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

Guideline

Subject: Liquidity Adequacy Requirements (LAR)

Chapter 1 – Overview

Date: February 2018

Subsection 485(1) and 949(1) of the *Bank Act* (BA), subsection 473(1) of the *Trust and Loan Companies Act* (TLCA) and subsection 409(1) of the *Cooperative Credit Associations Act* (CCAA) require banks, bank holding companies, trust and loan companies and cooperative retail associations, respectively, to maintain adequate and appropriate forms of liquidity.

The LAR Guideline is not made pursuant to subsection 485(2) or 949(2) of the BA, subsection 473(2) of the TLCA or subsection 409(2) of the CCAA. However, the liquidity metrics set out in this guideline provide the framework within which the Superintendent assesses whether a bank, a bank holding company, a trust and loan company or cooperative credit association maintains adequate liquidity pursuant to the Acts. For this purpose, the Superintendent has established two minimum standards: the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). These standards – in conjunction with additional liquidity metrics where OSFI reserves the right to apply supervisory requirements as needed, including the net cumulative cash flow (NCCF), the liquidity monitoring tools and the intraday liquidity monitoring tools – when assessed as a package, provide an overall perspective of the liquidity adequacy of an institution. The LAR Guideline should be read together with the Basel Committee on Banking Supervision's (BCBS) *Principles for Sound Liquidity Risk Management and Supervision* and OSFI's *Guideline B-6: Liquidity Principles*. As such, OSFI will conduct detailed supervisory assessments of both the quantitative and qualitative aspects of an institution's liquidity risk, as presented in the LAR Guideline and Guideline B-6, respectively. Notwithstanding that a bank, a bank holding company, a trust and loan company or cooperative credit association may meet the aforementioned standards, the Superintendent may by order direct a bank or bank holding company to take actions to improve its liquidity under subsection 485(3) or 949(3), respectively, of the BA, a trust and loan company to take actions to improve its liquidity under subsection 473(3) of the TLCA or a cooperative retail association to take actions to improve its liquidity under subsection 409(3) of the CCAA.

OSFI, as a member of the BCBS, participated in the development of the international liquidity framework, including *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013), *Basel III: the Net Stable Funding Ratio* (October 2014) and *Monitoring tools for intraday liquidity management* (April 2013). This domestic guidance is based on the Basel III framework, supplemented to include additional OSFI-designed measures to assess the liquidity adequacy of an institution.

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Where relevant, the Basel III paragraph numbers are provided in square brackets at the end of each paragraph referencing material from the Basel III framework. Some chapters include boxed-in text (called OSFI Notes) that set out how certain requirements are to be implemented by Canadian banks, bank holding companies, trust and loan companies and cooperative credit associations, collectively referred to as ‘institutions’.

Liquidity Adequacy Requirements

The Liquidity Adequacy Requirements (LAR) for banks, bank holding companies, trust and loan companies and cooperative retail associations are set out in six chapters, each of which has been issued as a separate document. This document, which contains Chapter 1 – Overview, should be read together with the other LAR chapters which include:

Chapter 1	Overview
Chapter 2	Liquidity Coverage Ratio
Chapter 3	Net Stable Funding Ratio
Chapter 4	Net Cumulative Cash Flow
Chapter 5	Liquidity Monitoring Tools
Chapter 6	Intraday Liquidity Monitoring Tools

Chapter 1 – Overview

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Chapter 1 – Overview

1.1. Objective

1. Outlined below is an overview of liquidity adequacy requirements for banks, federally regulated trust or loan companies, cooperative retail associations, and for bank holding companies incorporated or formed under Part XV of the Bank Act, collectively referred to as 'institutions'.

2. Parts of this chapter draw on the Basel Committee on Banking Supervision's (BCBS) Basel III liquidity framework, which encompasses *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* – published in January 2013, *Basel III: the Net Stable Funding Ratio* – published October 2014, and *Monitoring tools for intraday liquidity management* – published in April 2013. For reference, the Basel text paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph[1].

3. This guideline contains the methodologies underpinning a series of liquidity metrics that are used by OSFI to assess the liquidity adequacy of an institution. OSFI will evaluate the performance of an institution's liquidity metrics both as a package and individually when determining its overall assessment of an institution's liquidity adequacy. In addition, the liquidity metrics presented in this guideline will be supplemented by detailed supervisory assessments of other aspects of an institution's liquidity risk management framework in line with the BCBS *Sound Principles*[2] and OSFI's *Guideline B-6: Liquidity Principles*[3]. This is to ensure that the aspects of the OSFI's liquidity guidelines are well engrained in institutions' internal practices; for example that institutions should incorporate liquidity costs, benefits and risks in their internal pricing, in line with OSFI Principle 10 in *Guideline B-6*.

1.2. Scope of application

4. Unless otherwise noted in the detailed discussion of the individual liquidity measures (see Chapter 2 to Chapter 6), these liquidity adequacy requirements apply on a consolidated basis and apply to all institutions. The consolidated entity includes all subsidiaries and branches except insurance subsidiaries, as set out in Section 1.1 of OSFI's Capital Adequacy Requirements (CAR) Guideline[4].

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1 Following the format: [BCBS Jan 2013, para X], [BCBS Jan 2014, para X] and [BCBS Apr 2013, para X].
2 http://www.bis.org/publ/bcbs144.htm.
3 http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/b6.aspx.
4 http://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/CAR_chpt1.aspx.

OSFI Notes

Federally regulated deposit-taking institutions that are themselves subsidiaries and that i) do not have a parent that is either a DSIB or a foreign bank subsidiary and ii) whose operations are strictly in Canada and such operations are primarily Canadian dollar-related, do not need to adhere to the minimum standards and reporting requirements outlined in the LAR Guideline. However, the federally regulated parent deposit-taking institution of such an exempted subsidiary institution needs to comply with the requirements outlined in paragraph 5 below, in particular it needs to demonstrate that systems are in place to show the cash flow profiles of such legal entities and that such information can be provided to OSFI upon request.

5. Regardless of the scope of application of the individual metrics, in keeping with Principle 6 of the BCBS's *Sound Principles* and Principle 4 of OSFI's *Guideline B-6: Liquidity Principles*, an institution should actively monitor and control liquidity risk exposures and funding needs at the level of individual legal entities, foreign branches and subsidiaries, and the group as a whole, taking into account legal, regulatory and operational limitations to the transferability of liquidity. [BCBS Jan 2013, para 166]

1.3. Overview of the individual liquidity metrics

6. This guideline covers multiple quantitative liquidity measures including the Liquidity Coverage Ratio (LCR), the Net Stable Funding Ratio (NSFR), the Net Cumulative Cash Flow (NCCF) supervisory tool, a suite of additional liquidity monitoring tools, and a set of intraday liquidity monitoring tools. Each of these liquidity measures offers a different perspective on the liquidity adequacy of an institution as no one measure can, on its own, present a comprehensive picture.

7. The **Liquidity Coverage Ratio (LCR)** is a standard that aims to ensure that an institution has an adequate stock of unencumbered high-quality liquid assets (HQLA) that consists of cash or assets that can be converted into cash at little or no loss of value in private markets, to meet its liquidity needs for a 30 calendar day liquidity stress scenario. At a minimum, the stock of unencumbered HQLA should enable the institution to survive until Day 30 of the stress scenario, by which time it is assumed that appropriate corrective actions can be taken by management and supervisors, or that the institution can be resolved in an orderly way. Furthermore, it gives the central bank additional time to take appropriate measures, should they be regarded as necessary. [BCBS Jan 2013, para 16]

8. The **Net Stable Funding Ratio (NSFR)** is a standard that will require institutions to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A sustainable funding structure is intended to reduce the likelihood that disruptions to an institution's regular sources of funding will erode its liquidity position in a way that would increase the risk of its failure and potentially lead to broader systemic stress. The NSFR aims to limit over-reliance on short-term wholesale funding, encourages better assessment of funding risk across all on- and off-balance sheet items, and promotes funding stability. In addition, the NSFR approach offsets incentives for institutions to fund their stock of liquid assets

with short-term funds that mature just outside the LCR's 30-day horizon. [BCBS Jan 2014, para 1]

OSFI Notes

The discussion of the NSFR contained in the LAR Guideline, and all text related to the NSFR, should be viewed as a placeholder until OSFI has formally incorporated the BCBS NSFR rules issued in October 2014. As such, all references to the NSFR standard contained in the LAR Guideline will be updated, and the NSFR chapter populated with rules text, in due course well in advance of the revised implementation date.

9. The **Net Cumulative Cash Flow (NCCF)** is a tool that measures an institution's cash flows beyond the 30 day horizon in order to capture the risk posed by funding mismatches between assets and liabilities, after the application of assumptions around the functioning of assets and modified liabilities (i.e. where rollover of certain liabilities is permitted). The NCCF measures an institution's cash flow horizon both on the basis of the consolidated balance sheet as well as by major individual balance sheets and components. The metric helps identify gaps between contractual inflows and outflows for various time bands over and up to a 12 month time horizon, which indicate potential liquidity shortfalls an institution may need to address.

10. A suite of additional liquidity monitoring tools, discussed in paragraphs 11 to 16 are utilized to capture specific information related to an institution's cash flows, balance sheet structure, available unencumbered collateral, and certain market indicators as well as an institution's intraday liquidity positions.

11. The **contractual maturity mismatch** profile identifies the gaps between the contractual inflows and outflows of liquidity for defined time bands. These maturity gaps indicate how much liquidity an institution would potentially need to raise in each of these time bands if all outflows occurred at the earliest possible date. The NCCF, as described above and outlined in Chapter 4, provides such a maturity mismatch metric. This metric provides insight into the extent to which the institution relies on maturity transformation under its current contracts. [BCBS Jan 2013, para 177]

12. The **concentration of funding** metrics are meant to identify those sources of wholesale funding that are of such significance that withdrawal of this funding could trigger liquidity problems. The metric thus encourages the diversification of funding sources as recommended in the BCBS's *Sound Principles* and OSFI's *Guideline B-6: Liquidity Principles*. [BCBS Jan 2013, para 188]

13. Metrics related to **available unencumbered assets** provide data on the quantity and key characteristics, including currency denomination and location, of institutions' available unencumbered assets. These assets have the potential to be used as collateral to raise additional HQLA or secured funding in secondary markets or are eligible at central banks and as such may potentially be additional sources of liquidity for the institution. [BCBS Jan 2013, para 201]

14. The **LCR by significant currency** metric allows both the institution and OSFI to track potential currency mismatch issues that could arise. A currency is considered "significant" if the aggregate liabilities denominated in that currency amount to 5% or more of the institution's total liabilities. [BCBS Jan 2013, para 209 and para 211]

15. The **market-related monitoring tools** provide OSFI with high frequency market data with little or no time lag which can be used as early warning indicators in monitoring potential liquidity difficulties at institutions. This includes the monitoring of data at the following market-wide, financial sector, and institution-specific levels to focus on potential liquidity difficulties. [BCBS Jan 2013, para 214 and para 215]

16. The **intraday liquidity monitoring tools** enable OSFI and the Bank of Canada, as applicable (see Chapter 6), to better monitor an institution's management of intraday liquidity risk and its ability to meet payment and settlement obligations on a timely basis. Over time, the tools will also provide OSFI and the Bank of Canada with a better understanding of institutions' payment and settlement behaviour.

1.4. Requirements associated with the metrics

17. The LCR requires that, absent a situation of financial stress, the value of the ratio be no lower than 100% (i.e. the stock of HQLA should at least equal total net cash outflows over a 30 day horizon). Institutions are expected to meet this requirement continuously and hold a stock of unencumbered HQLA as a defense against the potential onset of liquidity stress. During a period of financial stress, however, OSFI reaffirms the view of the BCBS that institutions may use their stock of HQLA, thereby falling below 100%, as maintaining the LCR at 100% under such circumstances could produce undue negative effects on the institution and other market participants. OSFI will subsequently assess this situation and will adjust its response flexibly according to the circumstances, as described in Chapter 2, paragraph 6. [BCBS Jan 2013, para 17]

18. The minimum LCR requirement for Canadian institutions will be set at 100% beginning January 1, 2015 – i.e. no phase-in period will be permitted.

19. It remains OSFI's intention that the NSFR will become a minimum standard at a level of 100% by January 1, 2020.

20. The suite of liquidity monitoring tools described in paragraphs 11 to 15 are not standards and thus do not have defined minimum required thresholds. However, OSFI reserves the right to set supervisory requirements for any of the suite of liquidity tools as required. OSFI could, for example, consider setting minimum requirements for the LCR by significant currency measure on an institution-specific basis based on an evaluation of the institution's ability to raise funds in foreign currency markets and the ability to transfer a liquidity surplus from one currency to another and across jurisdictions and legal entities. As a general rule, the LCR by significant currency ratio should be higher for currencies in which OSFI evaluates an institution's ability to raise funds in foreign currency markets or the ability to transfer a liquidity surplus from one

currency to another and across jurisdictions and legal entities to be limited. [BCBS Jan 2013, para 212]

21. The tools for intraday liquidity management outlined in Chapter 6 are for purposes of monitoring only and do not have defined minimum required thresholds. However, OSFI reserves the right to set regulatory requirements for these intraday liquidity metrics if and as required. [BCBS Apr 2013, para 6]

1.5. Frequency of calculation and regulatory reporting timeline

22. All metrics presented in this guideline should be used by the institution on an ongoing basis to help monitor and control its liquidity risk. The time lag in reporting for each metric, as outlined below, should be considered the maximum time lag under normal conditions. OSFI reserves the right to accelerate the time lag in reporting where circumstances warrant (e.g. in market-wide or idiosyncratic stress).

23. The LCR should be reported to OSFI monthly, with the operational capacity to increase the frequency to weekly or even daily in stressed situations at OSFI's discretion. The time lag in reporting should not surpass 14 calendar days. [BCBS Jan 2013, para 162]

24. Institutions should notify OSFI immediately if their LCR has fallen, or is expected to fall, below 100%. [BCBS Jan 2013, para 163]

25. The NCCF should be reported to OSFI monthly. Direct clearers should have the operational capacity to increase the frequency to weekly or even daily in stressed situations at OSFI's discretion, whereas indirect clearers should have the operational capacity to increase the frequency to weekly at OSFI's discretion. The time lag in reporting should not surpass 14 calendar days for direct clearers and should not surpass 30 calendar days for indirect clearers.

26. Institutions should notify OSFI immediately if their NCCF has fallen, or is expected to fall, below the supervisory-communicated level.

27. The concentration of funding, available unencumbered assets and LCR by significant currency monitoring metrics should be reported to OSFI monthly. The time lag in reporting should not surpass 14 calendar days.

OSFI Notes

OSFI will not require separate reporting of data related to the concentration of funding and available unencumbered assets monitoring tools in 2015. Rather, OSFI will utilize information submitted as part of other aspects of regulatory reporting (e.g. NCCF, U3 return, etc.) to assess the information elements requested under these monitoring tools in 2015.

28. Institution-specific information related to the market-related monitoring tools should be provided to OSFI on a weekly basis. The time lag in reporting should not surpass three business days.

29. The information contained in the monitoring tools for intraday liquidity management should be reported to OSFI and the Bank of Canada on a monthly basis. The time lag in reporting should not surpass 14 calendar days.

30. Reporting of all of the above metrics, with the exception of the NSFR, intraday liquidity monitoring tools and other monitoring tools listed in the OSFI Notes text box to paragraph 2727, will commence as at the first reporting date, as defined above by individual metric, following January 1, 2015. Reporting of the NSFR is envisioned to commence as at the first quarterly reporting date following January 1, 2020.

OSFI Notes

The scope of application for the intraday liquidity monitoring tools will be limited to OSFI-regulated direct clearers only. OSFI will not require that such institutions report on the suite of intraday liquidity monitoring tools beginning on the first reporting date following January 1, 2015. However, OSFI will continue to review the applicable implementation date for these metrics – which will be, at latest, January 1, 2017 – and will discuss the proposed timing of rollout with affected institutions in advance of taking a final decision.