need to be equipped for the day when investors look elsewhere. ■

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depend on the existence of an ethical governance structure and processes.

ESOPs can both compound and complicate conflicts of interest because shareholders' funds are commonly used to assist in the acquisition of corporate equity by employees. Conflicts are compounded when directors, as trustees for the ESOP, obtain the voting rights of the employees.

ESOPs may not only introduce a cost to shareholders through dilution of their equity, but also result in excessive operating costs in the form of employee remuneration. Evaluation of the cost/benefit to shareholders can be complex, judgmental and depend-

ent on the future performance of the participating employees.

Well designed and managed plans will, of course, produce beneficial outcomes for the shareholders, the enterprise and its employees.

However, there have some examples of employee plans designed to benefit only the top executives. In these, material amounts of shareholder wealth have been diverted to the executives, irrespective of their performance, and in some cases the corporations have failed or become seriously distressed.

These examples have adversely reflected on ESOPs and provide sound

reasons for establishing a guide to how share ownership by directors and executives might best be managed.

The establishment of an ethical governance structure becomes a matter of survival for firms which have a large proportion of employee ownership. While employee ownership can give a company a competitive advantage, it can also bring disadvantages. The disadvantages may be not only that the interests of investors are not adequately protected, so increasing the cost of capital, but that the composition of the board is subsequently weakened. There are many examples of excessive control by either executives or employees jeopardising a firm's competitive position. ■

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Richard Andrew Kennett ASIA
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Mallesons Stephen Jaques
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