



REGULATORY GUIDELINE

# Liquidity Risk Management Principles

SYSTEM COMMUNICATION NUMBER  
Guideline 2015-02

ISSUE DATE  
June 2015

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## I. INTRODUCTION

This regulatory guideline is a Regulatory Guidance Document as contemplated by the Standards of Sound Business Practice (the Standards). It supplements and expands upon section 2.1, Financial Management, section 2.4, Risk Management and section 3.2, Liquidity of the Standards and must be adhered to by Saskatchewan credit unions.

## II. PURPOSE AND SCOPE

The purpose of this guideline is to communicate key principles and the expectations of Credit Union Deposit Guarantee Corporation (the Corporation) with respect to liquidity risk management. This guideline also provides the framework for the Corporation to assess the scope and effectiveness of a credit union's liquidity risk management framework, and whether the credit union has adequate and appropriate forms of liquidity for current and future needs.

The Corporation acknowledges that the level of sophistication of liquidity risk management will differ among credit unions. As such, the Corporation expects credit unions to scale and implement the expectations for each principle based on their nature, scope, complexity and risk profile.

## III. PRINCIPLES

### OVERVIEW OF LIQUIDITY RISK MANAGEMENT

Liquidity is the ability of a credit union to generate, obtain and maintain sufficient cash or its equivalent in a timely manner at a reasonable price to meet its commitments as they fall due. Adequate balance sheet liquidity is critical for the overall safety and soundness of credit unions.

Liquidity risk arises from a credit union's potential inability to meet both expected and unexpected current and future cash flow and collateral needs without affecting daily operations or the financial condition of the organization. A credit union's obligations, and the funding sources used to meet them, depend significantly on its business mix, balance sheet structure, and the cash flow profiles of its on- and off-balance sheet obligations. In managing cash flows, credit unions confront situations that can give rise to increased liquidity risk. These include funding mismatches, market constraints on the ability to convert assets into cash or in accessing sources of funds, and contingent liquidity events. Changes in economic conditions or exposure to credit, market, operational, legal and reputation risks can also affect a credit union's liquidity risk profile and should be considered in the assessment of liquidity. For example, if a credit union cannot meet depositor withdrawal requirements, general creditor expenses, or if it is forced to significantly limit new lending, members and other stakeholders are likely to lose confidence in the organization.

In Saskatchewan, credit unions rely on SaskCentral and Concentra Financial for liquidity support. It is critical that credit unions understand and consider the limited capacity of these liquidity support organizations (LSOs) when developing their liquidity risk management frameworks. Credit unions must be actively engaged with them to ensure comprehensive and sound liquidity risk management frameworks.

Pursuant to *The Credit Union Regulations, 1999*, SaskCentral prescribes the statutory liquidity requirement for Saskatchewan credit unions. These funds are held on deposit with SaskCentral and are used primarily to ensure the clearing and settlement of payment obligations within the provincial credit union system, and to support emergency liquidity events. Credit unions are also expected to maintain a sufficient buffer of liquid assets over and above prescribed regulatory minimums to meet normal operating requirements and unexpected contingencies. The amount of liquidity buffer that a credit union targets is to be determined by its application of the liquidity principles and will depend on the nature, scope, complexity and risk profile of the organization.

The Corporation expects credit unions to maintain the infrastructure and capacity to identify, measure, manage and monitor liquidity risk exposures under stressed outcomes and maintain structurally sound funding and liquidity profiles. The Corporation will assess liquidity based on the appropriateness of the quality, quantity and stability of current and potential liquidity sources under both normal and stressed conditions and will take supervisory action if a credit union is not holding sufficient liquidity.

## Principle 1

A credit union is responsible for the sound management of liquidity risk. A credit union should establish a robust liquidity risk management framework that ensures it maintains sufficient liquidity, including a cushion of unencumbered, high-quality liquid assets to withstand a range of stress events, including those involving the loss or impairment of both unsecured and secured funding sources.

A liquidity risk management framework should include:

- a board-approved tolerance for liquidity risk that is reflected in liquidity and funding policies, business strategies, reporting frameworks, risk management and control functions
- ongoing management and monitoring of assets held for liquidity purposes and funding requirements
- ongoing identification, management and monitoring of contingent liability obligations
- analysis of changes to funding requirements under various scenarios
- strategy for diversified sources of funding under stress scenarios
- strategy for managing and monitoring daily liquidity positions
- information systems that are timely and sufficient in their content, format and frequency to adequately manage liquidity
- arrangements for public disclosure of liquidity positions, risks and commensurate risk management practices

The primary objective of the liquidity risk management framework is to ensure, with a high degree of confidence, that the credit union is positioned to address its daily liquidity obligations and withstand periods of liquidity stress. This requires that credit unions sufficiently interact, plan with, and obtain appropriate assurances from their LSOs.

Credit unions are expected to hold a liquidity cushion comprised of high quality and readily marketable assets to be in a position to survive periods of liquidity stress. Credit unions must determine how much liquidity will be maintained over and above regulatory minimums, and demonstrate that their liquidity cushion is adequate. A credit union is also expected to demonstrate that its liquidity cushion is commensurate with the complexity of its on- and off-balance sheet activities, the nature of its assets and liabilities, the extent of its funding mismatches and the diversity of its business mix and funding strategies.

A credit union should use appropriately conservative assumptions with respect to the marketability of assets and access to funding (both secured and unsecured) during periods of stress. Moreover, it should not allow competitive pressures to compromise the integrity of its liquidity risk management, control functions, limit systems and liquidity cushion.

## **GOVERNANCE, RISK TOLERANCE AND LIQUIDITY POLICIES**

### **Principle 2**

A credit union should clearly articulate a liquidity risk tolerance that is appropriate for its business strategy and its role in the financial system.

The credit union's board is ultimately responsible for the liquidity risk assumed by the organization. As a result, the board is expected to ensure that the credit union's liquidity risk tolerance is established and communicated in such a manner that all levels of management understand the organization's approach to managing the trade-offs between liquidity risk and short-term profits. In addition, the board should ensure that it:

- understands the nature of the credit union's liquidity risk and reviews at least annually the information necessary to maintain this understanding
- establishes lines of authority and responsibility for managing the credit union's liquidity risk
- oversees management in the identification, measurement, monitoring and control of liquidity risk
- understands and periodically reviews the credit union's plans for dealing with adverse liquidity events and stress situations
- understands the liquidity risk profiles of key subsidiaries, as appropriate

The liquidity risk tolerance should reflect the credit union's financial condition and funding capacity, and ensure that it is able to withstand prolonged periods of stress.

### **Principle 3**

Senior management should develop a strategy, policies and practices to manage liquidity risk in accordance with the risk tolerance and ensure that the credit union maintains sufficient liquidity. Senior management should continuously review information on the credit union's liquidity developments and report to the board on a regular basis. The credit union's board should review and approve the strategies, policies and practices related to the management of liquidity at least annually and ensure that senior management manages liquidity risk effectively.

A credit union's documented liquidity policies and practices, which collectively articulate the importance senior management places on liquidity and its use in achieving business objectives, are to be communicated and understood at all levels of the organization. In particular, credit unions should have policy and practice with respect to:

- identification of potential operating liquidity risks and ensuring all cash outflow commitments (on- and off-balance sheet) are honoured on a daily basis by performing match and funds flow analysis
- limits and targets for the sources, types and levels of liquid assets to meet operational and regulatory requirements, as well as stressed conditions
- liquid assets that can be readily converted into cash without incurring undue capital losses or excessive costs

- diversified funding sources, including the ability to renew or replace deposits and the capacity to borrow
- large deposits and loans requiring liquidity hedging (e.g., maturity matching)
- liquidity management contingency plans
- potential long term liquidity needs resulting from unusual business conditions
- processes for determining, reviewing, approving and applying stress test scenarios and related assumptions

For investment and derivative management, credit unions should have policy and practice with respect to:

- requirements for safety, liquidity and return
- eligible investment instruments, portfolio and individual security concentration limits and term-to-maturity restrictions
- derivative instruments purpose, types and limits
- control, monitoring and reporting of the investment portfolio, including authorization and implementation of investment decisions and portfolio risk identification
- selection criteria for securities dealers and other parties with whom the credit union is authorized to deal with
- custodial arrangement of securities
- analysis of investment default risk including a regular review process to evaluate and maintain accurate asset values, and minimize non-productive assets
- action plans for deteriorating investment positions

For foreign exchange risk management, credit unions should have policy and practice with respect to:

- limits on foreign exchange risk exposure
- currencies permitted to incur exposure
- methods to analyze foreign exchange risk exposure and the financial impact of potential exchange rate exchanges

Senior management is expected to ensure that the credit union has adequate internal controls whereby liquidity risk oversight responsibilities are assigned to a function that is independent of business operations.

#### **Principle 4**

Credit unions should actively monitor the liquidity risk exposures and funding capacity of their liquidity support organizations taking into account legal, regulatory and operational limitations to the transferability of liquidity.

Compared to other financial institutions, a unique characteristic of Saskatchewan credit unions is their considerable reliance on organizations within the system to manage a substantial portion of their liquidity, and also support the management of liquidity risk. As a result, the Corporation expects that credit unions actively and regularly engage with their LSOs to fully understand their funding capacity, as well as any constraints or barriers associated with obtaining liquidity from them.

Credit unions are expected to understand results of and/or participate in coordinated stress tests and contingency planning with their LSOs, which consider both organization-specific and system-wide stress events. This will provide credit unions with a fulsome understanding

of the LSOs funding capacity. Credit unions should ensure that effective processes are in place to allocate and transfer liquidity, as well as meet collateral requirements for clearing and settlement. Having an understanding of funding capacity, credit unions are expected to establish appropriate policy limits, liquidity buffers, and ensure multiple sources of funding are available to mitigate stressed events.

Effective communication with members and other stakeholders when liquidity problems arise is of vital importance. Credit unions are expected to be actively engaged with their LSOs and have appropriate communication plans and procedures documented in advance.

Assumptions regarding the transferability of funds and collateral should be transparent in liquidity risk management plans. They should fully consider regulatory, legal, accounting, credit, tax and internal constraints on the movement of liquidity and collateral. They should also consider the operational arrangements needed to transfer funds and collateral and the time required to complete such transfers. Where applicable, credit unions are responsible for providing due diligence to the Corporation on the soundness of these arrangements.

## MEASURING, MANAGING AND MONITORING LIQUIDITY

### Principle 5

A credit union should have a sound process for identifying, measuring, monitoring and controlling liquidity risk. This process should include a robust framework for comprehensively projecting cash flows arising from assets, liabilities and off-balance sheet items over an appropriate set of time horizons.

A sound framework for identifying, measuring, managing and monitoring sources and uses of liquidity and the commensurate risk should have several dimensions including:

- a comprehensive liquidity measurement program that is integrated within the liquidity management strategy and contingency funding plans of the credit union. Components of such a program should include the combination of:
  - a process for measuring and reporting pro-forma funding requirements through the projection of contractual and contingent cash flows
  - maintenance of a stock of high-quality unencumbered liquid assets that can be converted under stress conditions into cash without incurring undue losses
- a contingency funding plan that addresses stress testing result outcomes
- processes for:
  - internal limit setting and controls consistent with the credit union's risk tolerance
  - measuring business performance and maintaining proper incentives for individual business lines to ensure they are assigning a liquidity cost or benefit to different business activities
  - managing access to a diversified set of funding sources and maturities
- information systems requirements and the necessary personnel to ensure timely measuring, monitoring and reporting of liquidity positions against limits to senior management and, as required, the board to support appropriate action, response and oversight

## STRESS TESTING<sup>1</sup>

### Principle 6

A credit union should conduct stress tests on a regular basis for a variety of short-term and protracted credit union-specific and market-wide stress scenarios (individually and in combination) to identify sources of potential liquidity strain and to ensure that current exposures remain in accordance with the credit union's established liquidity risk tolerance. A credit union should use stress test outcomes to adjust its liquidity risk management strategies, policies, and positions and to develop effective contingency plans.

A credit union should perform stress tests on a regular basis to identify and quantify its exposures to possible future liquidity stresses, and analyze possible impacts on the organization's cash flows, liquidity position, profitability and solvency. The results of these stress tests should be discussed by senior management and form the basis for taking remedial or mitigating actions to limit the credit union's exposures, build up a liquidity cushion and adjust its liquidity profile to fit its risk tolerance. The results of stress tests are expected to play a key role in shaping the credit union's contingency planning and in determining the strategy and tactics to deal with events of liquidity stress.

The extent and frequency of testing should be commensurate with the nature, scope, complexity and risk profile of the credit union and its liquidity risk exposures. Credit unions are expected to build in the capability to increase the frequency of tests in special circumstances, such as in volatile market conditions.

Senior management is expected to review stress test scenarios, assumptions and results. Stress test results and any subsequent actions are expected to be reported to and discussed with the board, and the Corporation upon request. Senior management is expected to integrate the results of the stress testing process into the credit union's strategic planning process (e.g., adjusting the credit union's balance sheet composition) and the organization's day-to-day risk management practices (e.g., through monitoring sensitive cash flows or reducing concentration limits). The result of the stress tests should be a key consideration when establishing internal limits.

Senior management is responsible to incorporate the results of stress tests in assessing and planning for related potential funding shortfalls in the credit union's contingency funding plan. To the extent that projected funding deficits are larger than (or projected funding surpluses are smaller than) implied by the credit union's liquidity risk tolerance, management should consider, in consultation with the board, whether to adjust the credit union's liquidity position or bolster the credit union's contingency plan.

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<sup>1</sup> The principles and expectations of credit unions with respect to stress testing are outlined in the Corporation's regulatory guideline 2011-01, Stress Testing.

## Principle 7

In addition to the statutory liquidity pool, a credit union should maintain a cushion 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 assets to obtain funding.

A critical element of a credit union's resilience to liquidity stress is the continuous availability of an adequate cushion of unencumbered, high-quality liquid assets that can be used to support a range of stress scenarios. Credit unions must determine how much liquidity will be maintained over and above regulatory minimums, and demonstrate that their liquidity cushion is adequate. The size of the liquidity cushion is expected to be aligned with the risk tolerance of the organization. Key considerations include assumptions about the size of cash flow mismatches, the duration and severity of stress and the liquidation or borrowing value of assets (i.e., the estimated cash available to the credit union if assets are liquidated or used as collateral for secured funding). Credit unions are expected to ensure that its liquid assets cushion is sized to maintain sufficient resilience to unexpected stress while it continues to meet daily payment and settlement obligations on a timely basis during the period of stress.

With respect to the composition of its liquidity cushion, a credit union is expected to hold a core of the most reliable liquid assets, such as cash and high-quality government bonds or similar instruments, to guard against the most severe stress scenarios. Demonstration of counterbalancing capacity (e.g., the ability to raise unsecured funds, draw on commitments, call loans or access new secured funding sources in the short-term) will not be considered an appropriate substitute to maintaining an adequate stock of liquid assets.

To ensure against less intense, but longer duration stress events, the composition of the cushion may be widened to hold other unencumbered liquid assets that are marketable (i.e., can be sold or used as collateral in sale and repurchase agreements) without resulting in excessive losses or discounts. The marketability of individual assets may differ depending on the stress scenario and timeframe involved. Credit unions should not assume that a liquid market will exist for assets held during stress scenarios simply because a market exists in normal times.

A credit union should be prepared to use its cushion of high-quality liquid assets in the event of severe stress. As such, it must ensure that there are no legal, regulatory or operational impediments to the use of these assets.

## Principle 8

A credit union should ensure its collateral positions are actively managed, differentiating between encumbered and unencumbered assets. The legal entity and physical location where collateral is held should be monitored, as well as how it may be mobilized in a timely manner.

As the provincial liquidity manager, SaskCentral is responsible for managing collateral positions of assets that are pledged for statutory liquidity. Credit unions are expected to understand how collateral positions are managed on their behalf.

Effective collateral management requires a credit union to be in a position to meet a range of collateral needs, including longer-term structural and short-term considerations. A credit union is expected to have sufficient collateral to meet expected and unexpected borrowing needs over different timeframes, depending upon the credit union's funding profile, and understand its capacity to borrow within regulatory constraints.

When determining which assets to be included in the stock of liquid assets over and above the requirements for statutory liquidity, encumbrances that would prevent a quick sale to meet unanticipated net cash outflow obligations should be considered in policy. This means that assets normally pledged to secure specific obligations should not be considered part of the stock of liquid assets available to meet unexpected net cash outflows.

## CONTINGENCY PLANNING

### Principle 9

A credit union should have a formal contingency funding plan (CFP) that clearly sets out the strategies for addressing liquidity shortfalls in emergency situations. A CFP should outline policies to manage a range of stress environments, establish clear lines of responsibility, include clear invocation and escalation procedures and be regularly tested and updated to ensure that it is operationally robust.

A credit union's ability to withstand liquidity disruptions (whether credit union-specific or market-wide) can depend on the calibre of its formal contingency plans. A contingency funding plan is the compilation of policies, procedures and action plans for responding to severe disruptions to a credit union's ability to fund some or all of its activities in a timely manner and at a reasonable cost. Effective CFPs should consist of several components, including:

- a set of early warning indicators designed with the aid of stress test results that identify the emergence of increased risk or vulnerabilities to a credit union's liquidity position or potential funding needs and, if necessary, initialize the application of the CFP<sup>2</sup>
- specific procedures and reporting requirements to ensure timely and uninterrupted information flow to senior management with potential escalation
- clear division of roles and responsibilities within management for stressed or crisis events
- action plans for altering on-balance sheet asset and liability behaviors (e.g., market assets more aggressively, sell assets that were intended to be held, lengthen maturities of liabilities and raise interest rates on deposits) and use of off-balance sheet sources
- an indication of the priority of alternative sources of funds (e.g., designating primary and secondary sources of liquidity) and ranking of liquidity consuming activities
- sufficient coordination and integration with plans of LSOs, including internal and external communications

Contingency plans should also include procedures for making up cash flow shortfalls in emergency situations. The plan should clearly identify the sources and amount of funds the credit union expects to have available from each source. Credit unions must ensure the Corporation is notified upon initialization or de-escalation of a CFP. Further communication requirements will be treated on a case-by-case basis.

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<sup>2</sup> Such a set of early warning indicators can be qualitative or quantitative in nature and may include, for example, rapid asset growth, growing concentrations in assets or liabilities, and negativity publicity.

The development and ongoing maintenance of CFPs should be integrated within the credit union's program for stress testing liquidity risk. In other words, potential action plans outlining the process for the escalation of the CFP can come from the output of stress tests and, further, if a scenario is designed where the CFP would need to be invoked, then assumptions should reflect this.

CFPs are expected to be reviewed and tested regularly to ensure effectiveness and operational feasibility, with the result of such tests reported to senior management regularly (i.e., annually, at a minimum) and to the board as required.

## **INTERNAL CONTROLS AND INCENTIVES**

The Corporation expects that credit unions will have information systems in place such that senior management and the board are able to review compliance with established liquidity risk management policies, control liquidity risk exposure and evaluate risk tolerance through the use of limits, funding targets and early warning indicators. The limit setting and compliance framework(s) should be calibrated to the results of the credit union's stress testing program with the goal of being able to continue as a going-concern. Limits should be operationally effective and appropriately calibrated in accordance with the credit union's stated liquidity risk tolerance (i.e., not set so high that they are never triggered). Clearly articulated and documented policies should describe procedures for dealing with limit exceptions, permissions or authorization to set and change limits, notification responsibilities and escalation procedures, sign-off by senior management and/or the board, and remedial follow up.

In order to ensure the integrity of information reporting, the Corporation expects credit unions to establish a framework whereby monitoring of performance against limits is conducted by parties that are operationally independent of funding areas and other business units. Such personnel should be trained and have the information system capabilities to monitor whether liquidity risk remains within the bounds set by senior management and the board. This framework is expected to be reviewed regularly as part of the general internal audit process.

### **Principle 10**

A credit union should incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities (both on- and off-balance sheet), thereby aligning the risk-taking incentives of individual business lines with the liquidity risk exposures their activities create for the credit union as a whole.

For purposes of measuring business performance and maintaining proper incentives, credit unions are expected to have the capacity to assign a liquidity cost or benefit to different business activities, including new products, in terms of funding requirements, risks or provisions. These costs or benefits should be explicitly attributed to the relevant activity and reinforce the overarching liquidity risk tolerance of the credit union, with a liquidity charge assigned as appropriate to positions, portfolios or individual transactions. This assignment of liquidity costs and benefits should incorporate factors related to the anticipated holding periods of assets and liabilities, their market liquidity risk characteristics and any other relevant factors. Further, in designing new products, a reputation assessment should be made of potential draws beyond contractual and/or legal obligations and potential impacts priced directly into a product.

## MANAGING MARKET ACCESS

### Principle 11

A credit union should ensure a funding strategy is established that provides effective diversification in the sources and tenor of funding. It should ensure an ongoing presence in its funding markets and strong relationships with funds providers are maintained to promote effective diversification of funding sources. A credit union should regularly gauge the capacity to raise funds quickly from each source. It should identify the main factors that affect its ability to raise funds and monitor those factors closely to ensure that estimates of fund raising capacity remain valid.

As a LSO, SaskCentral acts on behalf of credit unions as an intermediary for access to the market. Credit unions are expected to understand how SaskCentral manages its market access. This may include:

- reviewing the funding strategy
- understanding efforts to maintain diversified liabilities
- establishing relationships with liability holders
- monitoring market developments
- understanding the level of reliance on individual funding sources by instrument, type, tenor and provider of funds
- identifying correlations between similar funding sources or markets for funding concentrations under stress

The Corporation expects credit unions to obtain assurance from the LSO that it is effectively managing market access.

## PAYMENT AND SETTLEMENT OBLIGATIONS

### Principle 12

A credit union should ensure its daily liquidity positions and risks to meet payment and settlement obligations on a timely basis are actively managed under both normal and stressed conditions and thus contribute to the smooth functioning of payment and settlement systems.

The aggregate daily liquidity positions of credit unions are monitored and managed by SaskCentral. SaskCentral's role is to aggregate cash flows and facilitate payment and settlement obligations from credit unions to the Bank of Canada. Credit unions are expected to understand how SaskCentral manages aggregate daily liquidity and its capacity under normal and stressed conditions.

Credit unions are expected to understand their role in the system. Credit unions also manage and monitor their own liquidity positions daily. Daily liquidity monitoring is an important part of the liquidity risk management process. A credit union should ensure that liquidity management strategies are adopted that allow it to:

- monitor and measure expected daily gross liquidity inflows and outflows
- manage and mobilize collateral when necessary to obtain credit
- identify and prioritize time specific and other critical obligations in order to meet them when expected
- control credit to members and other customers when necessary

## PUBLIC DISCLOSURE

### Principle 13

A credit union should publicly disclose information on a regular basis that enables market participants to make an informed judgement about the soundness of its liquidity risk management framework and liquidity position.

Increased disclosure leads to greater transparency, clarity and public confidence in credit union liquidity management. Credit unions are expected to publicly disclose organizational structures and frameworks of liquidity risk to allow members and other key stakeholders to be able to conduct an adequate evaluation of the soundness and condition of credit unions' liquidity risk management frameworks and positions.

Credit unions are expected to determine the appropriate methods of disclosure based on Generally Accepted Accounting Principles (GAAP), industry practices<sup>3</sup> and ease of accessibility by stakeholders. Financial disclosures should be attached to or included in the notes of financial statements.<sup>4</sup>

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<sup>3</sup> See OSFI guideline B-6, Liquidity Principles and D-1, Annual Disclosures, for prescribed disclosure requirements of federally regulated financial institutions.

<sup>4</sup> The principles and expectations of credit unions with respect to transparency and disclosure are outlined in the Corporation's regulatory guideline 2011-02, Transparency and Disclosure.