Office of the Superintendent of Financial Institutions Canada | Bureau du surintendant des institutions financières Canada

Guideline

Subject: Liquidity

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This guideline sets out prudential considerations relating to the liquidity risk of federally regulated deposit-taking institutions. In this guideline, the term "company" means banks and all federally regulated trust and loan companies.

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Introduction

Liquidity is the ability of an institution to generate or obtain sufficient cash or its equivalents in a timely manner at a reasonable price to meet its commitments as they fall due. This guideline indicates some of the elements that will be considered in assessing the strength of a company's liquidity management framework and describes some of the information used to assess liquidity.

Companies must have:

- documented liquidity and funding policies and controls approved by the Board of Directors;
- ongoing monitoring of liquid assets and funding requirements;
- management information systems that are timely and sufficient in their content, format and frequency to adequately manage liquidity;
- an analysis of changes to funding requirements under alternative scenarios;
- policies on the diversification of funding sources; and
- contingency plans.

Liquidity Policies

Companies must establish and implement documented, sound and prudent liquidity and funding policies recommended by senior management, approved by the Board of Directors and reviewed at least annually by the Board or a board committee. Documented liquidity policies should articulate the importance senior management places on liquidity and, the company's liquidity goals. In assessing a company's implementation of these business practices, attention will be paid to the content and frequency of reports by management and the independent review function on the company's compliance with board-approved policies and controls.

The choice of analytical tools and the level of sophistication of information systems will in part be affected by the size of the company, the range and stability of its funding sources and the extent to which it accesses funds in more than one currency, or more than one operating unit.

A company with operations in several operating units and currencies will generally use one of three approaches to organize its global liquidity management. It may completely centralize liquidity management (the head office managing liquidity for the whole company in every currency). Alternatively, it may decentralize by assigning operating units responsibility for their own liquidity, but subject to limits imposed by the head office and frequent, routine reporting to the head office. As a third approach, a company may assign responsibility for liquidity in the home currency and for overall coordination to the home office, and responsibility for the company's global liquidity in each major foreign currency to the management of the foreign office in the country issuing that currency. All of these approaches provide head office management with the opportunity to monitor and control worldwide liquidity. However, where a company decentralizes or partially delegates liquidity management among operating units, the company must document the policies and limits established by operating units as well as any internal liquidity support arrangements that may be provided to these units.

For companies with an international presence, the treatment of assets and liabilities in multiple currencies is necessarily more complex, for two reasons. First, information on companies may be less readily available to liability holders in foreign currency markets. In the event of market concerns, these liability holders may be influenced more easily by rumour than will domestic currency customers. Second, in the event of a disturbance, a company may not always be able to mobilize domestic liquidity to meet foreign currency funding requirements.

A formal written foreign currency liquidity policy must be in place where foreign currency represents more than 10% of total funding. In the ordinary course of business, a company must decide how foreign currency funding needs will be met. For example, it should determine (a) to what extent the company will fund foreign currency needs in the domestic currency and convert the proceeds to foreign currency through the foreign exchange market or currency swaps, and (b) how it will manage the associated risk that exchange markets will cease to be available. A company's decision on these matters will be influenced by the size of its funding needs, its access to foreign currency funding markets and its capacity to rely on off-balance sheet instruments (i.e., standby lines of credit, swap facilities, etc.). Where cash flow mismatches in an individual currency are substantial, the policy with respect to that individual currency should be addressed in the overall foreign currency liquidity policy.

Managing Liquidity

A sound framework for managing liquidity has three dimensions:

- maintaining a stock of liquid assets that is appropriate to a company's cash flow profile and that can be readily converted into cash without incurring undue capital losses;
- measuring, controlling and scenario testing of funding requirements; and
- managing access to funding sources.

Stock of Liquid Assets

High quality securities for which there is a broad and active secondary market can be liquidated through their sale to a wide range of counterparties without incurring a substantial discount, thereby securing their status as dependable sources of cash flow. This requires an institution to establish the credit quality, marketability and market value of those securities it designates as part of its stock of liquid assets. As such, their purpose is to provide the company with time to access alternative sources of funding, in the event that circumstances giving rise to a liquidity problem are temporary. The liquidity policies of a company, therefore, must clearly define the role of liquid assets within the overall liquidity management system and establish minimum targets for holdings of liquid assets.

When determining which assets can be included in the stock of liquid assets, a company's policies must consider not only credit quality and marketability, but also the existence of encumbrances that would prevent quick sale to meet unanticipated net cash outflow requirements. This means, for example, that assets pledged to secure specific obligations like overnight advances from a central bank, or margin requirements for trades on a futures exchange, should not be considered part of a stock of liquid assets available for unanticipated net cash outflows.

Companies must actively monitor their pledging of assets to clearing and settlement organizations as part of their ongoing liquidity management program. Pledges of assets for these purposes require special focus because they involve encumbrances on an intra-day basis that are typically released at the end of a settlement cycle. To the extent these assets are included in an end of day measure of liquidity, they should be separately identified. Management must also explicitly address what assumptions it makes about these pledging requirements in the design and documentation of scenario tests of a disruption to the company's funding.

When establishing the minimum targets for the stock of liquid assets, a company should consider the company's overall liquidity profile including factors such as asset quality, stability of funding sources, cost and diversity of funding, short-term funding requirements, and where applicable, the degree of integration of liquidity management with that of a parent deposit-taking institution as well as the financial strength of the parent.

A company's minimum targets for holdings of liquid assets will be influenced by a number of considerations. For example, the stock of liquid assets will be of greater significance for companies or business lines that have greater reliance on wholesale funding in contrast to companies that are liability-driven and whose funding base is pre-eminently retail in its orientation. Wholesale funding comprises deposits and other borrowings raised in money and capital markets either directly or through brokers.

Funding Requirements

Analyzing funding requirements involves the construction of a maturity ladder and the calculation of a cumulative excess or deficit of funds at selected maturity dates. A company's funding requirements are determined by examining its future cash flows based on the future behaviour of assets and liabilities and off-balance sheet items including interim cash flows or settlements of financial derivatives, and then calculating the cumulative excess over the time frame for the liquidity assessment.

Assessing the funding surplus/deficit requires a company to consider, among other things:

- the amount of readily encashable assets relative to the surplus/deficit;
- the size of the surplus/deficit relative to total funding;
- the diversity of funding sources; and
- the quality of assets.

The relevant time frame for active liquidity management is short, generally extending out to no more than a few weeks. Companies active in markets for longer-term assets and liabilities will need to use a longer time frame than companies that are active in short-term money markets. Where wholesale funding in Canadian currency or total foreign currency is greater than 10% of total funding in Canadian and total foreign currency respectively, a company must have internal limits on short-term (e.g., next day, 2-7 days and 8-30 days) funding requirements and actively measure and monitor actual requirements against those limits.

Limits on short-term funding requirements should conform with a company's demonstrated capacity to fund in the market at a reasonable price. These limits should apply on a total currency basis and, where material, by currency or currency group. Based on the company's organizational structure, internal limits on short-term funding requirements may also be established according to legal entities or geographic markets.

As an example, a company's wholesale funding surplus or deficit for a given time period could be defined broadly as comprising:

the sum of:

- maturing money market and other like assets;
- assets specifically pledged to secure maturing borrowings of securities and sale and repurchase agreements;
- commercial asset repayments with virtual certainty; and
- cash inflows arising from off-balance sheet contracts (e.g., forward foreign exchange contracts) where significant.

less:

- maturing wholesale liabilities including maturing obligations related to borrowings of securities and sale and repurchase agreements;
- cash outflows arising from off-balance sheet contracts (e.g., forward foreign exchange contracts) where significant; and
- advised draws against loan commitments.

A number greater than 0 is a funding surplus. A number less than 0 is a funding deficit.

Scenario Testing

Evaluating whether a company is sufficiently liquid depends greatly on the behaviour of cash flows under different conditions. Analyzing liquidity thus entails laying out "what if" scenarios. Scenario testing should be among the measurement techniques used by a company as part of its contingency planning process.

Two scenarios should be tested: a company's "going concern" condition and a company-specific disruption. The going concern scenario establishes a benchmark for the "normal" behaviour of balance sheet-related cash flows in the ordinary course of business. A liquidity disruption that

remains confined to the company itself provides one type of "worst case" benchmark. Under each scenario a company would try to include any significant swings in cash flows and funding requirements.

Scenario testing requires a company to make assumptions about the probable behaviour of the timing of cash flows for each type of asset and liability in the scenario being examined. For each funding source, for example, a company would have to decide whether the liability would be: (1) repaid in full at maturity; (2) gradually run off over the next few weeks; or (3) virtually certain to be rolled over or available if tapped. The uncertainties involved in making such estimates require a conservative bias toward assigning later dates to cash inflows and earlier dates to cash outflows.

Managing Market Access

A company must review periodically its efforts to maintain the diversification of liabilities, to establish relationships with liability holders, and to develop asset-sales markets. As a check for adequate diversification of liabilities, a company needs to examine the level of reliance on individual funding sources by instrument type, provider of funds, and geographic market, and set internal limits on the maximum amount of funds it will accept in the normal course from any one counterparty or any one funding market (e.g., commercial paper).

Building strong relationships with providers of funding outside the company's corporate group can provide a line of defence in liquidity management. The frequency of contact and the frequency of use of a funding source are two possible indicators of the strength of a funding relationship and hence their reliability.

Companies should establish an ongoing presence in different funding markets and monitor market developments to take anticipatory action such as lengthening its funding profile.

Developing markets for asset sales or exploring arrangements under which a company can borrow against assets is the fourth element of managing market access. The frequency of use of some asset-sales markets is a possible indicator of a company's ability to execute sales under adverse scenarios.

Contingency Planning

A company's ability to withstand a funding requirement in a company specific disruption may also depend on the calibre of its formal contingency plans. Effective contingency plans should consist of several components:

- specific procedures to ensure timely and uninterrupted information flows to senior management;
- clear division of responsibility within management in a crisis;
- action plans for altering asset and liability behaviours (i.e., market assets more aggressively, sell assets intended to hold, raise interest rates on deposit);

- an indication of the priority of alternative sources of funds (i.e., designating primary and secondary sources of liquidity);
- a classification of borrowers and trading customers according to their importance to the company in order to maintain customer relationships; and
- plans and procedures for communicating with the media.

Contingency plans should also include procedures for making up cash flow shortfalls in emergency situations. Companies have available to them several sources of such funds, including previously unused credit facilities. The plan should spell out as clearly as possible the sources and amount of funds a company expects to have available from each sources.

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