



**AUTORITÉ
DES MARCHÉS
FINANCIERS**

LIQUIDITY RISK MANAGEMENT GUIDELINE

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Preamble

The *Autorité des marchés financiers* ("~~the~~"AMF") establishes guidelines setting out its expectations with respect to financial institutions' legal requirement to follow sound and prudent management practices. These guidelines therefore cover the execution, interpretation and application of this requirement.

The AMF favours a principles-based approach rather than a specific rules-based approach. As such, the guidelines provide financial institutions with the necessary latitude to determine the requisite strategies, policies and procedures for implementation of such management principles and to apply sound practices based on their nature, size ~~and, the~~ complexity of their activities and their risk profile. In this regard, the guideline illustrates how to comply with the principles described.

The AMF considers governance, integrated risk management and compliance (GRC) as the foundation stones for sound and prudent management of financial institutions and, consequently, as the basis for the prudential framework provided by the AMF.

This guideline is part of this approach and sets out the ~~AMF's~~AMF's expectations regarding ~~the~~ sound and prudent liquidity risk management practices.

Introduction

~~Liquidity is essential for the viability of every financial institution. Poor liquidity risk management can result in high financing costs and difficulty in liquidating assets at fair value. The risk can increase if a financial institution's reputation is affected. In such a case, liquidity risk could lead to massive withdrawals of deposits and thereby affect the solvency of the financial institution.~~

~~Given the close relationship between liquidity and solvency, an illiquid financial institution could rapidly become insolvent. Similarly, a financial institution's capitalization can impact its ability to obtain liquidity in a crisis, and thus the importance for all financial institutions to properly assess the adequacy of their capital based on their liquidity risk profile in the markets where they operate.~~

~~Accordingly, a financial institution should take liquidity risk into consideration as part of its integrated risk management framework and adopt a liquidity risk management strategy tailored to its overall risk profile, as well as a reliable policy and procedures for identifying, assessing, quantifying, controlling, mitigating and monitoring liquidity risk. The financial institution should also have a contingency plan in the event of liquidity problems.~~

~~This guideline is intended to set out the AMF's expectations with regard to liquidity risk management by financial institutions. Under the various sector based laws it administers,⁴ the AMF has the authority to establish guidelines regarding sound and prudent management practices for financial institutions. The AMF's expectations with regard to liquidity risk management are based on the core principles and guidance issued by The Basel Committee on Banking Supervision.²~~

⁴ — *An Act respecting insurance*, R.S.Q., CQLR, c. A-32, ss. 325.0.1 and 325.0.2;

— *An Act respecting financial services cooperatives*, R.S.Q., CQLR, c. C-67.3, s., 565.1 and 566;

— *An Act respecting trust companies and savings companies*, R.S.Q., CQLR, c. S-29.01, s. 314.1;

² — Basel Committee on Banking Supervision. *Principles for Sound Liquidity Risk Management and Supervision*, September 2008.

Scope

~~This liquidity risk~~The Liquidity Risk Management Guideline is intended for insurers of persons (life and health), damage (P&C) insurers, portfolio management guideline applies to companies controlled by an insurer, financial services cooperatives, trust companies and savings companies, and insurers authorized to receive deposits, which are governed by the following Acts/statutes:

- *Act respecting insurance, [R.S.Q., CQLR](#), c. A-32;*
- *Act respecting financial services cooperatives, [R.S.Q., CQLR](#), c. 67.3;*
- *Act respecting trust companies and savings companies, [R.S.Q., CQLR](#), c. S-29.01.*

This guideline applies to financial institutions operating independently as well as to financial institutions operating as members of a financial group.³ As regards financial services cooperatives and mutual insurance associations⁴ that are members of a federation, the standards or policies adopted by the federation should be consistent with - and even converge on - the principles of sound and prudent management prescribed by law and detailed in this guideline.

The generic terms “financial institution” and “institution” refer to all financial entities covered by the scope of this guideline.

³ For purposes of this guideline, “financial group” refers to any group of legal persons composed of a parent company (financial institution or holding company) and legal persons affiliated therewith.

⁴ [Mutual insurance associations are damage insurers covered by this guideline.](#)

Coming into effect and updating

~~This liquidity risk management guideline will come into effect on~~The Liquidity Risk Management Guideline has been in effect since April 1st, 2009.

With respect to the legal requirement of institutions to follow sound and prudent management practices, the AMF expects each institution to develop strategies, policies and procedures based on its nature, size, complexity and risk profile, and to ensure the adoption of~~have adopted~~ the principles underlying this guideline by~~since~~ April 1st, 2011. ~~Where an institution has already implemented such a framework, the AMF may verify whether it enables the institution to satisfy the requirements prescribed by law.~~

~~This guideline will be~~To reflect the changes in the principles of sound and prudent management emanating from international bodies with regard to compliance and according to supervisory findings, the Liquidity Risk Management Guideline has been updated based on to March 31, 2019.

A one-year transition period has been set to enable financial institutions to adjust to the new expectations. The AMF therefore expects financial institutions to make the necessary adjustments by March 31, 2020.

If an institution has already set up such a framework, the AMF may verify its compliance with the requirements prescribed by law.

As stated in the original version of this guideline, developments in liquidity risk management and in light of the AMF's observations in the course of its supervision ~~of financial institutions~~ could lead to other changes to this guideline.

Introduction

Liquidity is essential for the viability of every financial institution. Poor liquidity risk management may result in high financing costs and difficulty in liquidating assets at fair value. The risk can increase if a financial institution's reputation is affected. An illiquid financial institution could, for example, trigger massive withdrawals of deposits, which would also jeopardize its solvency.

Similarly, a financial institution's capitalization can impact its ability to obtain liquidity in a crisis, hence the importance for all financial institutions to properly assess the adequacy of their capital based on their liquidity risk profile in the markets where they operate.

This guideline is intended to set out the AMF's expectations with regard to liquidity risk management by financial institutions. Under the various sector-based laws it administers,⁵ the AMF has the authority to establish guidelines regarding sound and prudent management practices for financial institutions.

⁵ *An Act respecting insurance*, R.S.Q.,CQLR, c. A-32, ss. 325.0.1 and 325.0.2;

An Act respecting financial services cooperatives, R.S.Q.,CQLR, c. C-67.3, s., 565.1 and 566;

An Act respecting trust companies and savings companies, R.S.Q.,CQLR, c. S-29.01, s. 314.1;

1. 1. Liquidity risk

For the purposes ofIn the initial version of the guideline, the AMF's expectations with regard to liquidity risk management were mainly based on the core principles and guidance issued by The Basel Committee on Banking Supervision.⁶ The updated version will also take into account the principles of the International Association of Insurance Supervisors (IAIS).

The updated version innovates by establishing a process for assessing liquidity adequacy in order to increase market discipline and strengthen the guidance on solvency risk for financial institutions.

The following are the key themes addressed in this guideline,"

- sound and prudent liquidity" risk management;
- internal assessment of liquidity adequacy;
- mitigation of liquidity risk;
- crisis management.

⁶ Basel Committee on Banking Supervision, Bank for International Settlements. *Principles for Sound Liquidity Risk Management and Supervision*, September 2008.

1. Liquidity risk

Liquidity refers to a financial institution's capacity to meet its current and anticipated liquidity obligations as they come due, without incurring considerable losses.

Accordingly, liquidity risk results from a financial institution's difficulty or inability to honour its liquidity commitments in a timely manner at a reasonable cost. Liquidity risk can also extend to a financial institution's inability to take advantage of business opportunities and sustain the growth forecast in its strategic plan (strategic risk) due to a lack of liquidity or difficulty in obtaining funding at a reasonable cost.

~~The term "There is funding" refers to liquidity risk and market liquidity risk. Funding liquidity risk is the manner in which risk that a financial institution obtains will not be able to meet both expected and unexpected current and future commitments without impairing its daily operations or its financial condition. Market liquidity by taking on liabilities, while risk is the term "liquidity" refers to all liquidity resources available to the risk that a financial institution, both asset liquidity and liability, will not be able to resell marketable assets at current market prices due to disruptions in the liquidity market.~~

2. ~~2.~~ Sound and prudent liquidity risk management

This guideline favours a principles-based approach to liquidity risk management, and does not set out quantitative requirements regarding ratios or thresholds. Within the context of such an approach, the AMF expects financial institutions to define ~~their own~~ quantifiable limits, ~~and implement~~ coherent ~~governance strategies to mitigate~~ liquidity risk ~~mitigation strategies and a reliable contingency plan~~. As such, the AMF has established 11 principles articulated around the following four major themes:

2.1 Governance and management of liquidity risk

The

The AMF expects the senior management of a financial institution to set up a liquidity risk management framework that will enable it to maintain its viability while continuously meeting liquidity expectations and internal objectives, in normal times and in times of crisis.

In establishing its liquidity risk management framework, a financial institution should develop a liquidity risk management strategy and put in place a policy and procedures to implement the strategy at the operational level. The strategy should take determine a liquidity risk tolerance taking into account the interdependencies among members of a single group its business strategy, financial condition and the close connection between liquidity and capitalization, funding capacity.⁷

Monitoring and control of liquidity risk

Measures should be developed to manage the ~~Once the risk tolerance level has been established, a financial institution's liquidity position on a continuous, prospective basis. Similarly, multiple scenarios should be prepared and simulated. The assumptions adopted to measure and monitor senior management should develop~~ liquidity risk ~~should be reviewed regularly.~~

~~3.1. Mitigation of liquidity risk~~

~~Liquidity risk mitigation techniques should be established. In particular, the financial institution should hold an appropriate amount of liquid assets and diversify its sources of financing. Moreover, the financial institution should place importance on its relations with funds providers. The quality of these relations can be a determining factor in times of crisis.~~

~~4.1. Crisis management~~

~~The contingency plan should cover all anticipated crisis situations and should enable adequate management of a liquidity crisis, regardless of its duration or severity.~~

⁷ [Autorité des marchés financiers. *Integrated Risk Management Guideline*, May 2015.](#)

The AMF believes that the management, monitoring and control of liquidity risk should be supported by an effective governance structure. The Governance Guideline⁸ sets out sound management principles, strategies and policies that are in line with this tolerance level. These strategies, which must be approved by the board of directors, aim to ensure that a financial institution should consider in light of the particular nature of liquidity risk. The AMF expects the roles and responsibilities related to liquidity risk management to be clearly defined, properly documented and appropriately incorporated in the overall risk management strategy⁹ of the financial institution has sufficient liquidity.

3. Management of A committee responsible for managing assets and liabilities should ensure that the definition of liquid assets used is compatible with the risk appetite determined by the board of directors.

Senior management should, in addition to ensuring that the financial institution performs a self-assessment, carry out regular internal controls of liquidity risk management.

The financial institution's senior management should establish internal rules clearly indicating the techniques for managing liquidity risk and disseminate them at all relevant levels of the institution. These rules should include the progressive steps for monitoring liquidity and the procedure that applies in complex situations likely to have major financial impacts.

2.2 Strategies, policies and procedures

The AMF expects financial institutions to adopt an effective liquidity risk management strategy and implement a policy and procedures to execute the strategy at the operational level.

5. The financial institution should establish a liquidity risk

5.1 Principle 1: Strategy, policy and procedures

The AMF expects financial institutions to adopt an effective liquidity risk management strategy and implement a policy and procedures to execute the strategy at the operational level.

The objectives of the liquidity risk management strategy should be management strategy to ensure adequate management of liquidity on a day-to-day basis and to enable the financial institution to protect its capital, maintain marketplace confidence, take advantage of business opportunities and, finally, sustain its growth forecast.

Moreover, the financial institution should take the necessary measures to ensure that these objectives will be met remain even in a crisis situation, without the need to liquidate assets at a loss or obtain funding at a high cost or on unfavourable terms.

⁸ Autorité des marchés financiers. *Governance Guideline*, April 2009.

⁹ Autorité des marchés financiers. *Integrated Risk Management Guideline*, April 2009.

A financial ~~institution's~~institution's liquidity risk management strategy should cover all qualitative and quantitative aspects, such as:

- responsibilities related to liquidity risk management in normal times and in times of crisis;
- sources of liquidity risk⁴⁰ originating from its balance sheet structure, its internal affairs, its risk profile and market conditions;
- the impact of liquidity risk on, for example, its net funding requirements,⁴⁴ solvency and reputation;
- ~~the policy and procedures to be implemented in order to measure, monitor, mitigate and control~~management of intraday liquidity risk; and collateral;¹²
- ~~the information system that supports liquidity risk management~~risks related to securitization transactions¹³ ~~and provides relevant information internally~~the use of complex financial instruments;
- ~~the sources, availability, cost and diversification of funding (e.g., interbank market);~~
- the funding strategies that provide effective diversification in the sources and tenor of funding on a multidimensional scale, such as products, durations, legal entities and activities, and that critically assess currency fungibility;
- intra-group liquidity management;
- foreign currency liquidity risk management;
- ~~liquidity risk tolerance;~~
- scenario analyses and stress testing;¹⁴
- the crisis contingency plan.

Principle 2: ~~Capital~~

⁴⁰ ~~See principle 4.~~

⁴⁴ ~~See principle 5.~~

¹² Basel Committee on Banking Supervision, Bank for International Settlements. *Principles for Sound Liquidity Risk Management and Supervision*, September 2008.

¹³ Autorité des marchés financiers. *Securitization Risk Management Guideline*, March 2019.

¹⁴ Autorité des marchés financiers. *Stress Testing Guideline*, June 2012.

6.3. Assessment of liquidity adequacy

The AMF expects financial institutions to consider the importance of capital adequacy in managing liquidity risk and the potential impact of a liquidity crisis on their solvency.

While adequate capitalization is an essential condition for scoring a strong rating and thereby improving the cost and availability of funding, capital is not an appropriate cushion in the event of a liquidity crisis. Moreover, the assets of an adequately capitalized financial institution may not be sufficiently liquid in a crisis situation. By contrast, a financial institution may have sufficient liquidity without having adequate capitalization. Similarly, a financial institution's level of capitalization can affect its ability to obtain liquidity in a crisis situation. A financial institution whose solvency is at risk could face costly risk premiums or limited funding, or even be denied funding altogether.

The link between liquidity risk and capital adequacy should be properly considered in the liquidity risk management strategy, scenario analyses, stress testing and the contingency plan.

6.11.1 Principle 3: Intra-group management

The AMF expects financial institutions to consider the liquidity arrangements in effect within their financial group that could have an impact on their liquidity risk management.

Liquidity arrangements between the various members of a financial group of which the financial institution is a member may significantly influence its risk profile, profitability, capitalization and reputation. On the one hand, the financial institution may be required to provide liquidity to the other members of the group and, on the other hand, funds provided to the financial institution by other members of the group may be withdrawn or cancelled, particularly in the event of a crisis. However, the AMF recognizes the roles and responsibilities conferred under the Act on a federation and on a financial services cooperative acting as group treasurer.

The financial institution's liquidity risk management strategy should take into consideration the interdependencies between the various members of the same group as regards liquidity and the impacts of these interdependencies on the financial institution's liquidity risk.

Where the financial institution is part of a group, the AMF is of the opinion that the financial institution continues to be responsible for its own liquidity risk management, even if such management is carried out at the group level.

7. 4. Monitoring and control of liquidity risk

Principle 4: Financial institutions should critically assess their level of liquidity and their future needs based on their risk profile and business plans. The implementation of an

[internal liquidity adequacy assessment process should allow them to maintain their liquidity at adequate levels on an ongoing basis.](#)

7.43.1 Identification of liquidity risk sources

The AMF expects financial institutions to identify the various sources of liquidity risk to which they are exposed.

A financial institution should not ignore any potential source of liquidity risk, be it related to its balance sheet structure, off-balance sheet activities, exposure to other risks or market conditions.

As regards its balance sheet structure, the financial institution may have difficulty honouring its commitments if liquidity is insufficient, unavailable on the expected maturity date or only available at an unfavourable cost. In this sense, liquidity risk management requires a solid understanding of the cost, availability and maturity of the instruments used as well as the risks represented by the institution's various sources of liquidity, both under normal circumstances and in crisis situations. The financial institution should also assess the impact of its off-balance sheet activities on its liquidity risk [and take into account the possibility that it will assume transferred risks once again in the future.](#)

As regards the correlation between liquidity risk and other risks the financial institution faces, liquidity risk may be a consequence of its exposure to a combination of risks (such as credit risk, market risk, interest rate risk, operational risk, reputational risk and strategic risk). The AMF expects the financial institution's overall risk management strategy to consider the correlation between the institution's liquidity risk and the other risks to which it is exposed.¹⁵

[The financial institution should identify, for its subsidiaries or other related entities, the main underlying risks to which it could be exposed and take them into account in assessing the adequacy of the level of liquidity.](#)

With respect to market conditions, liquidity risk management depends on macroeconomic conditions (the quantity of monetary assets available on the markets) and on other conditions likely to influence the ability of the markets to absorb asset sales quickly and without a significant decline in prices. While macroeconomic conditions result from medium-term economic phenomena, market liquidity depends on investor confidence in the quality of the assets being traded and the solvency of borrowers. Consequently, market liquidity can rapidly run dry. In this regard, the AMF expects the financial institution to [regularly](#) monitor market conditions and their impacts on its liquidity risk.

In summary, a financial institution should clearly identify its sources of liquidity risk as well as their impacts on its risk profile and liquidity position.

¹⁵ Autorité des marchés financiers. *Integrated Risk Management Guideline*, [April 2009](#) [May 2015](#).

3.2 Principle 5:—Management of intraday risk and collateral

The AMF expects financial institutions, considering its exposure to risk, to actively manage their intraday liquidity positions and risks in order to meet payment and settlement obligations on a timely basis under both normal and stressed conditions.

To effectively manage and monitor its net funding requirements, the financial institution should have the ability to calculate liquidity positions on an intraday basis when exposed to liquidity risk, on a day-to-day basis for the shorter time horizons, and over a series of more distant time periods thereafter. The management information system should be used in day-to-day liquidity risk management to monitor compliance with the financial institution's established policies, procedures and limits.

In addition, institutions should design stress scenarios¹⁶ that reveal on a daily basis the events that could disrupt the payment and settlement systems and have contingency plans to manage them. In this regard, financial institutions should control the outflow of funds and monitor the use of intraday credit. They should also monitor their ability to access sufficient levels of intraday funds.

Financial institutions should also monitor market developments and the changes affecting their credit rating or financial position in order to take expected actions, such as the requirement for additional collateral.

As regards collateral management, a financial institution should diversify its sources of collateral. It should also actively manage its collateral positions (differentiating between encumbered and unencumbered assets), monitor the legal entity and physical location where collateral is held and how it may be mobilized in a timely manner.

7-23.3 Measurement of liquidity risk

The AMF expects financial institutions to establish liquidity risk metrics based on a coherent and robust methodology commensurate with their risk profile, size, nature and complexity.

Liquidity risk measurement requires that a financial institution estimate both its liquidity needs and its ability to honour future commitments as and when they come due. A number of liquidity risk measurement techniques can be used, from basic ratio calculations to sophisticated modelling techniques.¹⁷ In this regard, the AMF expects the financial institution to adopt measures that reflect its risk profile. ~~Within the scope of its supervisory activities, the AMF will assess the adequacy of the measures adopted by the financial institution.~~

¹⁶ Autorité des marchés financiers. *Liquidity Adequacy Guideline*, ch. 4, January 2016.

¹⁷ Autorité des marchés financiers. *Liquidity Adequacy Guideline*, p. 7-8, January 2016

The financial institution should have a model for projecting its liquidity requirements in light of trends (short-, medium- and long-term) and cycles (weekly, monthly and yearly) that affect liquidity, whether they relate to its particular activities or to market conditions.

In order to estimate liquidity risk exposure, financial institutions should use metrics that project cash flows and future liquidity positions over a determined set of maturities. These estimates should span short-term time horizons (e.g., five days, one month). However, given that funding gaps are identifiable over the longer term, these estimates should also span longer horizons. Estimates should include the institution's institution's vulnerability to liquidity risk under both normal and crisis conditions.

A financial institution should verify that its medium- and long-term funding sources (securitization, issuance of medium- to long-term securities, bonded debt, etc.) will continue to be at its disposal in adverse scenarios. An institution facing adverse liquidity conditions will often not have ongoing access to various funding sources, a factor it must consider in prospectively managing its liquidity.

The AMF also expects financial institutions to take steps to ensure that their liquidity risk assumptions are reasonable and appropriate, documented and periodically reviewed for validity. To do this, financial institutions should deploy appropriate processes and control mechanisms to guarantee data quality and to ensure sound decision making.

Assumptions on the liquidity of certain positions are of particular importance. These positions include deposits, assets, liabilities and off-balance sheet items with uncertain cash flows, and sources of funds in Consequently, a crisis. These financial institution's key assumptions should be adjusted according to analyzed to the financial institution's specific circumstances. Reputational risk is one of the factors that could affect the determine their ongoing validity of such assumptions. This risk could impact the financial institution's ability to raise funds in view of existing and potentially changing market conditions, including unexpected significant outflows or changes in the markets or liquidate its assets; it could also increase the probability of massive withdrawals of deposits. external market environment.

The AMF acknowledges that assumptions can vary from one financial institution to another. Nonetheless, the financial institution should be able to justify the assumptions used to estimate its liquidity risk.

~~7.3 Principle 6: Scenario analysis and stress tests~~

~~The AMF expects financial institutions to analyze liquidity risk based on various scenarios. Financial institutions should also carry out stress tests.~~

~~A financial institution should assess its liquidity risk exposure using scenarios that differ in terms of probability, severity and duration. For example, it should consider temporary liquidity crises (lasting a few days or a few weeks) as well as extended crises (lasting several months).~~

Scenario analyses and stress tests should allow the financial institution to simulate the following:

- institution-specific events;
- events related to market conditions;
- large-scale events affecting market conditions and presenting a systemic risk.

The interrelation between institution-specific and market-related events is important. Scenario analyses and stress tests should not consider these events in isolation. They should allow for the analysis and simulation of several concurrent events.

The financial institution should properly document the various scenarios used in its liquidity risk analysis as well as the assumptions underlying those scenarios.

Scenario analyses and stress tests should focus on the following:

Potential tightening or disruption of unsecured and secured loans markets.¹⁸ Simulations based only or predominantly on unsecured loans implicitly assume that secured loans will always be available in exchange for high-quality assets. In the event confidence in the interbank market has been shaken, this assumption may not be valid;

Prolonged unavailability of medium- and long-term funding sources (securitization, issuance of medium- to long-term securities, bonded debt, etc.). The simulation should reflect the correlation between short-term markets (interbank lending, repurchase and reverse repurchase agreements, etc.) and medium- to long-term markets. The assumption that in the event of a crisis, a financial institution will ultimately be able to rely on short-term funding may not be supported if the liquidity crisis undermines market confidence;

Limits to the diversity of funding sources in the event of a crisis. In a crisis situation, the securitization market may be completely frozen, the bond market may be partially frozen and the interbank market may incur lower trading volumes and post shorter maturities. The simulation should also assume that markets may be volatile in various foreign currencies simultaneously;

The ability to convert liquidity from one currency to another during a crisis. During a crisis, the financial institution may not be able to do so in a timely manner, for the necessary amounts or at the usual cost;

Product-related risks (e.g., asset-backed commercial paper) resulting not only from the legal provisions governing such instruments but also from the potential impact on reputational risk. For example, a financial institution that is acting as promoter of a structured product may decide to take on the responsibility for financing the product in a crisis situation, even if it is not legally bound to do so.

The results of scenario analyses and stress tests should, on the one hand, enable the financial institution to identify potential liquidity risk management deficiencies and, on the other hand, enable it to establish or amend its liquidity risk management strategies in order to remedy such deficiencies (e.g., revising limits, reducing exposures, diversifying sources of financing and accessing lines of credit).

¹⁸ Loans granted in consideration of the pledge of an asset to guarantee repayment.

~~Limits should be established based on the assessment of the financial institution's liquidity position and reflect the financial institution's risk tolerance. They could serve as crisis indicators for purposes of the financial institution's contingency plan and enable the institution to identify weaknesses in its liquidity risk management.~~

~~8. 5. Mitigation of liquidity risk~~

~~8.13.4 Principle 7: Holding liquid assets~~

The AMF expects financial institutions to hold an appropriate amount of liquid assets to meet their requirements adequately in normal times and in times of crisis. Financial institutions should also define internal high-quality liquid assets that are diversified and have stable funding sources.

~~If required, The financial institution can draw on its reserves should conduct an annual internal assessment of liquid assets.¹⁹ However, it may be costly for the the liquidity risk management framework. The assessment should be documented and include the following information:~~

- ~~• identification of the main liquidity and funding risks to which the institution is exposed;~~
- ~~• the description of the identification, monitoring and measurement process;~~
- ~~• the description of the techniques and resources used to manage and mitigate these risks.~~

~~The liquidity risk management framework should track positions against established internal limits and identify and manage risk factors that may result in exceeding these limits in light of the liquidity currently available and future liquidity.~~

~~The AMF also expects each financial institution to hold a cushion of diversified, internal, high-quality liquid assets and stable funding sources to constitute its liquid asset reserves.~~

~~Financial institutions must define which assets. This and which future inflows can be considered available liquidity to assess the adequacy of their level of liquidity. Therefore, they must differentiate between the assets that will very likely remain liquid during times of stress and the assets that can cause the institution to underestimate its liquidity be used solely to obtain liquidity from designated liquidity providers.²⁰ Internal limits must be set for these two components, and a clear link must be established between the targeted size of the high-quality liquid assets and the liquidity risks that could materialize over a time horizon aligned with the business model.~~

¹⁹ ~~Financial institutions can draw on three types of liquid asset reserves:~~

- ~~• Primary reserves: cash and deposits with the Bank of Canada;~~
- ~~• Secondary reserves: liquid deposits with other financial institutions;~~
- ~~• Tertiary reserves (cushion): highly liquid marketable securities (e.g., Treasury bills).~~

²⁰ ~~Examples: Bank of Canada or deposit insurance fund.~~

If required, the financial institution can draw on these reserves of unencumbered high-quality liquid assets to be held as insurance against a range of liquidity stress scenarios, including those that involve the loss or impairment of unsecured and typically available secured funding sources. There should be no legal, regulatory or operational impediment to using these assets to obtain funding. In addition, the reserves of liquid assets should be designed to meet stress test requirements for reasons of competitiveness and profitability. In this regard, at all times.

The AMF expects the financial institution to establish limits regarding the appropriate level of liquid assets it should hold at all times in light of its liquidity risk profile.

The financial institution should identify the types, qualities and quantity of liquid assets it must hold ~~in order~~ to meet its liquidity requirements ~~adequately~~.

To do so, the financial institution should base its assessment on such criteria as:

- the market's ability to absorb the assets, the time required to liquidate them and the selling price;
- holdings as a percentage;
- the rating assigned to the assets by a rating agency;
- the currency of the assets;
- the maturity date, in light of a possible redemption or early sale;
- the possibility of pledging the assets as collateral to borrow funds or as part of repurchase agreements;
- the concentration by type of asset, counterparty, geographic location and industry.

8.2 — Principle 8: — Diversification of financing sources

The financial institution should ensure that its liquidity risk management process includes measurement of the liquidity costs, benefits and risks implicit in all significant business activities, including activities that involve the creation of contingent exposures which may not immediately have a direct balance sheet impact.

This assignment of liquidity costs should incorporate factors related to the anticipated holding periods of assets and liabilities, their market liquidity risk characteristics and any other relevant factors, including the benefits from having access to relatively stable sources of funding, such as some types of retail deposits.

The quantification and attribution of these risks should be explicit and transparent and should include consideration of how liquidity would be affected under stressed conditions.

The analytical framework should be reviewed to reflect changing business and financial market conditions and so maintain the appropriate alignment of incentives. Moreover, liquidity risk costs, benefits and risks should be addressed explicitly in the new product approval process.

Financial institutions should also define which funding sources can be considered stable for the purpose of assessing the adequacy of funding sustainability. They should also assess the stability of their funding profile on the basis of the diversity (or the concentration) of their liquidity providers, markets and funding products and assess their market access in terms of volume and pricing, in light of any encumbrance on the assets and the expected changes therein when the funding plan is executed.

3.5 Impact of financial institution's level of capitalization on liquidity risk management

The AMF expects financial institutions to ~~maintain diversified~~consider the importance of capital adequacy in managing liquidity risk and permanent sources of funding, consequently, the potential impact of a liquidity crisis on their solvency.

While adequate capitalization contributes to a better rating for a financial institution and thereby improves the cost and availability of funding, capital is not an appropriate cushion in the event of a liquidity crisis. Moreover, the assets of an adequately capitalized financial institution may not be sufficiently liquid in a crisis situation. By contrast, a financial institution may have sufficient liquidity without having adequate capitalization. Similarly, a financial institution's level of capitalization can affect its ability to obtain liquidity in a crisis situation. A financial institution whose solvency is at risk could face costly risk premiums or limited funding, or even be denied funding altogether.

Therefore, the link between liquidity risk and capital adequacy should be properly considered in:

- the liquidity risk management strategy;
- scenario analyses;
- stress testing;
- the contingency plan.

3.6 Management of liquidity risk through asset-liability management²¹

The AMF expects financial institutions to structure their assets so as to have sufficient funds and hold various marketable securities to meet their obligations when due.

²¹ International Association of Insurance Supervisors. ICP 16 Enterprise Risk Management for Solvency Purposes, October 2011.

International Association of Insurance Supervisors. Standard on Asset-Liability Management, Standard N° 13, October 2006.

Basel Committee on Banking Supervision, Bank for International Settlements. Principles for Sound Liquidity Risk Management and Supervision, September 2008.

Gilbert, Charles. IAA Risk Book - Asset Liability Management. Techniques and Practices for Insurance Companies, International Actuarial Association, Chapter 13, 2016.

A financial institution's liquidity profile depends on both its assets and liabilities and varies according to market conditions. Asset-liability management (ALM) consists of matching cash flows for assets and liabilities in normal conditions, in times of stress and/or disaster.

Financial institutions should therefore establish an ALM strategy that clearly specifies the nature, role and scope of ALM activities and their relation to the development of these products, pricing functions and investment management. This ALM strategy should consider the interdependence that exists between all of the institution's assets and liabilities by acknowledging that correlations may not be linear.

The AMF recognizes that there are no "one size fits all" formulas that can be applied to financial institutions. As a result, each financial institution should choose appropriate measurement tools, such as liquidity ratios and cash flow modelling, to determine its exposure to liquidity risk.

Therefore, in order to implement ALM, the financial institution should be able to identify the potential liquidity risks associated with the early repayment of loans or the early cancellation of insurance contracts.

Losses due to liquidity risk can also occur when a financial institution needs to borrow unexpectedly or sell assets at a price that is lower than their market value. To this end, financial institutions should ensure, on an ongoing basis, that their assets and liabilities adapt to market conditions.

The financial institution should also structure its assets in line with its short-term cash flows. It should establish a plan to deal with unexpected outflows of funds, either by holding additional liquid assets or having an emergency credit facility.

Furthermore, the financial institution should ensure that the average lifespan of a block of liabilities is kept within a specific range of the average lifespan of the matched assets and that the impact of interest rate changes remains within tolerance limits.

3.7 Intra-group management

The AMF expects financial institutions to consider the liquidity arrangements in effect within their financial group that could have an impact on their liquidity risk management.

Intra-group liquidity arrangements may significantly influence the risk profile, profitability, capitalization and reputation of a financial institution. On the one hand, the financial institution may be required to provide liquidity to the other members of the group and, on the other hand, funds provided to the financial institution by other members of the group may be withdrawn or cancelled, particularly in the event of a crisis.

The financial institution's liquidity risk management strategy should take into consideration the interdependencies between the various members of the same group as regards liquidity and the impacts of these interdependencies on the financial institution's liquidity risk.

For each individual legal entity and for all of the entities in the group, the financial institution should actively monitor and control its liquidity risk exposures and funding needs, considering legal, regulatory and operational limitations to the transferability of liquidity.

While cross-entity funding channels could help relieve liquidity pressures at one entity, a financial institution should consider establishing internal limits on intra-group liquidity risk to mitigate the risk of contagion under stress. It also may establish limits at the subsidiary and branch level to restrict the reliance of related entities on funding from elsewhere in the institution. Internal limits also may be set for each currency used by the institution. The limits should be stricter where ready conversion between currencies is uncertain, particularly in stress situations.

In addition, assumptions regarding the transferability of funds and collateral should be transparent in liquidity risk management plans that are available for supervisory review. An institution's assumptions should fully consider regulatory, legal, accounting, credit, tax and internal constraints on the effective movement of liquidity and collateral. They should also consider the operational arrangements needed to transfer funds and collateral across entities and the time required to complete such transfers under those arrangements.

Where the financial institution is part of a group, the AMF is of the opinion that the financial institution continues to be responsible for its own liquidity risk management, even if such management is carried out at the group level.

3.8 Scenario analysis and stress tests

The AMF expects financial institutions to analyze liquidity risk based on various stress scenarios affecting specifically or more generally the entire market in order to ensure that its current exposures to liquidity risk remain aligned with the tolerance levels they have set. Financial institutions should also carry out stress tests to adapt their liquidity risk management strategies, policies and positions and to develop effective contingency plans.

In the context of liquidity risk management, scenario analyses and stress tests should focus on the provisions in the *Stress Testing Guideline*,²² and more particularly on the following:

- Potential tightening or disruption of unsecured and secured loans markets
 - Simulations based only or predominantly on unsecured loans implicitly assume that secured loans will always be available in exchange for high-quality assets. In the event confidence in the interbank market has been shaken, this assumption may not be valid.
- Prolonged unavailability of medium- and long-term funding sources (securitization, issuance of medium- to long-term securities, bonded debt, etc.)

²² Autorité des marchés financiers. *Stress Testing Guideline*, June 2012.

- The simulation should reflect the correlation between short-term markets (interbank lending, repurchase and reverse repurchase agreements, etc.) and medium- to long-term markets. The assumption that in the event of a crisis, a financial institution will ultimately be able to rely on short-term funding may not be supported if the liquidity crisis undermines market confidence.
- Limits to the diversity of funding sources in the event of a crisis
 - In a crisis situation, the securitization market may be completely frozen, the bond market may be partially frozen and the interbank market may incur lower trading volumes and post shorter maturities. The simulation should also assume that markets may be volatile in various foreign currencies simultaneously.
- The ability to convert liquidity from one currency to another during a crisis
 - During a crisis, the financial institution may not be able to do so in a timely manner, for the necessary amounts or at the usual cost.
- Product-related risks, for example, asset-backed commercial paper, resulting not only from the legal provisions governing such instruments but also from the potential impact on reputational risk
 - For example, a financial institution that is acting as promoter of a structured product may decide to take on the responsibility for financing the product in a crisis situation, even if it is not legally bound to do so.

The results of scenario analyses and stress tests should, on the one hand, enable the financial institution to identify potential liquidity risk management deficiencies and, on the other hand, enable it to establish or amend its liquidity risk management strategies in order to remedy such deficiencies (e.g., revising limits, reducing exposures, diversifying sources of financing and accessing lines of credit).

Limits should be established based on the assessment of the financial institution's liquidity position and reflect the financial institution's risk tolerance. They could serve as crisis indicators for purposes of the financial institution's contingency plan and enable the institution to identify weaknesses in its liquidity risk management.

3.9 Public disclosure²³

The AMF expects financial institutions to publicly disclose information on a regular basis that enables market stakeholders to make an informed judgment about their liquidity positions and the soundness of their liquidity risk management framework.

²³ [Basel Committee on Banking Supervision. *Pillar 3 disclosure requirements – consolidated and enhanced framework*, March 2017, Table LIQA, p. 56.](#)

The financial institution should disclose sufficient information about its liquidity risk management to enable the concerned stakeholders to make an informed judgment about the institution's capacity to meet its liquidity needs.

This information might include:

- an organizational structure and liquidity risk management framework;
- the roles and responsibilities of the board of directors, senior management and special committees in the design and operation of this framework;
- the funding strategy, including policies on diversification in the sources and tenor of funding and whether the funding strategy is centralized or decentralized;
- an explanation of how stress tests are used;
- a description of liquidity risk tolerance and a demonstration of how compliance with this tolerance is assessed;
- an outline of contingency funding plans;
- the policy on maintaining liquidity reserves;
- the inclusion of quantitative measures such as the composition and size of the stock of liquid assets, the values of internal ratios, balance sheet and off-balance sheet items, the concentration limits on collateral pools and sources of funding (both products and counterparties), liquidity exposures and funding needs at the level of individual legal entities, foreign branches and subsidiaries, taking into account legal, regulatory and operational limitations on the transferability of liquidity, and a description of the metrics used and the limits placed on the values of those metrics.

The information published by the financial institution should make it possible to:

- identify the liquidity risks to which it is exposed and to monitor the level of these risks;
- monitor its potential sources of liquidity;
- determine if it is complying with the framework in place.

[International Association of Insurance Supervisors. *Insurance core principles, standards, guidance and assessment methodology Draft revised ICP 20 \(Public Disclosure\) for public consultation, June 21, 2018, page 2.*](#)

4. Mitigation of liquidity risk

4.1 Diversification of funding sources

The AMF expects financial institutions to maintain diversified and ongoing sources of funding.

A financial institution should avoid any potential concentration of certain sources of funding.

To this end, the financial institution should analyze the various characteristics of its liabilities and their impact on its liquidity position in light of the following:

- the maturity date and volatility of liabilities;
- percentage of holdings of secured and unsecured funding;
- reliance on:
 - a single provider of funds or on a related group of providers of funds;
 - a single product or financial instrument (e.g., interbank loans and repurchase agreements);
 - intra-group financing.
- the geographic location of the funds providers and their industry or area of activity.

In order to limit the concentration of volatile liabilities, the financial institution should analyze the various conditions that apply to its liabilities (e.g., penalties for early withdrawal, interest rate revision clauses, etc.) in order to identify:

- liabilities that are stable even in times of crisis;
- liabilities likely to be withdrawn gradually after the first signs of a crisis;
- liabilities withdrawn immediately.

The objective is to estimate and maintain an appropriate amount of primary financingfunding and minimize reliance on volatile liabilities-sources of funding. Concentration limits should be clearly established and monitored by the liquidity risk control systems.

8.34.2 Principle 9: Market access

The AMF expects a financial institution to regularly review its ability to obtain market funding and maintain a relationship of confidence with its principal providers of funds in normal times and in times of [crisisstress](#).

A financial institution should ensure that it has opportunities to borrow or issue debt securities on the market if necessary, even during a crisis. The financial institution should also expand its funding opportunities and develop solid and lasting relationships with funds providers.

The financial institution should be able to assess its ability to obtain funding in local currency and foreign currencies on a daily and weekly basis. It should ensure that its ability to obtain funding adequately covers its liquidity requirements.

When assessing its ability to obtain funding, the financial institution should take the following factors into consideration, among others:

- size and volumes of market transactions;
- market share held;
- credit limits imposed by lenders;
- market perception;
- market conditions;
- its borrowing experience and history.

To assess its ability to obtain funding, the financial institution could also test the market even when it does not have an immediate funding need.

In addition, the financial institution should maintain strong relationships with principal providers of funds. It should, [where applicable](#), negotiate favourable lines of credit in advance with its key lenders as a preventive measure in the event of a crisis.

~~Financial institutions consider securitization and repurchase agreements as valuable vehicles for transferring assets, including illiquid assets. However, as a strategy for raising funds, securitization is a solution that is not always accessible in a crisis. Consequently, it would be advisable for the financial institution to resort to securitization on a regular basis during normal times in order to be able to do so efficiently in a crisis. This may be particularly judicious given that resorting to securitization at the start of a crisis could be perceived as a sign that the financial institution has liquidity problems.~~

8.44.3 Principle 10: Management of foreign currency liquidity risk

The AMF expects financial institutions to have an appropriate process for managing their liquidity positions with respect to the principal foreign currencies used in their operations.

The financial institution could use foreign currency deposits or loans in order to fund a portion of its liquidity requirements in local currency or foreign currencies. The financial institution could also convert liquidity in local currency in order to meet foreign currency liquidity needs.

In both cases, it should take the following factors into consideration:

- the convertibility of each currency, the volatility of the exchange rate, and the delay for obtaining foreign currency funds;
- foreign market conditions, including their liquidity and interest rate levels;
- the impact of a potential liquidity crisis on foreign markets.

The financial institution should ~~establish interdependence~~also set limits ~~with respect for its exposure~~ to liquidity risk from its operations between the local currency and the principal foreign currencies ~~used in the course of its operations.~~

5. Crisis management

~~9. 6. Crisis management~~

9.15.1 Principle 11: Contingency plan

~~The AMF expects financial institutions to develop a contingency plan for managing any liquidity crisis adequately, regardless of its severity or duration.~~

The AMF expects financial institutions to establish a contingency plan for managing any liquidity crisis adequately, regardless of its severity or duration.

The principal objective of the contingency plan should be to identify and document the various processes to be implemented and steps to be taken in order to manage a liquidity crisis effectively and efficiently.

The results of the scenario analyses and stress tests should be incorporated into the contingency plan. These results should be used as the basis for identifying the various crises that could affect the financial institution's liquidity and estimating their severity.

The ~~contingency plan~~financial institution should ~~include early draw up a list of indicators to identify the~~ warning signs ~~to signal~~of a possible liquidity crisis and trigger ~~implementation~~the activation of the contingency plan. These indicators could include the following:

- rapid asset growth, especially if funded with potentially volatile liabilities;
- high concentration of certain assets or sources of funding;
- repeated breaching of internal and regulatory limits;
- heightened risk associated with a financial product or service (e.g., rising negative trend in delinquencies);
- significant deterioration in profitability, asset quality and overall financial condition of the institution; (e.g., credit rating downgrade);
- ~~negative publicity;~~
- ~~credit rating downgrade;~~
- ~~rising funding costs;~~
- difficulty in obtaining market funding or inability to access such funding; (e.g., rising funding costs);
- collateral requirements or requests for additional collateral from lenders for exposure to credit risk;
- lowering or elimination of lines of credit granted to the institution by counterparties;

- deterioration in cash flow positions due to greater mismatching of maturities, particularly short-term maturities;
- increase in deposit withdrawals for short-term periods;
- ~~changes in market conditions.~~

Liquidity risk control ~~process~~ processes should enable the financial institution to thoroughly monitor all indicators of a potential liquidity crisis.

Depending on the severity and duration of the anticipated liquidity crisis, the contingency plan should, among other things:

- specify the roles and responsibilities of all parties;
- identify the information and data necessary for decision-making and ensure they are available in a timely manner and on a continuous basis throughout the crisis;
- ~~determine~~ define the series of steps to be taken with respect to clients, market participants, the media, the regulatory agency and compensation bodies, over a fixed timeframe, determine the potential impact of these actions on market perception, the reputation of the financial institution and its solvency;
- establish procedures for offsetting liquidity deficiencies in a crisis, including the circumstances under which each step is to be taken;
- identify the various sources of liquidity, their availability, the conditions for their use, their reliability and the order of priority in which they are to be used; also assess the costs of alternative funding strategies;
- ~~assess the costs of alternative funding strategies;~~
- ~~determine the potential impact of the steps to be taken on market perception, the reputation of the financial institution and its solvency;~~
- ~~determine the actions to be taken as regards clients, market participants, the media, compensation bodies and its regulatory agency;~~
- include a communications protocol to be adopted during the crisis.

Proper management of disclosure will help financial institutions to lessen the impact on their reputation and thereby prevent a potential massive withdrawal of funds or higher financing costs. They should therefore maintain regular and effective communication with the AMF, their largest lenders, credit rating agencies, the media, clients, ~~their regulatory agency~~ and compensation bodies.

Financial institutions should ensure that all parties involved at every level of the contingency plan understand their roles and responsibilities and are kept informed of any changes to the plan.

Finally, the contingency plan should be reviewed and updated regularly in light of such factors as the most recent changes in the financial institution's organizational structure, changes in practices, and market conditions. The contingency plan should also be tested to ensure that it is effective and appropriate.

Supervision of sound and prudent management practices

In fostering the establishment of sound and prudent management practices within financial institutions, the AMF, as part of its supervisory activities, intends to assess the degree of compliance with the principles set forth in this guideline in light of the specific attributes of each institution.

Consequently, it will examine the effectiveness and relevance of the strategies, policies and procedures adopted by financial institutions as well as the quality of supervision and control exercised by their boards of directors and senior management.

Liquidity risk management practices are constantly evolving. The AMF expects decision makers at financial institutions to remain current with best practices and to adopt them, to the extent that they address their needs.