

RESERVE BANK OF VANUATU

Bank Supervision Policy Guideline 3

SUPERVISION OF THE ADEQUACY OF LIQUIDITY OF BANKS

1. Banks are particularly vulnerable to sudden and unexpected demands on them for funds. Since liquidity problems in one bank can have significant implications for other banks and for the financial system as a whole, liquidity management is pivotal to a bank's operations.
2. The aim of this guideline is to ensure that all banks have sufficient liquidity to meet obligations as they fall due across a wide range of operating circumstances. The maintenance of an assured capacity to meet promptly all obligations as they fall due is fundamental to banking. It is the responsibility of a bank's management to ensure that its internal systems and controls are adequate to ensure resources are available to cover potential funds outflows.

RESPONSIBILITY FOR LIQUIDITY MANAGEMENT

3. The board of directors and management of a bank shall implement and maintain a liquidity management strategy that is appropriate for the operations of the bank to ensure that it has sufficient liquidity to meet its obligations as they fall due.
4. A bank shall adhere to its liquidity management strategy at all times and review it regularly (at least annually) to take account of changing operating circumstances.
5. A bank shall inform the Reserve Bank of Vanuatu immediately of any concerns it has about its current or future liquidity, as well as its plans to address these concerns.

LIQUIDITY MANAGEMENT STRATEGY

6. The Reserve Bank of Vanuatu will review the adequacy and appropriateness of a bank's liquidity management strategy, having regard to the bank's size and nature of operations. The bank shall consult with the Reserve Bank of Vanuatu prior to making any material changes to the liquidity management strategy.
7. A bank's liquidity management strategy shall include the following elements:
 - (a) a liquidity management policy statement approved by the board of directors or a board committee. For foreign banks, the policy statement should be approved by an appropriate senior officer from outside Vanuatu;

- (b) a system for measuring, assessing and reporting liquidity;
 - (c) procedures for managing liquidity;
 - (d) clearly defined managerial responsibilities and controls; and
 - (e) a formal contingency plan for dealing with a liquidity crisis.
8. Branches of foreign banks should identify in their policy statements where responsibility resides for monitoring the liquidity of their Vanuatu operations, and should include in the statement details of reporting arrangements to head office.
 9. A bank's liquidity management strategy shall cover both the domestic and overseas operations of the bank, as well as all related entities which have impact on the bank's liquidity. Where a bank manages liquidity on a group basis, the strategy shall cover both the bank and the group as a whole. The strategy shall address all on- and off-balance sheet activities of the bank and, where relevant, the banking group as a whole across all currencies.
 10. The Reserve Bank of Vanuatu recognizes that the scope of the liquidity management strategy may vary among banks depending on the nature and complexity of their operations. In assessing the adequacy of a bank's liquidity management strategy, the Reserve Bank of Vanuatu may need to distinguish between institutions having regard to:
 - (a) the institution's market standing – an bank's ability to borrow and deal in various markets, especially in the wholesale and inter-bank markets, depends critically on the bank's standing in those markets;
 - (b) liability diversification and volatility – a bank with a widely diversified, stable funding base is likely to be less exposed to changes in the perceptions of a narrow group of depositors or investors;
 - (c) asset profile and quality – a bank with a greater proportion of high quality marketable assets is able to have a quicker and easier access to funding when required by selling or pledging these assets;
 - (d) activities across currencies;
 - (e) the availability and reliability of standby facilities and intra-group funding; and
 - (f) staff expertise and the quality of policies and systems for managing liquidity.

SYSTEMS FOR MEASURING, ASSESSING AND REPORTING LIQUIDITY

11. A bank, as part of its liquidity management strategy, should put in place a management information system capable of measuring, assessing and reporting liquidity on a regular basis as appropriate for the operations of the bank.
12. While the sophistication of a bank's management information system will depend on the nature and complexity of the bank's operations, the system must produce timely, accurate and relevant information for managing and monitoring the

liquidity positions of a bank in all operating circumstances. At a minimum, the management information system must be able to:

- (a) report the composition and market values of a bank's liquid holdings; and
- (b) construct maturity profiles of a bank's cash flows to identify cumulative net funding positions at selected maturity dates.

13. To construct maturity profiles a bank needs to make assumptions of future cash flows associated with its assets, liabilities and off-balance sheet activities. In principle the cash flows will be allocated to time bands in accordance with the contractual maturity dates. In practice the bank must determine:

- (a) the proportion of maturing assets and liabilities that it will rollover or renew;
- (b) the behaviour of assets and liabilities with no clearly specified maturity dates (e.g. repayments of overdrafts, at call deposits and those with early withdrawal options);
- (c) potential cash flows from off-balance sheet activities, including draw downs under loan commitments, contingent liabilities and market-related transactions;
- (d) its ability to access various markets for funds and to undertake transactions in different markets;
- (e) the convertibility of foreign currencies; and
- (f) access to standby facilities and intra-group funding.

14. A bank should document in its liquidity management policy statement the underlying assumptions used in constructing the maturity profiles of its cash flows as well as the reasoning behind them. There should be provisions to review these assumptions regularly to take account of available statistical evidence and/or changing business profile. The Reserve Bank of Vanuatu will review these assumptions with each bank.

PROCEDURES FOR MANAGING LIQUIDITY

15. A bank may pursue a range of procedures to manage its liquidity. The relevance and effectiveness of particular procedures will depend on the nature of a bank's business and its standing in the market. As a guide, the Reserve Bank of Vanuatu expects the following procedures to be adopted:

- (a) Maturity Mismatch Limits

A bank should establish maturity mismatch limits for its cumulative funding positions as identified under the maturity profiles at various selected time bands. These mismatch limits should be realistic and commensurate with the bank's funding capacity.

(b) Liquid Holdings

In addition to the minimum liquid assets requirements specified in paragraph 28 of this Guideline, a bank should maintain an adequate stock of high quality liquid assets to cater for any unexpected liquidity pressures or fluctuations under both normal and adverse operating conditions. These readily liquefiable assets can provide a bank with the capacity to meet its obligations while the underlying problems affecting liquidity are being addressed. This also lowers the likelihood of a bank needing to undertake an urgent sale of illiquid assets, or purchasing liabilities at a higher cost than is sustainable over the medium term.

A bank should clearly identify the composition of such a liquid portfolio, define its role, establish minimum levels (including trigger ratios to warn management of potential breaches) and concentration limits in its liquidity management policy statement. The liquid portfolio should be diversified to ensure there will not be an undue reliance on any one class of liquid assets.

(c) Diversification of Liabilities

A bank should seek to maintain a diversified and stable funding base. This can be achieved by establishing a policy limiting the concentration in funding sources to avoid excessive reliance on any one counterparty (including related counterparties), product or market as well as by building strong and lasting relationships with depositors and other liability holders.

A bank should also undertake appropriate analysis on the pattern of its liabilities and the potential impact this may have on the bank's liquidity position (e.g. to detect any signs that the deposit base is becoming more volatile).

(d) Access to Wholesale Markets

The ability to obtain funds in the inter-bank and other wholesale markets is an important source of liquidity for a bank in both normal and crisis conditions. However, in formulating its liquidity management procedures, a bank should recognise that its ability to access funds from these markets may be radically reduced or delayed in crisis conditions.

A bank should be able to estimate its "normal" borrowing capacity in the wholesale markets and to establish a policy regarding dealing in markets against that capacity. A bank making unusual demands on the wholesale markets may face difficulties due to the exposure limits set by counterparties.

A bank may maintain standby credit lines with other banks or counterparties as a potential source of liquidity. A bank should recognise that its right to draw on these facilities may be denied in a crisis or there might be calls for early repayment of drawings under these facilities triggered by events of default or

breaches of any material adverse change clauses. In formulating standby arrangements, a bank should ensure that the facilities are fully committed and irrevocable. Where standby facilities form an integral element of a bank's crisis liquidity management, the Reserve Bank of Vanuatu will seek to be satisfied as to the certainty of these arrangements.

(e) Foreign Currency and Other Markets

A bank with active involvement in multiple currencies and/or with significant positions in specific foreign currencies should address the procedures for liquidity measurement and management of these individual currencies in its strategy. The bank should assess the convertibility of individual currencies, the timing of access to funds, the impact of potential disruptions to foreign exchange markets and exchange risks before presuming that surplus liquidity in one currency can be used to meet the shortfall in another currency. The bank should have in place backup liquidity procedures for circumstances in which normal access to funding in individual currencies is disrupted.

A bank active in securities and other markets should, in a similar vein, take account of the impact on its liquidity management of disruption in those markets.

(f) Intra-group Liquidity

A bank's liquidity management procedures should address any regulatory or legal impediments to accessing liquidity from related sources. Excess liquidity in related entities and overseas branches may not be readily available to the bank when needed.

Branches of foreign banks and foreign owned subsidiary banks may have lines of liquidity support from their head office or overseas parents (or associates). This support would be of particular value in a crisis affecting only local operations but could prove ineffective if the crisis impinged upon the group as a whole.

Foreign owned subsidiary banks should have adequate procedures in place for managing their liquidity in their own right. In the case of foreign bank branches, the Reserve Bank of Vanuatu is prepared to consider their liquidity management in a global context, having regard to:

- i. the extent to which liquidity of the foreign bank is managed, and supervised, on an integrated global basis;
- ii. the reliance placed on funding from head office and other branches;
- iii. the ability and willingness of head office to provide liquidity at all times as required – the Reserve Bank of Vanuatu may seek an assurance from the head office regarding the provision of liquidity to the branch;
- iv. whether the home country supervisor of the foreign bank is aware of, and has no objections to, any dependence by the branch on head office for

liquidity support and any assurance provided by head office regarding the provision of such support – the Reserve Bank of Vanuatu will require confirmation to this effect from the home country supervisor; and

- v. the particular policies governing the branch's liquidity management in Vanuatu.

(g) Use of Assets

A bank's ability to use assets (e.g. through sales, repurchase agreements or securitization structures) may provide much needed liquidity and support in adverse circumstances. Prearrangements to convert less liquid assets (e.g. mortgages or other loans) to generate additional funding when required can be an important part of a bank's liquidity management procedures.

RESPONSIBILITIES AND CONTROLS

16. A bank should set internal limits consistent with its liquidity management strategy and have appropriate control mechanisms in place to ensure that the internal limits and procedures established for managing liquidity are adhered to at all times.
17. At the core of a bank's liquidity management strategy there should be a well-defined management responsibility and control structure for monitoring, reporting and responding to the bank's liquidity in a timely and effective manner. Senior management should be responsible for reviewing a bank's liquidity management information on a regular basis. The monitoring and review should, where appropriate, cover:
 - (a) the maturity profiles of a bank's cash flows;
 - (b) the stock of liquid assets available to the bank and their market values;
 - (c) concentration in sources and application of funds;
 - (d) the ability to borrow in various markets;
 - (e) intra-group cash flows and the accessibility of intra-group funding;
 - (f) potential sources of volatility in assets and liabilities (and claims and obligations arising from off-balance sheet business);
 - (g) credit standing and the capacity of providers of standby facilities to meet their obligations;
 - (h) the impact of market / operational disruptions on cash flows and on customers;
 - (i) the impact of adverse trends in asset quality on future cash flows and market confidence in the bank; and
 - (j) the ability to undertake asset sales in various markets.

CONTINGENCY PLANNING

18. In relation to paragraph 5 of this Guideline, indicators of liquidity concerns may include one or more of the following:

- (a) regular breaches of internal limits;
- (b) experiencing difficulty or inability to borrow in the wholesale markets;
- (c) lenders demanding a higher than standard funding premium or seeking collateral for funding provided;
- (d) deteriorating cash flow positions as evidenced by widening negative maturity mismatches, especially in the short term time bands;
- (e) unusual volatility in the deposit base;
- (f) frequent utilization of overdraft or standby facilities;
- (g) deterioration in asset quality or profitability;
- (h) adverse ratings changes; and
- (i) problems with related entities.

19. As set out in paragraph 7(e) of this Guideline, the Reserve Bank of Vanuatu requires a bank to formulate a formal contingency plan for dealing with a liquidity crisis. The plan should be approved, in the case of locally incorporated banks, by the board of directors or a board committee, and in the case of foreign bank branches, by an appropriate senior officer from outside Vanuatu. As a guide, the plan should:

- (a) designate who would be responsible for identifying crises (including speedy notification of the problems to the Reserve Bank of Vanuatu) and crisis management. Responsibilities should be clearly assigned so that all personnel understand what is expected of them during a crisis;
- (b) specify the early warning signals indicative of an approaching crisis and the mechanisms to facilitate constant monitoring and reporting of these signals;
- (c) establish reporting procedures to deliver all necessary information to senior management to enable them to make quick decisions;
- (d) set out procedures for making up cash flow shortfalls in crisis situations, including trigger points and timeframes within which each action should be taken. The procedures should identify all key sources of funds, their expected reliability and the priority in which those funds would be accessed. The plan should also include an assessment of the cost of alternative funding strategies and the impact on the bank's capital;
- (e) outline courses of action for altering asset and liability behaviour e.g. plans to market assets more aggressively, raise deposits, etc;
- (f) assess the likely impact of particular courses of action on the market's perception of the bank;
- (g) provide procedures to determine priority of customer relationships in the event of liquidity problems e.g. the order in which lines of credit would be withdrawn from specific customers; and
- (h) detail plans for dealing with staff and the public including customers, key market participants and the media. Astute public relations management is important to avoid the spread of rumours which could result in a significant run-off of funds.

20. A bank should review and update its contingency plan regularly (at least annually) to ensure that it remains robust over time and reflects the bank's changing operating circumstances. A bank should have adequate procedures in place to ensure relevant staff (including those nominated as back-ups) involved in the implementation of the plan are well-informed of their role under the plan and of any subsequent changes to the plan.

SCENARIO ANALYSIS

21. In developing their liquidity management strategy banks should give consideration to developing a scenario analysis of domestic and foreign currency liquidity to ensure that the bank can operate under a wide range of operating conditions. At least two scenarios should be addressed:
- (a) "going-concern" refers to the "normal" behaviour of cash flows in the ordinary course of business; and
 - (b) "name crisis" refers to the behaviour of cash flows in adverse operating circumstances specific to the bank, where it has significant difficulty in rolling over or replacing its liabilities.
22. The scenario analyses should be able to demonstrate:
- (a) how obligations and commitments are met on a day-to-day basis; and
 - (b) that there is sufficient liquidity available to the bank to keep it operating for at least five business days in a name crisis.
23. For foreign owned banks operating in Vanuatu (either as branches or subsidiaries), a name crisis may take two forms – it could be restricted to local operations or it could affect the foreign bank's global operations. The Reserve Bank of Vanuatu would expect the analyses of these foreign banks to cover both these scenarios.
24. Scenario analysis depends heavily on the assumptions of future cash flows associated with the behaviour of a bank's assets, liabilities and off-balance sheet activities under different operating scenarios. Considerable judgment and discretion is involved in making these underlying assumptions, which may vary substantially among banks depending on their individual business profiles. Banks are expected to take a conservative approach in assessing future cash flows. A bank should be in a position to provide analysis and evidence to justify the assumptions underlying these two scenarios.
25. Banks should pay particular attention to policies to address a name crisis. Assumptions under this scenario would represent a "worst case" for a bank, as evidenced by significant difficulty in rolling over or replacing liabilities. In addition to assumptions regarding the behaviour of maturing and at call assets and

liabilities, and estimates of cash flows from off-balance sheet activities, a bank must assess the effect of pressure on it to support its paper in the market and of requests to redeem term liabilities before their due dates. A bank should evaluate the marketability of its assets, and the likely values generated from a fire sale. For inflows from standby facilities and intra-group funding to be included, the arrangements must either be fully committed and irrevocable or demonstrate an acceptable level of certainty.

26. A bank should document in its liquidity management policy statement the underlying assumptions adopted for its scenario analysis. The assumptions should be subject to regular review to take account of changes in the bank's operations and/or market environment.

LIQUID ASSETS REQUIREMENT

27. Banks are required to maintain a minimum holding of 12 per cent of liabilities in specified high quality liquid assets at all times. To be eligible the assets must be held in the name of the bank. The assets must be unencumbered by any pledge or restriction on access and be readily transferable and convertible into cash within two business days.
28. For the purpose of the Reserve Bank of Vanuatu's minimum liquidity holdings requirement, high quality liquid assets include:
- Notes and coins;
 - Balances with the Reserve Bank of Vanuatu (other than Statutory Reserve Deposits);
 - Reserve Bank Notes;
 - Other Central Government securities; and
 - Other assets approved by the Reserve Bank of Vanuatu.
29. Liabilities, for the purpose of this Guideline, are defined as all liabilities (other than capital) which are invested in Vatu assets within Vanuatu. For convenience of measurement, the LAR ratio will be calculated on the basis of each bank's total Vatu assets within Vanuatu less:
- the bank's capital base; and
 - favourable overnight settlement balances.
30. The Reserve Bank of Vanuatu may, where it is not satisfied with the adequacy of a bank's liquidity management strategy, or where it has particular concerns about a bank's liquidity, direct the bank to hold specified amounts of high quality liquid assets as defined in paragraph 28 above.

31. A bank shall inform the Reserve Bank of Vanuatu immediately when in danger of breaching the minimum requirement and the remedial action taken / planned to avert any breaches. A bank should set a trigger ratio above the minimum requirement to warn management of potential breaches.
32. The Reserve Bank of Vanuatu will review the minimum liquid assets requirement against market developments. In addition, the Reserve Bank of Vanuatu may reduce a bank's minimum liquid assets requirement if it is satisfied as to the adequacy of the bank's liquidity management strategy.

REPORTING ARRANGEMENTS

33. A bank must provide the Reserve Bank of Vanuatu each quarter (or more frequently if required by the Reserve Bank of Vanuatu) with a domestic and foreign currency maturity profile report. Banks are required to provide the Reserve Bank of Vanuatu each quarter with a report detailing the type and amount of liquid assets held.
34. In addition, a bank must to provide to the Reserve Bank of Vanuatu each week a Liquid Assets Requirement report.