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# Guideline

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**Subject: Liquidity Adequacy Requirements (LAR)**

## Chapter 2 – Liquidity Coverage Ratio

**Effective Date: May 1, 2026**

Subsections 485(1) and 949(1) of the *Bank Act* (BA) and subsection 473(1) of the *Trust and Loan Companies Act* (TLCA) require banks, bank holding companies and trust and loan companies, 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 or subsection 473(2) of the TLCA. However, the liquidity metrics set out in this guideline provide the framework within which the Superintendent assesses whether a bank, a bank holding company or a trust and loan company 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 operating cash flow statement (OCFS), 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](#).

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 or a trust and loan company 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 or a trust and loan company to take actions to improve its liquidity under subsection 473(3) of the TLCA.

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 – now integrated in the December 2019 "[Basel Consolidated Framework](#)" – supplemented to include additional OSFI-designed measures to assess the liquidity adequacy of an institution.



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Where relevant, the Basel Consolidated Framework paragraph numbers are provided in square brackets at the end of each paragraph referencing material from the Basel Consolidated 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 and trust and loan companies, collectively referred to as “institutions”.

# Liquidity Adequacy Requirements

The Liquidity Adequacy Requirements (LAR) for banks, bank holding companies and trust and loan companies are set out in seven chapters, each of which has been issued as a separate document. This document, which contains Chapter 2 – Liquidity Coverage Ratio, 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	Operating Cash Flow Statement
Chapter 6	Liquidity Monitoring Tools
Chapter 7	Intraday Liquidity Monitoring Tools

# Chapter 2 – Liquidity Coverage Ratio

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## Chapter 2 – Liquidity Coverage Ratio

1. This chapter is drawn from the Basel Committee on Banking Supervision's (BCBS) Basel III framework, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (January 2013 - Part 1, Liquidity Coverage Ratio), and the BCBS's *Frequently Asked Questions on Basel III's January 2013 Liquidity Coverage Ratio framework* (June 2017). For reference, the Basel Consolidated Framework text paragraph numbers that are associated with the text appearing in this chapter are indicated in square brackets at the end of each paragraph.<sup>1</sup>
2. The Committee has developed the LCR to promote the short-term resilience of the liquidity risk profile of institutions by ensuring that they have sufficient high-quality liquid assets (HQLA) to survive a significant stress scenario lasting 30 calendar days. [Basel Framework, LCR 20.1]
3. The LCR will be a key component of OSFI's supervisory approach to liquidity risk, and 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](#) and OSFI's [Guideline B-6: Liquidity Principles](#), the NSFR (Chapter 3), and the other liquidity monitoring tools (Chapter 4 and Chapter 6). In addition, OSFI may require an institution to adopt more stringent requirements or parameters to reflect its liquidity risk profile and OSFI's assessment of its compliance with the BCBS *Sound Principles* and OSFI's *B-6 Guideline*.

### OSFI Notes

The LCR standard applies to DSIBs, Category I and Category II institutions, as described in OSFI's [Capital and Liquidity Requirements for Small and Medium-Sized Deposit-Taking Institutions](#) Guideline. A subsidiary that is itself a FRFI may be exempted from adhering to and reporting its LCR provided it meets the criteria outlined in section 1.2 of Chapter 1 – *Overview* of this guideline. Furthermore, per section 6.4 of Chapter 6 – *Liquidity Monitoring Tools*, some institutions may have to monitor and report an LCR by significant currency.

### 2.1. Objective of the LCR and use of HQLA

4. This standard aims to ensure that an institution has an adequate stock of unencumbered 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. As noted in the BCBS *Sound Principles* and OSFI's *Guideline B-6*, given the uncertain timing of outflows and inflows, institutions are also expected to be aware of any potential mismatches within the 30-day period and ensure that sufficient HQLA are available to meet any cash flow gaps throughout the period.

<sup>1</sup> Following the format: [Basel Framework, XXX yy.zz]

5. The LCR builds on traditional liquidity “coverage ratio” methodologies used internally by institutions to assess exposure to contingent liquidity events. The total net cash outflows for the scenario are to be calculated for 30 calendar days into the future. The standard 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) on an ongoing basis because the stock of unencumbered HQLA is intended to serve as a defense against the potential onset of liquidity stress. During a period of financial stress, however, institutions should use their stock of HQLA, potentially 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. [Basel Framework, LCR 20.5]

6. In particular, OSFI’s decisions regarding an institution’s use of its HQLA will be guided by consideration of the core objective and definition of the LCR. OSFI will exercise judgment in its assessment and account not only for prevailing macro-financial conditions, but also consider forward-looking assessments of macroeconomic and financial conditions. In determining a response, OSFI will be aware that some actions could be procyclical if applied in circumstances of market-wide stress.

- (a) OSFI will assess conditions at an early stage, and take actions if deemed necessary, to address potential liquidity risk.
- (b) OSFI will allow for differentiated responses to a reported LCR below 100%, which will be proportionate with the drivers, magnitude, duration and frequency of the reported shortfall.
- (c) OSFI will assess a number of institution- and market-specific factors in determining the appropriate response as well as other considerations related to both domestic and global frameworks and conditions. Potential considerations include, but are not limited to:
  - (i) The reason(s) that the LCR fell below 100%. This includes use of the stock of HQLA, an inability to roll over funding or large unexpected draws on contingent obligations. In addition, the reasons may relate to overall credit, funding and market conditions, including liquidity in credit, asset and funding markets, affecting an individual institution or all institutions, regardless of their own condition;
  - (ii) The extent to which the reported decline in the LCR is due to an institution-specific or market-wide shock;
  - (iii) An institution’s overall health and risk profile, including activities, positions with respect to other supervisory requirements, internal risk systems, controls and other management processes, among others;
  - (iv) The magnitude, duration and frequency of the reported decline of HQLA;
  - (v) The potential for contagion to the financial system and additional restricted flow of credit or reduced market liquidity due to actions to maintain an LCR of 100%;

- (vi) The availability of other sources of contingent funding such as central bank funding,<sup>2</sup> or other actions by prudential authorities.
- (d) OSFI will have a range of tools at its disposal to address a reported LCR below 100%. Institutions may use their stock of HQLA in both idiosyncratic and systemic stress events, although the OSFI's response may differ between the two.
  - (i) At a minimum, an institution should present an assessment of its liquidity position, including the factors that contributed to its LCR falling below 100%, the measures that have been and will be taken and the expectations on the potential length of the situation. Enhanced reporting to OSFI should be commensurate with the duration of the shortfall.
  - (ii) If appropriate, OSFI may also require actions by an institution to reduce its exposure to liquidity risk, strengthen its overall liquidity risk management, or improve its contingency funding plan.
  - (iii) However, in a situation of sufficiently severe system-wide stress, effects on the entire financial system should be considered. Potential measures to restore liquidity levels should be discussed, and should be executed over a period of time considered appropriate to prevent additional stress on the institution and on the financial system as a whole.
- (e) OSFI's responses will be consistent with its overall approach to the prudential framework. [Basel Framework, LCR 20.6]

## 2.2. Definition of the LCR

7. The scenario for the LCR standard entails a combined idiosyncratic and market-wide shock that would result in:

- (a) the run-off of a proportion of retail deposits;
- (b) a partial loss of unsecured wholesale funding capacity;
- (c) a partial loss of secured, short-term financing with certain collateral and counterparties;
- (d) additional contractual outflows that would arise from a downgrade in the institution's public credit rating by up to and including three notches, including collateral posting requirements;
- (e) increases in market volatilities that impact the quality of collateral or potential future exposure of derivative positions and thus require larger collateral haircuts or additional collateral, or lead to other liquidity needs;

<sup>2</sup> The BCBS *Sound Principles* and OSFI's *Guideline B-6: Liquidity Principles* require that an institution develop a Contingency Funding Plan (CFP) that clearly sets out strategies for addressing liquidity shortfalls, both institution-specific and market-wide situations of stress. A CFP should, among other things, "reflect central bank lending programmes and collateral requirements, including facilities that form part of normal liquidity management operations (e.g. the availability of seasonal credit)."

- (f) unscheduled draws on committed but unused credit and liquidity facilities that the institution has provided to its clients; and
- (g) the potential need for the institution to buy back debt or honour non-contractual obligations in the interest of mitigating reputational risk.

[Basel Framework, LCR 20.2]

8. In summary, the stress scenario specified incorporates many of the shocks experienced during the crisis that started in 2007 into one significant stress scenario for which an institution would need sufficient liquidity on hand to survive for up to 30 calendar days.

9. This stress test should be viewed as a minimum supervisory requirement for institutions. Institutions are expected to conduct their own stress tests to assess the level of liquidity they should hold beyond this minimum, and construct their own scenarios that could cause difficulties for their specific business activities. Such internal stress tests should incorporate longer time horizons than the one mandated by this standard. Institutions are expected to share the results of these additional stress tests with OSFI. [Basel Framework, LCR 20.3]

10. The LCR has two components:

- (a) Value of the stock of HQLA in stressed conditions plus Eligible non-operational demand and overnight deposits; and
- (b) Total net cash outflows, calculated according to the scenario parameters outlined below.

[Basel Framework, LCR 20.4]

$\frac{\text{Stock of HQLA} + \text{Eligible non-operational demand and overnight deposits}}{\text{Total net cash outflows over the next 30 calendar days}} \geq 100\%$
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### OSFI Notes

When calculating the LCR, institutions should maintain a consistent categorization of a given entity/counterparty across all HQLA, outflow and inflow categories.

## 2.2.A. Stock of HQLA

11. The numerator of the LCR is the “stock of HQLA.” Under the standard, institutions must hold a stock of unencumbered HQLA to cover the total net cash outflows (as defined below) over a 30-day period under the prescribed stress scenario. In order to qualify as “HQLA,” assets should be liquid in markets during a time of stress and, ideally, be central bank eligible. The following sets out the characteristics that such assets should generally possess and the operational requirements that they should satisfy.<sup>3</sup> [Basel Framework, LCR 30.1]

<sup>3</sup> Refer to the sections on “*Definition of HQLA*” and “*Operational requirements*” for the characteristics that an asset must meet to be part of the stock of HQLA and the definition of “unencumbered” respectively.



## 2.2.A.1. Characteristics of HQLA

12. Assets are considered to be HQLA if they can be easily and immediately converted into cash at little or no loss of value. The liquidity of an asset depends on the underlying stress scenario, the volume to be monetised and the timeframe considered. Nevertheless, there are certain assets that are more likely to generate funds without incurring large discounts in sale or repurchase agreement (repo) markets due to fire-sales even in times of stress. This section outlines the factors that influence whether or not the market for an asset can be relied upon to raise liquidity when considered in the context of possible stresses. These factors should assist OSFI in determining which assets, despite meeting the criteria from paragraphs 42 to 47, are not sufficiently liquid in private markets to be included in the stock of HQLA.

### (i) *Fundamental characteristics*

- **Low risk:** assets that are less risky tend to have higher liquidity. High credit standing of the issuer and a low degree of subordination increase an asset's liquidity. Low duration,<sup>4</sup> low legal risk, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.
- **Ease and certainty of valuation:** an asset's liquidity increases if market participants are more likely to agree on its valuation. Assets with more standardised, homogenous and simple structures tend to be more fungible, promoting liquidity. The pricing formula of a high-quality liquid asset must be easy to calculate and not depend on strong assumptions. The inputs into the pricing formula must also be publicly available. In practice, this should rule out the inclusion of most structured or exotic products.
- **Low correlation with risky assets:** the stock of HQLA should not be subject to wrong-way (highly correlated) risk. For example, assets issued by financial institutions are more likely to be illiquid in times of liquidity stress in the banking sector.
- **Listed on a developed and recognised exchange:** being listed increases an asset's transparency.

### (ii) *Market-related characteristics*

- **Active and sizable market:** the asset should have active outright sale or repo markets at all times. This means that:
  - There should be historical evidence of market breadth and market depth. This could be demonstrated by low bid-ask spreads, high trading volumes, and a large and diverse number of market participants. Diversity of market participants reduces market concentration and increases the reliability of the liquidity in the market.

<sup>4</sup> Duration measures the price sensitivity of a fixed income security to changes in interest rate.

- There should be robust market infrastructure in place. The presence of multiple committed market makers increases liquidity as quotes will most likely be available for buying or selling HQLA.
  - **Low volatility:** assets whose prices remain relatively stable and are less prone to sharp price declines over time will have a lower probability of triggering forced sales to meet liquidity requirements. Volatility of traded prices and spreads are simple proxy measures of market volatility. There should be historical evidence of relative stability of market terms (e.g. prices and haircuts) and volumes during stressed periods.
  - **Flight to quality:** historically, the market has shown tendencies to move into these types of assets in a systemic crisis. The correlation between proxies of market liquidity and banking system stress is one simple measure that could be used.
- [Basel Framework, LCR 30.2, 30.6, 30.12]

13. As outlined by these characteristics, the test of whether liquid assets are of “high quality” is that, by way of sale or repo, their liquidity-generating capacity is assumed to remain intact even in periods of severe idiosyncratic and market stress. Lower quality assets typically fail to meet that test. An attempt by an institution to raise liquidity from lower quality assets under conditions of severe market stress would entail acceptance of a large fire-sale discount or haircut to compensate for high market risk. That may not only erode the market’s confidence in the institution, but would also generate mark-to-market losses for institutions holding similar instruments and add to the pressure on their liquidity position, thus encouraging further fire sales and declines in prices and market liquidity. In these circumstances, private market liquidity for such instruments is likely to disappear quickly. [Basel Framework, LCR 30.3]

14. HQLA (except Level 2B assets as defined below) should ideally be eligible at central banks<sup>5</sup> for intraday liquidity needs and overnight liquidity facilities. In the past, central banks have provided a further backstop to the supply of banking system liquidity under conditions of severe stress. Central bank eligibility should thus provide additional confidence that institutions are holding assets that could be used in events of severe stress without damaging the broader financial system. That in turn would raise confidence in the safety and soundness of liquidity risk management in the banking system. [Basel Framework, LCR 30.4]

15. It should be noted however, that central bank eligibility does not by itself constitute the basis for the categorisation of an asset as HQLA. [Basel Framework, LCR 30.5]

## 2.2.A.2. Operational requirements

16. All assets in the stock of HQLA are subject to the following operational requirements. The purpose of the operational requirements is to recognise that not all assets outlined in paragraphs 42 to 47 that meet the asset class, risk-weighting and credit-rating criteria should be

<sup>5</sup> In most jurisdictions, HQLA should be central bank eligible in addition to being liquid in markets during stressed periods. In jurisdictions where central bank eligibility is limited to an extremely narrow list of assets, a supervisor may allow unencumbered, non-central bank eligible assets that meet the qualifying criteria for Level 1 or Level 2 assets to count as part of the stock (see *Definition of HQLA* beginning from paragraph 33).

eligible for the stock as there are other operational restrictions on the availability of HQLA that can prevent timely monetisation during a stress period. [Basel Framework, LCR 30.13]

17. These operational requirements are designed to ensure that the stock of HQLA is managed in such a way that the institution can, and is able to demonstrate that it can, immediately use the stock of assets as a source of contingent funds that is available for the institution to convert into cash through outright sale or repo, to fill funding gaps between cash inflows and outflows at any time during the 30-day stress period, with no restriction on the use of the liquidity generated. [Basel Framework, LCR 30.14]

#### **OSFI Notes**

HQLA collateral held by an institution on the first day of the LCR horizon may count toward the stock of HQLA even if it is sold or repoed forward. [Basel Framework, LCR 40.74 ]

18. An institution should periodically monetise a representative proportion of the assets in the stock through repo or outright sale, in order to test its access to the market, the effectiveness of its processes for monetisation, the availability of the assets, and to minimise the risk of negative signaling during a period of actual stress. [Basel Framework, LCR 30.15]

#### **OSFI Notes**

The extent, subject and frequency of HQLA monetization necessary to comply with paragraph 18 should be assessed on a case-by-case basis. It is the responsibility of institutions to incorporate the intent of paragraph 18 in their management of liquid assets and be able to demonstrate to OSFI an approach which is appropriate rather than ex ante stipulations. Institutions need not monetize HQLA specifically for test purposes; this requirement can be met through transactions in the course of the institution's normal business. [Basel Framework, LCR 30.15]

19. All assets in the stock should be unencumbered. "Unencumbered" means free of legal, regulatory, contractual or other restrictions on the ability of the institution to liquidate, sell, transfer, or assign the asset. An asset in the stock should not be pledged (either explicitly or implicitly) to secure, collateralise or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries). Assets received in reverse repo and securities financing transactions that are held at the institution, have not been rehypothecated, and are legally and contractually available for the institution's use can be considered as part of the stock of HQLA. In addition, assets which qualify for the stock of HQLA that have been pre-positioned or deposited with, or pledged to, the central bank or a public sector entity (PSE) but have not been used to generate liquidity may be included in the stock.<sup>6</sup> [Basel Framework, LCR 30.16]

<sup>6</sup> If an institution has deposited, pre-positioned or pledged Level 1, Level 2 and other assets in a collateral pool and no specific securities are assigned as collateral for any transactions, it may assume that assets are encumbered in order of increasing liquidity value in the LCR, i.e. assets ineligible for the stock of HQLA are assigned first, followed by Level 2B assets, then Level 2A and finally Level 1. This determination must be made in compliance with any requirements, such as concentration or diversification, of the central bank or PSE.

**OSFI Notes**

Assets received in collateral swap transactions or other securities financing transactions can be considered part of the stock of HQLA if they are held at the institution, have not been rehypothecated, and are legally and contractually available for the institution's use.

Institutions may count the unused portion of HQLA-eligible collateral pledged with a clearing entity such as a central counterparty (CCP) against secured funding transactions towards its stock of HQLA (with associated haircuts). If the institution cannot determine which specific assets remain unused, it may assume that assets are encumbered in order of increasing liquidity value, consistent with the methodology set out in footnote 6. [Basel Framework, LCR 30.16]

The assessment of whether a collateral is “unused” is to be performed at the end of day of the reporting date in the respective jurisdiction. [Basel Framework, LCR 40.47]

HQLA that is borrowed without any further offsetting transaction (i.e. no repo/reverse repo or collateral swap) where the assets will be returned or can be recalled during the next 30 days should not be included in the stock of HQLA. [Basel Framework, LCR 40.74]

20. An institution should exclude from the stock those assets that, although meeting the definition of “unencumbered” specified in paragraph 19, the institution would not have the operational capability to monetise to meet outflows during the stress period. Operational capability to monetise assets requires having procedures and appropriate systems in place, including providing the function identified in paragraph 21 with access to all necessary information to execute monetisation of any asset at any time. Monetisation of the asset must be executable, from an operational perspective, in the standard settlement period for the asset class in the relevant jurisdiction. [Basel Framework, LCR 30.17]

**OSFI Notes**

An HQLA-eligible asset received as a component of a pool of collateral for a secured transaction (e.g. reverse repo) can be included in the stock of HQLA (with associated haircuts) to the extent that it can be monetised separately. [Basel Framework, LCR 30.16]

21. The stock should be under the control of the function charged with managing the liquidity of the institution (e.g. the treasurer), meaning the function has the continuous authority, and legal and operational capability, to monetise any asset in the stock. Control must be evidenced either by maintaining assets in a separate pool managed by the function with the sole intent for use as a source of contingent funds, or by demonstrating that the function can monetise the asset at any point in the 30-day stress period and that the proceeds of doing so are available to the function throughout the 30-day stress period without directly conflicting with a stated business or risk management strategy. For example, an asset should not be included in the stock if the sale of that asset, without replacement throughout the 30-day period, would remove a hedge that would create an open risk position in excess of internal limits. [Basel Framework, LCR 30.18]

## OSFI Notes

For purposes of meeting the requirements outlined in paragraph 21, OSFI will recognize liquidity contingency plans where the function charged with managing the liquidity of the institution (e.g. treasurer) has continuous delegated authority to invoke the plan at any time.

22. An institution is permitted to hedge the market risk associated with ownership of the stock of HQLA and still include the assets in the stock. If it chooses to hedge the market risk, the institution should take into account (in the market value applied to each asset) the cash outflow that would arise if the hedge were to be closed out early (in the event of the asset being sold).

[Basel Framework, LCR 30.19]

23. In accordance with Principle 9 of the BCBS *Sound Principles* and Principle 8 of OSFI's *Guideline B-6: Liquidity Principles* an institution "should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner." Specifically, it should have a policy in place that identifies legal entities, geographical locations, currencies and specific custodial or bank accounts where HQLA are held. In addition, the institution should determine whether any such assets should be excluded for operational reasons and therefore, have the ability to determine the composition of its stock on a daily basis. [Basel Framework, LCR 30.20]

24. As noted in paragraphs 147 and 148, qualifying HQLA that are held to meet statutory liquidity requirements at the legal entity or sub-consolidated level (where applicable) may only be included in the stock at the consolidated level to the extent that the related risks (as measured by the legal entity's or sub-consolidated group's net cash outflows in the LCR) are also reflected in the consolidated LCR. Any surplus of HQLA held at the legal entity can only be included in the consolidated stock if those assets would also be freely available to the consolidated (parent) entity in times of stress. [Basel Framework, LCR 30.21]

25. In assessing whether assets are freely transferable for regulatory purposes, institutions should be aware that assets may not be freely available to the consolidated entity due to regulatory, legal, tax, accounting or other impediments. Assets held in legal entities without market access should only be included to the extent that they can be freely transferred to other entities that could monetise the assets. [Basel Framework, LCR 30.22]

26. In certain jurisdictions, large, deep and active repo markets do not exist for eligible asset classes, and therefore such assets are likely to be monetised through outright sale. In these circumstances, an institution should exclude from the stock of HQLA those assets where there are impediments to sale, such as large fire-sale discounts which would cause it to breach minimum solvency requirements, or requirements to hold such assets, including, but not limited to, statutory minimum inventory requirements for market making. [Basel Framework, LCR 30.23]

27. Institutions should not include in the stock of HQLA any assets, or liquidity generated from assets, they have received under right of rehypothecation, if the beneficial owner has the

contractual right to withdraw those assets during the 30-day stress period.<sup>7</sup> [Basel Framework, LCR 30.24]

28. Assets received as collateral for derivatives transactions that are not segregated and are legally able to be rehypothecated may be included in the stock of HQLA provided that the institution records an appropriate outflow for the associated risks as set out in paragraph 96. [Basel Framework, LCR 30.25]

29. As stated in Principle 8 of the BCBS *Sound Principles* and Principle 12 of OSFI's *Guideline B-6: Liquidity Principles*, an institution should actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and thus contribute to the smooth functioning of payment and settlement systems. Institutions and regulators should be aware that the LCR stress scenario does not cover expected or unexpected intraday liquidity needs. [Basel Framework, LCR 30.26]

30. While the LCR is expected to be met and reported in a single currency, institutions are expected to be able to meet their liquidity needs in each currency and maintain HQLA consistent with the distribution of their liquidity needs by currency. The institution should be able to use the stock to generate liquidity in the currency and jurisdiction in which the net cash outflows arise. As such, the LCR by currency is expected to be monitored and reported to allow the institution and OSFI to track any potential currency mismatch issues that could arise, as outlined in Chapter 6. In managing foreign exchange liquidity risk, the institution should take into account the risk that its ability to swap currencies and access the relevant foreign exchange markets may erode rapidly under stressed conditions. It should be aware that sudden, adverse exchange rate movements could sharply widen existing mismatched positions and alter the effectiveness of any foreign exchange hedges in place. [Basel Framework, LCR 30.27]

31. In order to mitigate cliff effects that could arise, if an eligible liquid asset became ineligible (e.g. due to rating downgrade), an institution is permitted to keep such assets in its stock of liquid assets for an additional 30 calendar days. This would allow the institution additional time to adjust its stock as needed or replace the asset. [Basel Framework, LCR 30.28]

### **2.2.A.3. Diversification of the stock of HQLA**

32. The stock of HQLA should be well diversified within the asset classes themselves (except for sovereign debt of the institution's home jurisdiction or from the jurisdiction in which the institution operates; central bank reserves; central bank debt securities; and cash). Although some asset classes are more likely to remain liquid irrespective of circumstances, ex-ante it is not possible to know with certainty which specific assets within each asset class might be subject to shocks ex-post. Institutions should therefore have policies and limits in place in order to avoid concentration with respect to asset types, issue and issuer types, and currency (consistent with the distribution of net cash outflows by currency) within asset classes. [Basel Framework, LCR 30.29]

<sup>7</sup> Refer to paragraph 126 for the appropriate treatment if the contractual withdrawal of such assets would lead to a short position (e.g. because the institution had used the assets in longer-term securities financing transactions).



## 2.2.A.4. Definition of HQLA

33. The stock of HQLA should comprise assets with the characteristics outlined in paragraphs 12 to 15. This section describes the type of assets that meet these characteristics and can therefore be included in the stock. [Basel Framework, LCR 30.30]

34. There are two categories of assets that can be included in the stock. Assets to be included in each category are those that the institution is holding on the first day of the stress period, irrespective of their residual maturity. “Level 1” assets can be included without limit, while “Level 2” assets can only comprise up to 40% of the stock. [Basel Framework, LCR 30.31]

35. Supervisors may also choose to include within Level 2 an additional class of assets (Level 2B assets - see paragraph 46 below). If included, these assets should comprise no more than 15% of the total stock of HQLA. They must also be included within the overall 40% cap on Level 2 assets. [Basel Framework, LCR 30.33]

36. The 40% cap on Level 2 assets and the 15% cap on Level 2B assets should be determined after the application of required haircuts, and after taking into account the unwind of short-term securities financing transactions and collateral swap transactions maturing within 30 calendar days that involve the exchange of HQLA. In this context, short term transactions are transactions with a maturity date up to and including 30 calendar days. [Basel Framework, LCR 30.34]

37. As stated in paragraph 36, the calculation of the 40% cap on Level 2 assets should take into account the impact on the stock of HQLA of the amounts of Level 1 and Level 2 assets involved in secured funding,<sup>8</sup> secured lending<sup>9</sup> and collateral swap transactions maturing within 30 calendar days. The maximum amount of adjusted Level 2 assets in the stock of HQLA is equal to two-thirds of the adjusted amount of Level 1 assets after haircuts have been applied. The calculation of the 40% cap on Level 2 assets will take into account any reduction in eligible Level 2B assets on account of the 15% cap on Level 2B assets.<sup>10</sup> [Basel Framework, LCR 30.35]

### OSFI Notes

For purposes of the LCR calculation, OSFI will only require the size of an individual institution’s pool of Level 2 and Level 2B assets to be calculated on an adjusted basis as noted in paragraph 37. OSFI will, however, through regulatory reporting, monitor the size of an institution’s pool of Level 2 and Level 2B assets on an unadjusted basis as discussed in footnote 10.

38. Further, the calculation of the 15% cap on Level 2B assets should take into account the impact on the stock of HQLA of the amounts of HQLA assets involved in secured funding, secured lending and collateral swap transactions maturing within 30 calendar days. The

<sup>8</sup> See definition in paragraph 92.

<sup>9</sup> See definition in paragraph 125.

<sup>10</sup> When determining the calculation of the 15% and 40% caps, supervisors may, as an additional requirement, separately consider the size of the pool of Level 2 and Level 2B assets on an unadjusted basis.

maximum amount of adjusted Level 2B assets in the stock of HQLA is equal to 15/85 of the sum of the adjusted amounts of Level 1 and Level 2 assets, or, in cases where the 40% cap is binding, up to a maximum of 1/4 of the adjusted amount of Level 1 assets, both after haircuts have been applied. [Basel Framework, LCR 30.36]

39. The adjusted amount of Level 1 assets is defined as the amount of Level 1 assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 1 assets (including cash) that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 16 to 28. The adjusted amount of Level 2A assets is defined as the amount of Level 2A assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 2A assets that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 16 to 28. The adjusted amount of Level 2B assets is defined as the amount of Level 2B assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 2B assets that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 16 to 28. In this context, short-term transactions are transactions with a maturity date up to and including 30 calendar days. Relevant haircuts would be applied prior to calculation of the respective caps. [Basel Framework, LCR 30.37]

40. The formula for the calculation of the stock of HQLA is as follows:

$$\text{Stock of HQLA} = \text{Level 1} + \text{Level 2A} + \text{Level 2B} - \text{Adjustment for 15\% cap} - \text{Adjustment for 40\% cap}$$

Where:

$$\text{Adjustment for 15\% cap} = \text{Max} (\text{Adjusted Level 2B} - 15/85 \times (\text{Adjusted Level 1} + \text{Adjusted Level 2A}), \text{Adjusted Level 2B} - 15/60 \times \text{Adjusted Level 1}, 0)$$

$$\text{Adjustment for 40\% cap} = \text{Max} ((\text{Adjusted Level 2A} + \text{Adjusted Level 2B} - \text{Adjustment for 15\% cap}) - 2/3 \times \text{Adjusted Level 1 assets}, 0)$$

[Basel Framework, LCR 30.38, 30.39]

41. Alternatively, the formula can be expressed as:

$$\text{Stock of HQLA} = \text{Level 1} + \text{Level 2A} + \text{Level 2B} - \text{Max} ((\text{Adjusted Level 2A} + \text{Adjusted Level 2B}) - 2/3 \times \text{Adjusted Level 1}, \text{Adjusted Level 2B} - 15/85 \times (\text{Adjusted Level 1} + \text{Adjusted Level 2A}), 0)$$



*(i) Level 1 assets*

42. Level 1 assets can comprise an unlimited share of the pool and are not subject to a haircut under the LCR.<sup>11</sup> However, national supervisors may wish to require haircuts for Level 1 securities based on, among other things, their duration, credit and liquidity risk, and typical repo haircuts. [Basel Framework, LCR 30.40]

**OSFI Notes**

Level 1 assets will not be subject to a haircut (i.e. can be included in HQLA at 100% of their market value).

43. Level 1 assets are limited to:

- a) coins and banknotes;
- b) central bank reserves (including required reserves),<sup>12</sup> to the extent that the central bank policies allow them to be drawn down in times of stress;<sup>13</sup>
- c) marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs, the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Community, or multilateral development banks,<sup>14</sup> and satisfying all of the following conditions:
  - assigned a 0% risk-weight under the Standardized Approach for credit risk as per Chapter 4 of the Capital Adequacy Requirements Guideline;<sup>15</sup>
  - traded in large, deep and active repo or cash markets characterised by a low level of concentration;
  - have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions; and

<sup>11</sup> For purpose of calculating the LCR, Level 1 assets in the stock of HQLA should be measured at an amount no greater than their current market value.

<sup>12</sup> In this context, central bank reserves would include institutions' overnight deposits with the central bank, and term deposits with the central bank that: (i) are explicitly and contractually repayable on notice from the depositing institution; or (ii) that constitute a loan against which the institution can borrow on a term basis or on an overnight but automatically renewable basis (only where the institution has an existing deposit with the relevant central bank). Other term deposits with central banks are not eligible for the stock of HQLA; however, if the term expires within 30 days, the term deposit could be considered as an inflow per paragraph 134.

<sup>13</sup> Local supervisors should discuss and agree with the relevant central bank the extent to which central bank reserves should count towards the stock of liquid assets, i.e. the extent to which reserves are able to be drawn down in times of stress.

<sup>14</sup> This follows the categorisation of market participants applied in the Basel Consolidated Framework, unless otherwise specified.

<sup>15</sup> Paragraph 43(c) includes only marketable securities that qualify for [CRE 20.4](#) under the Basel Consolidated Framework. When a 0% risk-weight has been assigned at national discretion according to the provision in CRE 20.5 of the Basel Consolidated Framework, the treatment should follow paragraph 43(d) or 43(e).

- not an obligation of a financial institution<sup>16</sup> or any of its affiliated entities.<sup>17</sup>

### OSFI Notes

Claims on all provincial and territorial governments and agents of the federal, provincial or territorial government whose debts are, by virtue of their enabling legislation, obligations of the parent government, will receive the same risk weight as the Government of Canada under the Standardized Approach for credit risk as per Chapter 4 of the Capital Adequacy Requirements Guideline.

Securities issued under the National Housing Act Mortgage Backed Securities (NHA MBS) program may be included as Level 1 assets.

For non-foreign non-DSIB institutions, holdings of NHA MBS and Canada Mortgage Bonds (CMBs) where the minimum pool size is less than \$25 million may be included as Level 1

- d) where the sovereign has a non-0% risk weight, sovereign or central bank debt securities issued in domestic currencies by the sovereign or central bank in the country in which the liquidity risk is being taken or in the institution's home country; and
- e) where the sovereign has a non-0% risk weight, domestic sovereign or central bank debt securities issued in foreign currencies are eligible up to the amount of the institution's stressed net cash outflows in that specific foreign currency stemming from the institution's operations in the jurisdiction where the institution's liquidity risk is being taken. [Basel Framework, LCR 30.41]

### OSFI Notes

Sovereign and central bank debt securities, even with a rating below AA-, should be considered eligible as Level 1 assets only when these assets are issued by the sovereign or central bank in the institution's home country or in host countries where the institution has a presence via a subsidiary or branch. Therefore, paragraphs 43(d) and 43(e) do not apply to a country in which the institution's only presence is liquidity risk exposures denominated in the currency of that country. [Basel Framework, LCR 30.41]

In paragraph 43(e), the amount of non-0% risk-weighted sovereign/central bank debt issued in foreign currencies included in Level 1 assets is strictly limited to the foreign currency exposure in the jurisdiction of the issuing sovereign/central bank. [Basel Framework, LCR 30.41]

<sup>16</sup> This includes deposit-taking entities (including banking entities), insurance entities, securities firms and their affiliates.

<sup>17</sup> This requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the institution also qualifies as a PSE under the Basel Consolidated Framework (Basel Framework, CRE 20.11) where securities issued by the institution could qualify for Level 1 assets if all necessary conditions are satisfied.

*(ii) Level 2 assets*

44. Level 2 assets (comprising Level 2A assets and any Level 2B assets permitted by OSFI) can be included in the stock of HQLA, subject to the requirement that they comprise no more than 40% of the overall stock after haircuts have been applied. The method for calculating the cap on Level 2 assets and the cap on Level 2B assets is set out in paragraphs 37 to 39. [Basel Framework, LCR 30.42]

*(iii) Level 2A assets*

45. A 15% haircut is applied to the current market value of each Level 2A asset held in the stock of HQLA. Level 2A assets are limited to the following:

- a) Marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks that satisfy all of the following conditions:<sup>18</sup>
  - assigned a 20% risk weight under the Standardized Approach for credit risk as per Chapter 4 of the Capital Adequacy Requirements Guideline;
  - traded in large, deep and active repo or cash markets characterised by a low level of concentration;
  - have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period during a relevant period of significant liquidity stress); and
  - not an obligation of a financial institution or any of its affiliated entities.<sup>19</sup>
- b) Corporate debt securities (including commercial paper)<sup>20</sup> and covered bonds<sup>21</sup> that satisfy all of the following conditions:

<sup>18</sup> Paragraphs 43(d) and 43(e) may overlap with paragraph 45(a) in terms of sovereign and central bank securities with a 20% risk weight. In such a case, the assets can be assigned to the Level 1 category according to Paragraph 43(d) or 43(e), as appropriate.

<sup>19</sup> This requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the institution also qualifies as a PSE under the Standardized Approach for credit risk as per Chapter 4 of the Capital Adequacy Requirements Guidelinewhere securities issued by the institution could qualify for Level 1 assets if all necessary conditions are satisfied.

<sup>20</sup> Corporate debt securities (including commercial paper) in this respect include only plain-vanilla assets whose valuation is readily available based on standard methods and does not depend on private knowledge, i.e. these do not include complex structured products or subordinated debt.

<sup>21</sup> Covered bonds are bonds issued and owned by a bank or mortgage institution and are subject by law to special public supervision designed to protect bond holders. Proceeds deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of the validity of the bonds, are capable of covering claims attached to the bonds and which, in the event of the failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest.

- in the case of corporate debt securities: not issued by a financial institution or any of its affiliated entities;
- in the case of covered bonds: not issued by the institution itself or any of its affiliated entities;
- either (i) have a long-term credit rating from a recognised external credit assessment institution (ECAI) of at least AA-<sup>22</sup> or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or (ii) do not have a credit assessment by a recognised ECAI but are internally rated as having a probability of default (PD) corresponding to a credit rating of at least AA-;
- traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
- have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions: i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%. [Basel Framework, LCR 30.43]

(iv) *Level 2B assets*

46. Certain additional assets (Level 2B assets) may be included in Level 2 at the discretion of national authorities. In choosing to include these assets in Level 2 for the purpose of the LCR, supervisors are expected to ensure that such assets fully comply with the qualifying criteria.<sup>23</sup> Supervisors are also expected to ensure that institutions have appropriate systems and measures to monitor and control the potential risks (e.g. credit and market risks) that institutions could be exposed to in holding these assets. [Basel Framework, LCR 30.44]

**OSFI Notes**

OSFI will permit institutions to include Level 2B assets as eligible HQLA, up to the 15% composition limit of total HQLA noted in paragraph 35, provided the assets meet all of the eligibility criteria noted in paragraph 47 for the individual asset type.

47. A larger haircut is applied to the current market value of each Level 2B asset held in the stock of HQLA. Level 2B assets are limited to the following:

- a) Residential mortgage backed securities (RMBS) that satisfy all of the following conditions may be included in Level 2B, subject to a 25% haircut:

<sup>22</sup> In the event of split ratings, the applicable rating should be determined according to the method used in the Standardised Approach for credit risk. Local rating scales (rather than international ratings) of a supervisor-approved ECAI that meet the eligibility criteria outlined in paragraph 21.2 of the Basel Consolidated Framework [CRE 21.2] can be recognised if corporate debt securities or covered bonds are held by an institution for local currency liquidity needs arising from its operations in that local jurisdiction. This also applies to Level 2B assets.

<sup>23</sup> As with all aspects of the framework, compliance with these criteria will be assessed as part of peer reviews undertaken under the Committee's Regulatory Consistency Assessment Programme.

- not issued by, and the underlying assets have not been originated by the institution itself or any of its affiliated entities;
- have a long-term credit rating from a recognised ECAI of AA or higher, or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating;
- traded in large, deep and active repo or cash markets characterised by a low level of concentration;
- have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress;
- the underlying asset pool is restricted to residential mortgages and cannot contain structured products;
- the underlying mortgages are “full recourse” loans (i.e. in the case of foreclosure the mortgage owner remains liable for any shortfall in sales proceeds from the property) and have a maximum loan-to-value ratio (LTV) of 80% on average at issuance; and
- the securitisations are subject to “risk retention” regulations which require issuers to retain an interest in the assets they securitise.

### OSFI Notes

In Canada, authorities have not prescribed specific “risk retention” regulations. Enhanced disclosure and the requirement to deduct first loss in securitisations are examples where the principles of risk retention are met. For holdings of RMBS from foreign jurisdictions, institutions should follow the respective “risk retention” regulations in that jurisdiction.

The LTV requirement in paragraph 47(a) refers to the weighted average (by loan balance) LTV of the portfolio of underlying mortgages, not to any individual mortgage, i.e. mortgages that have an LTV greater than 80% are not excluded per se. [Basel Framework, LCR 30.45]

The “at issuance” reference in paragraph 47(a) refers to the time when the RMBS is issued, i.e. the average LTV of the underlying mortgages at the time of the issuance of the RMBS must not be higher than 80%. [Basel Framework, LCR 30.45]

b) Corporate debt securities (including commercial paper)<sup>24</sup> that satisfy all of the following conditions may be included in Level 2B, subject to a 50% haircut:

- not issued by a financial institution or any of its affiliated entities;

<sup>24</sup> Corporate debt securities (including commercial paper) in this respect include only plain-vanilla assets whose valuation is readily available based on standard methods and does not depend on private knowledge, i.e. these do not include complex structured products or subordinated debt.

- either (i) have a long-term credit rating from a recognised ECAI between A+ and BBB- or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or (ii) do not have a credit assessment by a recognised ECAI and are internally rated as having a PD corresponding to a credit rating of between A+ and BBB-;
- traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
- have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress.

### OSFI Notes

Sovereign and central bank debt securities rated BBB+ to BBB- that are not included in the definition of Level 1 assets according to paragraph 43(d) or 43(e) may be included in the definition of Level 2B assets with a 50% haircut within the 15% cap for all Level 2B assets. [Basel Framework, LCR 30.45].

Corporate debt securities with a rating of at least AA- whose maximum decline of price or increase in haircut over a 30-day period of significant liquidity stress is between 10% and 20% may count towards Level 2B assets provided that they meet all other requirements stated in paragraph 47(b). [Basel Framework, LCR 30.43]

Securities representing claims on PSEs with a rating of at least BBB- whose maximum decline of price or increase in haircut over a 30-day period of significant liquidity stress does not exceed 20% may count towards Level 2B assets provided that they meet all other requirements stated in paragraph 47(b). [Basel Framework, LCR 30.45]

- c) Common equity shares that satisfy all of the following conditions may be included in Level 2B, subject to a 50% haircut:
- not issued by a financial institution or any of its affiliated entities;
  - exchange traded and centrally cleared;
  - a constituent of the major stock index in the home jurisdiction or where the liquidity risk is taken, as decided by the supervisor in the jurisdiction where the index is located;
  - denominated in the domestic currency of an institution's home jurisdiction or in the currency of the jurisdiction where an institution's liquidity risk is taken;
  - traded in large, deep and active repo or cash markets characterised by a low level of concentration; and
  - have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, i.e. a maximum decline of share

price not exceeding 40% or increase in haircut not exceeding 40 percentage points over a 30-day period during a relevant period of significant liquidity. [Basel Framework, LCR 30.45]

### OSFI Notes

For purposes of the third sub-criteria under paragraph 47(c), the S&P/TSX 60 Index should be recognized as the major stock index in Canada. Institutions should consult with the supervisor in jurisdictions outside Canada where both i) common equity shares are held by the institution and ii) where liquidity risk is being taken by the institution, for a determination of the major stock index in that jurisdiction. [Basel Framework, LCR 30.45]

Institutions are permitted to include long cash non-financial equity positions held against synthetic short positions as eligible Level 2B assets provided the operational requirements outlined in section 2.2.A.2 are met. In the case of equity total return swap (TRS) transactions for example, this includes that provisions are included in the TRS contracts that permit the institution with the unfettered right to terminate the TRS with settlement of cash flows (on both the equities and the TRS) occurring within the LCR's 30-day time horizon. In addition, the process of unwinding such transactions must not create an open risk position in excess of internal limits, in line with paragraph 21.

Equities that are a constituent of a major stock index can only be assigned to the stock of HQLA if the stock index is located within the home jurisdiction of the institution or if the institution has liquidity risk exposure through a branch or other legal entity in that jurisdiction. [Basel Framework, LCR 30.45]

(v) *Treatment for jurisdictions with insufficient HQLA*

(a) *Assessment of eligibility for alternative liquidity approaches (ALA)*

48. Some jurisdictions may have an insufficient supply of Level 1 assets (or both Level 1 and Level 2 assets)<sup>25</sup> in their domestic currency to meet the aggregate demand of institutions with significant exposures in this currency. To address this situation, the Committee has developed alternative treatments for holdings in the stock of HQLA, which are expected to apply to a limited number of currencies and jurisdictions. Eligibility for such alternative treatment will be judged on the basis of the qualifying criteria set out in Annex 1 of BCBS January 2013 and will be determined through an independent peer review process overseen by the Committee. The purpose of this process is to ensure that the alternative treatments are only used when there is a true shortfall in HQLA in the domestic currency relative to the needs in that currency.<sup>26</sup> [Basel Framework, LCR 30.32, 31.1]

49. To qualify for the alternative treatment, a jurisdiction should be able to demonstrate that:

<sup>25</sup> Insufficiency in Level 2 assets alone does not qualify for the alternative treatment.

<sup>26</sup> For member states of a monetary union with a common currency, that common currency is considered the "domestic currency."



- there is an insufficient supply of HQLA in its domestic currency, taking into account all relevant factors affecting the supply of, and demand for, such HQLA;<sup>27</sup>
- the insufficiency is caused by long-term structural constraints that cannot be resolved within the medium term;
- it has the capacity, through any mechanism or control in place, to limit or mitigate the risk that the alternative treatment cannot work as expected; and
- it is committed to observing the obligations relating to supervisory monitoring, disclosure, and periodic self-assessment and independent peer review of its eligibility for alternative treatment.

All of the above criteria have to be met to qualify for the alternative treatment.

### OSFI Notes

OSFI does not consider that Canada as a jurisdiction, nor the Canadian dollar (CAD) as a currency, meet the qualifying criteria for eligibility for the alternative liquidity approaches mentioned in paragraphs 48 and 49. Accordingly, OSFI has not incorporated the guidance featured in LCR 31 – Alternative Liquidity Approaches into the LAR Guideline.

#### (vi) *Eligible non-operational demand and overnight deposits*

50. OSFI will recognize non-operational demand and overnight deposits placed by an indirect clearer (that is not a subsidiary of a direct clearer) with an OSFI or provincially regulated direct clearer in the numerator of the LCR, although not as HQLA. As such, these eligible deposits should not be considered as inflows from financial institutions under paragraph 134 and will be eligible for inclusion in the LCR at the 100% rate that they would have received if they had otherwise been captured under paragraph 134.

### 2.2.B. Total net cash outflows

51. The term total net cash outflows<sup>28</sup> is defined as the total expected cash outflows minus total expected cash inflows in the specified stress scenario for the subsequent 30 calendar days. Total expected cash outflows are calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or be drawn down. Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in under the scenario up to an aggregate cap of 75% of total expected cash outflows. [Basel Framework, LCR 40.1]

<sup>27</sup> The assessment of insufficiency is only required to take into account the Level 2B assets if the national authority chooses to include them within HQLA. In particular, if certain Level 2B assets are not included in the stock of HQLA in a given jurisdiction, then the assessment of insufficiency in that jurisdiction does not need to include the stock of Level 2B assets that are available in that jurisdiction.

<sup>28</sup> Where applicable, cash inflows and outflows should include interest that is expected to be received and paid during the 30-day time horizon.



**Total net cash outflows over the next 30 calendar days = Total expected cash outflows – Min {total expected cash inflows; 75% of total expected cash outflows}**

52. While most roll-off rates, draw-down rates and similar factors are harmonised across jurisdictions as outlined in this standard, a few parameters are to be determined by supervisory authorities at the national level. Where this is the case, the parameters should be transparent and made publicly available. [Basel Framework, LCR 40.2]

53. Institutions will not be permitted to double count items, i.e. if an asset is included as part of the “stock of HQLA” (i.e. the numerator), the associated cash inflows cannot also be counted as cash inflows (i.e. part of the denominator). Where there is potential that an item could be counted in multiple outflow categories, (e.g. committed liquidity facilities granted to cover debt maturing within the 30 calendar day period), an institution only has to assume up to the maximum contractual outflow for that product. Residual maturity of funding instruments with market-based maturity triggers, such as autocallable notes, should either reflect the earliest possible maturity or the expected life derived from prudent and appropriate analysis. [Basel Framework, LCR 40.4]

### 2.2.B.1. Cash outflows

#### OSFI Notes

For deposits that are contractually pledged to an institution as collateral to secure a credit facility or loan granted by the institution that will not mature or be settled in the next 30 days, the pledged deposit may be excluded from the LCR calculation only if the following conditions are met:

- the loan will not mature or be settled in the next 30 days;
- the pledge arrangement is subject to a legally enforceable contract disallowing withdrawal of the deposit before the loan is fully settled or repaid; and
- the amount of deposit to be excluded cannot exceed the outstanding balance of the loan (which may be the drawn portion of a credit facility).

The above treatment does not apply to a deposit which is pledged against an undrawn facility, in which case the higher of the outflow rate applicable to the undrawn facility or the pledged deposit applies.

[Basel Framework, LCR 40.5]

#### (i) *Retail deposit run-off*

54. Retail deposits are defined as deposits placed with an institution by a natural person. Deposits from legal entities, sole proprietorships or partnerships are captured in wholesale deposit categories, including funding provided by small business customers which receive

equivalent retail treatment, set out in paragraphs 69-72<sup>29</sup>. Retail deposits subject to the LCR include demand deposits and term deposits, including structured notes, unless otherwise excluded under the criteria set out in paragraphs 62 and 63. To be treated as retail deposits, it is not sufficient that the instruments are specifically designed and marketed to retail or small business customers. Rather there should be controls in place to ensure any corporate or institutional ownership is identified and excluded.

[Basel Framework, LCR 40.5]

55. These retail deposits are divided into “stable” and “less stable” portions of funds as described below, with minimum run-off rates listed for each category. Institutions should discuss with OSFI the classification of new products offered. The run-off rates for retail deposits are minimum floors, with higher run-off rates established by individual jurisdictions as appropriate to capture depositor behaviour in a period of stress in each jurisdiction. [Basel Framework, LCR 40.6]

### OSFI Notes

For purposes of determining a retail deposit run-off rate:

- An established relationship between an institution and a retail depositor exists where there is evidence of a dependency or reliance of the depositor on the institution that makes deposit withdrawal highly unlikely in a stress environment. There is a general presumption that an established relationship has been developed where the depositor holds complementary banking services with the institution. This presumption holds if any of the following are met:
  - the depositor holds a demand or term deposit in addition to:
    - a term investment(s) or installment loan(s) maturing outside the LCR window; or
    - a revolving credit facility with an outstanding balance (excluding credit cards); or
    - a transactional account; or
    - a brokerage/discount brokerage/wealth management account with the institution or its direct subsidiaries;

<sup>29</sup> Deposits in precious metals received by an institution should be treated as retail deposits or as unsecured wholesale funding depending on the type of counterparty. An institution may assume no outflow if:

- the deposit physically settles and the institution is able to supply the precious metals from its own inventories; or
- contractual arrangements give the institution the choice between cash settlement and physical delivery and there are no market practices or reputational factors that may limit the institution’s discretion to exercise the option in a way that would minimise the LCR-effective outflow (i.e., to opt for physical delivery if the institution is able to supply the precious metals from its own inventories).

This provision is strictly limited in scope to precious metal deposits and does not extend to derivatives or other products that have similar economic features as precious metal deposits.

- the depositor holds investments in a registered account (e.g. Registered Retirement Savings Plans, Registered Education Savings Plans, Tax Free Savings Accounts) with the institution;
- other combinations of banking services and products demonstrated to increase the resilience of the depositor-institution relationship, as agreed by OSFI.<sup>30</sup>
- an account is transactional if it meets any of these criteria:
  - the depositor's source of income is automatically deposited into the account;
  - bill payments are regularly withdrawn from the account; or
  - the account is routinely used for client-driven transactions.
- an unaffiliated third party is an entity that is not branded with the institution or that is not branded as a subsidiary of the institution, and that is acting on behalf of the retail client in an advisory role (e.g. ability to direct or influence the institution where the funds are placed);
- rate sensitive deposits (RSD) are deposits where the interest rate paid is a temporary promotional<sup>31</sup> rate, and where the funds deposited are free from material constraints on withdrawals.
- A partnership agreement sources retail deposits under an effective contract between the deposit-taking institution (DTI) and an unaffiliated third party such as a non-bank financial intermediary (NBFI). The third party should guarantee the retail nature of these deposits and the contract between the DTI and the third party should meet the following three conditions:
  - Existence of a withdrawal notice period, where the third party should provide a longer runway to terminate the relationship.
  - Ability of the DTI to refuse withdrawal by the third party without evidence of retail client activity or without a proper notice.
  - Transparent distribution of withdrawal activity among all DTIs receiving funds from the same NBFI product.

(a) *Stable deposits (run-off rate = 3% and higher)*

<sup>30</sup> Requests seeking OSFI's agreement on other combinations should be addressed to the institution's Lead Supervisor, with a copy to Market and Liquidity Risk Division (at: [capitalmarkets@osfi-bsif.gc.ca](mailto:capitalmarkets@osfi-bsif.gc.ca)), and should include a business case that, at a minimum, sets out:

- the reason why the agreement is being requested;
- rationale and supporting evidence for the proposed combination qualifying for relationship status; and
- financial projections, including expected impact of the reclassification on liquidity position and related metrics (internal and regulatory).

<sup>31</sup> In the case of promotional offers on new accounts, institutions can migrate accounts to a lower run-off rate category once the stability of the deposit has been confirmed, i.e. where the deposits are still present after the promotional period ends. In the case of a promotional rate offered on new balances only, only the new balances attracting the promotional rate should be allocated to the RSD category (rather than the entire balance of the deposit).

56. Stable deposits, which usually receive a run-off factor of 5%, are the amount of the deposits that are fully insured<sup>32</sup> by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection and where:

- the depositors have an established relationships with the institution that make deposit withdrawal highly unlikely; or
- the deposits are in transactional accounts. [Basel Framework, LCR 40.7]

57. For the purposes of this standard, an “effective deposit insurance scheme” refers to a scheme (i) that guarantees that it has the ability to make prompt payouts, (ii) for which the coverage is clearly defined and (iii) of which public awareness is high. The deposit insurer in an effective deposit insurance scheme has formal legal powers to fulfill its mandate and is operationally independent, transparent and accountable. A jurisdiction with an explicit and legally binding sovereign deposit guarantee that effectively functions as deposit insurance can be regarded as having an effective deposit insurance scheme. [Basel Framework, LCR 40.8, 40.9]

58. The presence of deposit insurance alone is not sufficient to consider a deposit “stable.” [Basel Framework, LCR 40.10]

59. Jurisdictions may choose to apply a run-off rate of 3% to stable deposits in their jurisdiction, if they meet the above stable deposit criteria and the following additional criteria for deposit insurance schemes:

- the insurance scheme is based on a system of prefunding via the periodic collection of levies on institutions with insured deposits;<sup>33</sup>

<sup>32</sup> “Fully insured” means that 100% of the deposit amount, up to the deposit insurance limit, is covered by an effective deposit insurance scheme. Deposit balances up to the deposit insurance limit can be treated as “fully insured” even if a depositor has a balance in excess of the deposit insurance limit. However, any amount in excess of the deposit insurance limit is to be treated as “less stable.” For example, if a depositor has a deposit of 150 that is covered by a deposit insurance scheme, which has a limit of 100, where the depositor would receive at least 100 from the deposit insurance scheme if the financial institution were unable to pay, then 100 would be considered “fully insured” and treated as stable deposits while 50 would be treated as less stable deposits. However if the deposit insurance scheme only covered a percentage of the funds from the first currency unit (e.g. 90% of the deposit amount up to a limit of 100) then the entire 150 deposit would be less stable.

In addition, where a depositor’s balance includes deposits maturing in the next 30 days (demand and/or term) and term deposits with a maturity greater than 30 days that, in aggregate, exceed the deposit category’s insurance coverage limit, the insured portion should be allocated on a pro rata basis between the deposit portion maturing in the next 30 days (demand and/or term) and the greater than 30 days term deposit portion. For example, if a depositor has 65 in a chequing account (i.e. demand deposit), 25 in a term deposit maturing in 20 days, and 60 in a term deposit maturing in 2 years – and assuming all these deposits are aggregated under the same deposit insurance category and where the deposit insurance scheme limit is 100 – the institution would classify 60 of the chequing account and 20-day term deposit as insured (i.e.  $65+25=90$  total deposits maturing in the next 30 days;  $90/150=60\%$  of the total depositor’s deposits which will mature in the next 30 days;  $60\% \times 100$  deposit insurance limit = 60 in insured deposits), 40 of the 2-year term deposit as insured (i.e.  $60/150=40\%$  of the total depositor’s deposits which will mature outside the LCR’s 30-day window;  $40\% \times 100$  deposit insurance limit = 40 in insured deposits), and the remaining 50 across all deposits as uninsured.

<sup>33</sup> The requirement for periodic collection of levies from institutions does not preclude that deposit insurance schemes may, on occasion, provide for contribution holidays due to the scheme being well-funded at a given point in time.

- the scheme has adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, e.g. an explicit and legally binding guarantee from the government, or a standing authority to borrow from the government; and
- access to insured deposits is available to depositors in a short period of time once the deposit insurance scheme is triggered.<sup>34</sup>

Jurisdictions applying the 3% run-off rate to stable deposits with deposit insurance arrangements that meet the above criteria should be able to provide evidence of run-off rates for stable deposits within the banking system below 3% during any periods of stress experienced that are consistent with the conditions within the LCR. [Basel Framework, LCR 40.11, 40.12]

### OSFI Notes

Institutions may recognize the 3% run-off rate for retail deposits that meet the stable deposit criteria in paragraph 56 that are fully insured by the Canada Deposit Insurance Corporation.

Institutions may recognize the 3% run-off rate for retail deposits located outside Canada that meet the stable deposit criteria in paragraph 56 that are fully insured by a deposit insurer that meets the criteria outlined in paragraph 59 as approved by the relevant prudential supervisor in that jurisdiction.

#### (b) *Less stable deposits (run-off rates = 10% and higher)*

60. Supervisory authorities are expected to develop additional buckets with higher run-off rates as necessary to apply to buckets of potentially less stable retail deposits in their jurisdictions, with a minimum run-off rate of 10%. These jurisdiction-specific run-off rates should be clearly outlined and publicly transparent. Buckets of less stable deposits could include deposits that are not fully covered by an effective deposit insurance scheme or sovereign deposit guarantee, high-value deposits, deposits from sophisticated or high net worth individuals, deposits that can be withdrawn quickly and foreign currency deposits, as determined by each jurisdiction. Institutions must allocate each less stable deposit to one of the categories below. Where a deposit could be categorized in more than one category, the highest run-off rate should be assigned. [Basel Framework, LCR 40.13]

##### (i) insured retail deposits where:

- a. the depositor does not have an established relationship with the institution or the deposit is not in a transactional account; or
- b. the deposits are received from funds and trusts where the balance is controlled solely by the underlying retail customer (i.e. the intermediary does not influence the balance placed or the institution where such balances are placed at after initial placement);

are assigned a 10% run-off rate;

<sup>34</sup> This period of time would typically be expected to be no more than seven business days.

- (ii) deposits sourced in the home jurisdiction but denominated<sup>35</sup> in a foreign currency that do not qualify as “stable” per paragraph 56 are assigned a 10% run-off rate;
- (iii) rate sensitive deposits where the client directly manages the funds and
  - a. the client has an established relationship with the institution or
  - b. the deposit is in a transactional account
 are assigned a 10% run-off rate;
- (iv) uninsured deposits are assigned a 10% run-off rate, including the portion of a deposit in excess of the deposit insurance coverage limit and deposits not meeting the deposit insurance coverage criteria;
- (v) deposits sourced through a partnership agreement (partnership deposits) where
  - a. the full amount of the deposit is insured,
  - b. the client has an established relationship with the third party, and
  - c. the client’s account is transactional
 are classified as stable partnership deposits and are assigned a 15% run-off rate;
- (vi) rate sensitive deposits where the client directly manages the funds and where:
  - a. the client does not have an established relationship with the institution and
  - b. the deposit is not in a transactional account
 are assigned a 20% run-off rate;
- (vii) retail structured notes that are not exchange tradeable are assigned a 30% run-off rate<sup>36</sup>;
- (viii) term deposits directly managed by an unaffiliated third party that are maturing or that are cashable in the next 30 days are assigned a 30% run-off rate;
- (ix) retail structured notes that are exchange tradeable are assigned a 40% run-off rate<sup>37</sup>;
- (x) deposits sourced through a partnership agreement (partnership deposits) where either
  - a. the client does not have an established relationship with the third party, or
  - b. the client’s account is not transactional, or

<sup>35</sup> Refer to paragraph 145 for the treatment of retail and small business deposits sourced in host jurisdictions.

<sup>36</sup> Where client information is not directly available, institutions may rely on the platform’s documented classification framework to determine retail eligibility provided that all of the following conditions are met: the platform provides investor protection safeguards consistent with retail distributions (e.g., suitability assessments, disclosure of risks, and regulatory oversight); the platform does not allow direct participation by institutional or corporate clients under the same product classification, without clear segregation from retail channels; and the platform maintains records sufficient to demonstrate the retail nature of the client base.

<sup>37</sup> Retail funding may also include exchange-traded structured notes (ETNs) where the instrument is issued and held within the same institution’s platform or affiliated brokerage account, provided that the end holder is an individual retail client, and retail ownership can be demonstrated and monitored on a daily basis. Only the portion of ETNs that meet these conditions may be treated as retail funding; the remaining portion should be classified as wholesale.

c. the deposits are not fully insured

are classified as less stable partnership deposits and are assigned a 40% run-off rate;

(xi) demand deposits where an unaffiliated third party directly manages the funds are assigned a 40% run-off rate;

61. Foreign currency retail deposits are deposits denominated in any other currency than the domestic currency in a jurisdiction in which the institution operates. Supervisors will determine the run-off factor that institutions in their jurisdiction should use for foreign currency deposits. Foreign currency deposits will be considered as “less stable” if there is a reason to believe that such deposits are more volatile than domestic currency deposits. Factors affecting the volatility of foreign currency deposits include the type and sophistication of the depositors, and the nature of such deposits (e.g. whether the deposits are linked to business needs in the same currency, or whether the deposits are placed in a search for yield). [Basel Framework, LCR 40.15]

62. Cash outflows related to retail term deposits with a residual maturity or withdrawal notice period of greater than 30 days will be excluded from total expected cash outflows if the depositor has no legal right to withdraw deposits within the 30-day horizon of the LCR, or if early withdrawal results in a significant penalty that is materially greater than the loss of interest.<sup>38</sup> [Basel Framework, LCR 40.16]

63. If an institution allows a depositor to withdraw such deposits without applying the corresponding penalty, or despite a clause that says the depositor has no legal right to withdraw, the entire category of these funds would then have to be treated as demand deposits (i.e. regardless of the remaining term, the deposits would be subject to the deposit run-off rates as specified in paragraphs 55 to 61). Supervisors in each jurisdiction may choose to outline exceptional circumstances that would qualify as hardship, under which the exceptional term deposit could be withdrawn by the depositor without changing the treatment of the entire pool of deposits. [Basel Framework, LCR 40.17]

#### **OSFI Notes**

For purposes of paragraph 63, OSFI defines ‘hardship’ to include pre-defined and documented situations such as death, catastrophic illness, loss of employment, or bankruptcy of the depositor.

64. Notwithstanding the above, supervisors may also opt to treat retail term deposits that meet the qualifications set out in paragraph 63 with a higher than 0% run-off rate, if they clearly state the treatment that applies for their jurisdiction and apply this treatment in a similar fashion across institutions in their jurisdiction. Such reasons could include, but are not limited to, supervisory concerns that depositors would withdraw term deposits in a similar fashion as retail demand deposits during either normal or stress times, concern that institutions may repay such deposits early in stressed times for reputational reasons, or the presence of unintended incentives

<sup>38</sup> If a portion of the term deposit can be withdrawn without incurring such a penalty, only that portion should be treated as a demand deposit. The remaining balance of the deposit should be treated as a term deposit.



on institutions to impose material penalties on consumers if deposits are withdrawn early. In these cases supervisors would assess a higher run-off against all or some of such deposits. [Basel Framework, LCR 40.18]

### OSFI Notes

OSFI will treat all retail term deposits that meet the qualifications set out in paragraph 63 with a 0% run-off rate. OSFI will monitor institutions' practices regarding retail term deposits to ensure this treatment remains appropriate.

### (ii) *Unsecured wholesale funding run-off*

65. For the purposes of the LCR, "unsecured wholesale funding" is defined as those liabilities and general obligations that are raised from non-natural persons (i.e. legal entities, including sole proprietorships and partnerships) and are not collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution. Obligations related to derivative contracts are explicitly excluded from this definition. [Basel Framework, LCR 40.19]

66. The wholesale funding included in the LCR is defined as all funding that is callable within the LCR's horizon of 30 days or that has its earliest possible contractual maturity date situated within this horizon (such as maturing term deposits and unsecured debt securities) as well as funding with an undetermined maturity. This should include all funding with options that are exercisable at the investor's discretion within the 30 calendar day horizon. For funding with options exercisable at the institution's discretion, OSFI will take into account reputational factors that may limit an institution's ability not to exercise the option.<sup>39</sup> In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date, institutions should and OSFI will assume such behaviour for the purpose of the LCR and include these liabilities as outflows. Residual maturity of funding instruments with market-based maturity triggers, such as autocallable notes, should receive treatment consistent with retail instruments described in paragraph 53. [Basel Framework, LCR 40.20]

67. Wholesale funding that is callable<sup>40</sup> by the funds provider subject to a contractually defined and binding notice period surpassing the 30-day horizon is not included. [Basel Framework, LCR 40.21]

68. For the purposes of the LCR, unsecured wholesale funding is to be categorised as detailed below, based on the assumed sensitivity of the funds providers to the rate offered and the credit quality and solvency of the borrowing institution. This is determined by the type of funds providers and their level of sophistication, as well as their operational relationships with the bank. The run-off rates for the scenario are listed for each category.

<sup>39</sup> This could reflect a case where an institution may imply that it is under liquidity stress if it did not exercise an option on its own funding.

<sup>40</sup> This takes into account any embedded options linked to the funds provider's ability to call the funding before contractual maturity.



(a) *Unsecured wholesale funding provided by small business customers: 5%, 10% and higher*

69. Unsecured wholesale funding provided by small business customers is treated the same way as retail deposits for the purposes of this standard, effectively distinguishing between a "stable" portion of funding provided by small business customers and different buckets of less stable funding defined by each jurisdiction. The same bucket definitions and associated run-off factors apply as for retail deposits. [Basel Framework, LCR 40.22]

70. This category consists of deposits and other extensions of funds made by non-financial small business customers. "Small business customers" are defined in line with the definition of loans extended to small businesses in paragraph 25 of Chapter 5 of OSFI's CAR Guideline that are managed as retail exposures and are generally considered as having similar liquidity risk characteristics to retail accounts provided the total aggregated funding<sup>41</sup> raised from one small business customer is less than CAD \$1.5 million (on a consolidated basis where applicable). [Basel Framework, LCR 40.23]

71. Where an institution does not have any exposure to a small business customer that would enable it to use the definition under paragraph 25 of Chapter 5 of OSFI's CAR Guideline, the institution may include such a deposit in this category provided that the total aggregate funding raised from the customer is less than CAD \$1.5 million (on a consolidated basis where applicable) and the deposit is managed as a retail deposit. This means that the institution treats such deposits in its internal risk management systems consistently over time and in the same manner as other retail deposits, and that the deposits are not individually managed in a way comparable to larger corporate deposits. [Basel Framework, LCR 40.24]

72. Term deposits from small business customers should be treated in accordance with the treatment for term retail deposits as outlined in paragraphs 62, 63 and 64. [Basel Framework, LCR 40.25]

(b) *Operational deposits generated by clearing, custody and cash management activities: 25%*

73. Certain activities lead to financial and non-financial customers needing to place, or leave, deposits with an institution in order to facilitate their access and ability to use payment and settlement systems and otherwise make payments. These funds may receive a 25% run-off factor only if the customer has a substantive dependency with the institution and the deposit is required for such activities. Supervisory approval would have to be given to ensure that institutions utilising this treatment actually are conducting these operational activities at the level indicated. OSFI may choose not to permit institutions to utilise the operational deposit run-off rates in cases where, for example, a significant portion of operational deposits are provided by a small proportion of customers (i.e. concentration risk). [Basel Framework, LCR 40.26]

<sup>41</sup> "Aggregated funding" means the gross amount (i.e. not netting any form of credit extended to the legal entity) of all forms of funding (e.g. deposits or debt securities or similar derivative exposure for which the counterparty is known to be a small business customer). In addition, applying the limit on a consolidated basis means that where one or more small business customers are affiliated with each other, they may be considered as a single creditor such that the limit is applied to the total funding received by the institution from this group of customers.

74. Qualifying activities in this context refer to clearing, custody or cash management activities that meet the following criteria:

- The customer is reliant on the institution to perform these services as an independent third-party intermediary in order to fulfill its normal banking activities over the next 30 days. For example, this condition would not be met if the institution is aware that the customer has adequate back-up arrangements.
- These services must be provided under a legally binding agreement to institutional customers.
- The termination of such agreements shall be subject either to a notice period of at least 30 days or significant switching costs (such as those related to transaction, information technology, early termination or legal costs) to be borne by the customer if the operational deposits are moved before 30 days.

[Basel Framework, LCR 40.27]

75. Qualifying operational deposits generated by such an activity are ones where:

- The deposits are by-products of the underlying services provided by the deposit-taking organisation and not sought out in the wholesale market in the sole interest of offering interest income.
- The deposits are held in specifically designated accounts and priced without giving an economic incentive to the customer (not limited to paying market interest rates) to leave any excess funds on these accounts. In the case that interest rates in a jurisdiction are close to zero, it would be expected that such accounts are non-interest bearing. Institutions should be particularly aware that during prolonged periods of low interest rates, excess balances (as defined below) could be significant.

[Basel Framework, LCR 40.28]

76. Any excess balances that could be withdrawn and would still leave enough funds to fulfill these clearing, custody and cash management activities do not qualify for the 25% factor. In other words, only that part of the deposit balance with the service provider that is proven to serve a customer's operational needs can qualify as stable. Excess balances should be treated in the appropriate category for non-operational deposits. If institutions are unable to determine the amount of the excess balance, then the entire deposit should be assumed to be excess to requirements and, therefore, considered non-operational. [Basel Framework, LCR 40.29]

77. Institutions must determine the methodology for identifying excess deposits that are excluded from this treatment. This assessment should be conducted at a sufficiently granular level to adequately assess the risk of withdrawal in an idiosyncratic stress. The methodology should take into account relevant factors such as the likelihood that wholesale customers have above average balances in advance of specific payment needs, and consider appropriate indicators (e.g. ratios of account balances to payment or settlement volumes or to assets under custody) to identify those customers that are not actively managing account balances efficiently. [Basel Framework, LCR 40.30]

78. Operational deposits would receive a 0% inflow assumption for the depositing institution given that these deposits are required for operational reasons, and are therefore not available to the depositing institution to repay other outflows. [Basel Framework, LCR 40.31]

79. Notwithstanding these operational categories, if the deposit under consideration arises out of correspondent banking or from the provision of prime brokerage services, it will be treated as if there were no operational activity for the purpose of determining run-off factors.<sup>42</sup> [Basel Framework, LCR 40.32]

80. The following paragraphs describe the types of activities that may generate operational deposits. An institution should assess whether the presence of such an activity does indeed generate an operational deposit as not all such activities qualify due to differences in customer dependency, activity and practices. [Basel Framework, LCR 40.33]

81. A clearing relationship, in this context, refers to a service arrangement that enables customers to transfer funds (or securities) indirectly through direct participants in domestic settlement systems to final recipients. Such services are limited to the following activities: transmission, reconciliation and confirmation of payment orders; daylight overdraft, overnight financing and maintenance of post-settlement balances; and determination of intra-day and final settlement positions. [Basel Framework, LCR 40.33]

82. A custody relationship, in this context, refers to the provision of safekeeping, reporting, processing of assets or the facilitation of the operational and administrative elements of related activities on behalf of customers in the process of their transacting and retaining financial assets. Such services are limited to the settlement of securities transactions, the transfer of contractual payments, the processing of collateral, and the provision of custody related cash management services. Also included are the receipt of dividends and other income, client subscriptions and redemptions. Custodial services can furthermore extend to asset and corporate trust servicing, treasury, escrow, funds transfer, stock transfer and agency services, including payment and settlement services (excluding correspondent banking), and depository receipts. [Basel Framework, LCR 40.34]

83. A cash management relationship, in this context, refers to the provision of cash management and related services to customers. Cash management services, in this context, refers to those products and services provided to a customer to manage its cash flows, assets and liabilities, and conduct financial transactions necessary to the customer's ongoing operations. Such services are limited to payment remittance, collection and aggregation of funds, payroll administration, and control over the disbursement of funds. [Basel Framework, LCR 40.35]

<sup>42</sup> Correspondent banking refers to arrangements under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payment and other services in order to settle foreign currency transactions (e.g. so-called nostro and vostro accounts used to settle transactions in a currency other than the domestic currency of the respondent bank for the provision of clearing and settlement of payments). Prime brokerage is a package of services offered to large active investors, particularly institutional hedge funds. These services usually include: clearing, settlement and custody; consolidated reporting; financing (margin, repo or synthetic); securities lending; capital introduction; and risk analytics.

84. The portion of the operational deposits generated by clearing, custody and cash management activities that is fully covered by deposit insurance can receive the same treatment as “stable” retail deposits. [Basel Framework, LCR 40.36]

*(c) Treatment of deposits in institutional networks of cooperative institutions: 25% or 100%*

85. An institutional network of cooperative (or otherwise named) institutions is a group of legally autonomous institutions with a statutory framework of cooperation with common strategic focus and brand where specific functions are performed by central institutions or specialised service providers. A 25% run-off rate can be given to the amount of deposits of member institutions with the central institution or specialised central service providers that are placed (a) due to statutory minimum deposit requirements, which are registered at regulators or (b) in the context of common task sharing and legal, statutory or contractual arrangements so long as both the institution that has received the monies and the institution that has deposited participate in the same institutional network’s mutual protection scheme against illiquidity and insolvency of its members. As with other operational deposits, these deposits would receive a 0% inflow assumption for the depositing institution, as these funds are considered to remain with the centralised institution. [Basel Framework, LCR 40.37, 40.38]

86. Supervisory approval would have to be given to ensure that institutions utilising this treatment actually are the central institution or a central service provider of such a cooperative (or otherwise named) network. Correspondent banking activities would not be included in this treatment and would receive a 100% outflow treatment, as would funds placed at the central institutions or specialised service providers for any other reason other than those outlined in (a) and (b) in the paragraph above, or for operational functions of clearing, custody, or cash management as outlined in paragraphs 81 to 83. [Basel Framework, LCR 40.39]

*(d) Unsecured wholesale funding provided by non-financial corporates and sovereigns, central banks, multilateral development banks, and PSEs: 20% or 40%*

87. This category comprises all deposits and other extensions of unsecured funding from non-financial corporate customers (that are not categorised as small business customers) and (both domestic and foreign) sovereign, central bank, multilateral development bank, and PSE customers that are not specifically held for operational purposes (as defined above). The run-off factor for these funds is 40%, unless the criteria in paragraph 88 are met. [Basel Framework, LCR 40.40]

88. Unsecured wholesale funding provided by non-financial corporate customers, sovereigns, central banks, multilateral development banks, and PSEs without operational relationships can receive a 20% run-off factor if the entire amount of the deposit is fully covered by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection. [Basel Framework, LCR 40.41]

*(e) Unsecured wholesale funding provided by other legal entity customers: 100%*

89. This category consists of all deposits and other funding from other institutions (including banks, securities firms, insurance companies, etc.), fiduciaries,<sup>43</sup> beneficiaries,<sup>44</sup> conduits and special purpose vehicles, affiliated entities of the bank<sup>45</sup> and other entities that are not specifically held for operational purposes (as defined above) and not included in the prior three categories. The run-off factor for these funds is 100%. [Basel Framework, LCR 40.42]

90. All notes, bonds and other debt securities issued by the institution are included in this category regardless of the holder, unless the bond is sold in the retail market and held in retail accounts as described in paragraph 54 (including small business customer accounts treated as retail per paragraphs 69 to 71), in which case the instruments can be treated in the appropriate retail or small business customer deposit category. Deposits from non-bank financial intermediaries (NBFIs) that have underlying retail characteristics and are driven by retail activities but without an effective agreement as defined in section 2.2.B.1 (i) are assigned a 100% run-off rate. Institutions should monitor the portion of these deposits that are demonstrably held by the NBFIs' retail clients. [Basel Framework, LCR 40.43]

91. Customer cash balances arising from the provision of prime brokerage services, including but not limited to the cash arising from prime brokerage services as identified in paragraph 79, should be considered separate from any required segregated balances related to client protection regimes imposed by national regulations, and should not be netted against other customer exposures included in this standard. These offsetting balances held in segregated accounts are treated as inflows in paragraph 134 and should be excluded from the stock of HQLA. [Basel Framework, LCR 40.44]

### ***(iii) Secured funding run-off***

92. For the purposes of this standard, “secured funding” is defined as those liabilities and general obligations that are collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution. [Basel Framework, LCR 40.45]

93. Loss of secured funding on short-term financing transactions: In this scenario, the ability to continue to transact repurchase, reverse repurchase and other securities financing transactions is limited to transactions backed by HQLA or with the bank's domestic sovereign, PSE or central bank.<sup>46</sup> Collateral swaps should be treated as repurchase or reverse repurchase agreements, as should any other transaction with a similar form. Additionally, collateral lent to the institution's

<sup>43</sup> Fiduciary is defined in this context as a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles.

<sup>44</sup> Beneficiary is defined in this context as a legal entity that receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust, or other contract.

<sup>45</sup> Outflows on unsecured wholesale funding from affiliated entities of the institution are included in this category unless the funding is part of an operational relationship, a deposit in an institutional network of cooperative institutions or the affiliated entity of a non-financial corporate.

<sup>46</sup> In this context, PSEs that receive this treatment should be limited to those that are 20% risk weighted or better, and “domestic” can be defined as a jurisdiction where an institution is legally incorporated.

customers to affect short positions<sup>47</sup> should be treated as a form of secured funding. For the scenario, an institution should apply the following factors to all outstanding secured funding transactions with maturities within the 30 calendar day stress horizon, including customer short positions that do not have a specified contractual maturity. The amount of outflow is calculated based on the amount of funds raised through the transaction, and not the value of the underlying collateral. [Basel Framework, LCR 40.46]

### OSFI Notes

Cash outflows associated with collateral swaps occur where the collateral borrowed is of higher quality within the LCR framework than the collateral lent. Such cash outflow amounts are to be calculated as the difference between the outflow rate prescribed in the table in paragraph 95 for the collateral lent and the inflow rate prescribed for non-rehypothecated collateral in the table in paragraph 126 for the collateral borrowed. For example, where Level 2A assets are lent and Level 1 assets are borrowed, a 15% outflow rate should be allocated. Similarly, where non-HQLA assets are lent and Level 2A assets are borrowed, an 85% outflow rate should be allocated. Note that no outflow should be allocated when the collateral lent and collateral borrowed are of the same LCR type.

Forward repos and forward collateral swaps that start prior to and mature within the LCR's 30-day horizon should be treated like repos and collateral swaps according to paragraphs 93 to 95. [Basel Framework, LCR 40.74]

94. Due to the high-quality of Level 1 assets, no reduction in funding availability against these assets is assumed to occur. Moreover, no reduction in funding availability is expected for any maturing secured funding transactions with the institution's domestic central bank. A reduction in funding availability will be assigned to maturing transactions backed by Level 2 assets equivalent to the required haircuts. A 25% factor is applied for maturing secured funding transactions with the institution's domestic sovereign, multilateral development banks, or domestic PSEs that have a 20% or lower risk weight, when the transactions are backed by assets other than Level 1 or Level 2A assets, in recognition that these entities are unlikely to withdraw secured funding from institutions in a time of market-wide stress. This, however, gives credit only for outstanding secured funding transactions, and not for unused collateral or merely the capacity to borrow. [Basel Framework, LCR 40.47]

95. For all other maturing transactions the run-off factor is 100%, including transactions where a bank has satisfied customers' short positions with its own long inventory. The table below summarises the applicable standards:

<sup>47</sup> A customer short position in this context describes a transaction where an institution's customer sells a security it does not own, and the institution subsequently obtains the same security from internal or external sources to make delivery into the sale. Internal sources include the institution's own inventory of collateral as well as rehypothecatable collateral held in other customer margin accounts. External sources include collateral obtained through a securities borrowing, reverse repo, or like transaction.



Categories for outstanding maturing secured funding transactions	Amount to add to cash outflows
• Backed by Level 1 assets or with central banks	0%
• Backed by Level 2A assets	15%
• Secured funding transactions with domestic sovereign, PSEs or multilateral development banks that are not backed by Level 1 or 2A assets. PSEs that receive this treatment are limited to those that have a risk weight of 20% or lower.	25%
• Backed by RMBS eligible for inclusion in Level 2B	25%
• Backed by other Level 2B assets	50%
• All others	100%

[Basel Framework, LCR 40.48]

### OSFI Notes

All secured transactions maturing within 30 days should be reported according to the collateral actually pledged as of close of business on the LCR measurement date applying the outflow assumptions in paragraph 95. In cases where the institution pledges a pool of HQLA and non-HQLA collateral to secured funding transactions and a portion of the secured funding transactions has a residual maturity greater than 30 days, if the institution cannot determine which specific assets in the collateral pool are used to collateralise the transactions with a residual maturity greater than 30 days, it may assume that assets are encumbered to these transactions in order of increasing liquidity value, consistent with the methodology set out in footnote 6, in such a way that assets with the lowest liquidity value in the LCR are assigned to the transactions with the longest residual maturities first. [Basel Framework, LCR 40.48]

#### (iv) *Additional requirements*

96. **Derivatives cash outflows:** the sum of all net cash outflows should receive a 100% factor. Institutions should calculate, in accordance with their existing valuation methodologies, expected contractual derivative cash inflows and outflows. Cash flows may be calculated on a net basis (i.e. inflows can offset outflows) by counterparty, only where a valid master netting agreement exists. Institutions should exclude from such calculations those liquidity requirements that would result from increased collateral needs due to market value movements or falls in value of collateral posted.<sup>48</sup> Options should be assumed to be exercised when they are ‘in the money’ to the option buyer. [Basel Framework, LCR 40.49]

<sup>48</sup> These risks are captured in paragraphs 99 and 103, respectively.

## OSFI Notes

For purposes of paragraph 96, institutions should consider any option that expires or can be exercised within the next 30 days and that is “in the money” to the option buyer. The cash flow should reflect the state of the transaction as of the reporting date. [Basel Framework, LCR 40.49]

Options with delivery settlement should be considered according to the liquidity value of the delivered assets, i.e. the assets are subject to the haircuts that would be applied if these assets were collateral in secured transactions or collateral swaps. If contractual arrangements allow for both physical delivery and cash settlement, cash settlement may be assumed. [Basel Framework, LCR 40.49]

For options with delivery settlement where the delivery obligation can be fulfilled with a variety of asset classes (i.e. the party liable has the choice between different securities), if the delivery obligation can be fulfilled with different security classes, delivery of the least valuable security possible (“cheapest to deliver”) can be assumed. This applies symmetrically to both the inflow and outflow perspective, such that the obligor is assumed to deliver the security with the lowest liquidity value. [Basel Framework, LCR 40.49]

Cash flows arising from foreign exchange derivative transactions that involve a full exchange of principal amounts on a simultaneous basis (or within the same day) may be reflected in the LCR as a net cash flow figure, even where those deals are not covered by a master netting agreement. [Basel Framework, LCR 40.49]

97. Where derivative payments are collateralised by HQLA, cash outflows should be calculated net of any corresponding cash or collateral inflows that would result, all other things being equal, from contractual obligations for cash or collateral to be provided to the institution, if the institution is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received. This is in line with the principle that institutions should not double count liquidity inflows and outflows. [Basel Framework, LCR 40.50]

98. **Increased liquidity needs related to downgrade triggers embedded in financing transactions, derivatives and other contracts:** (100% of the amount of collateral that would be posted for, or contractual cash outflows associated with, any downgrade up to and including a 3-notch downgrade). Often, contracts governing derivatives and other transactions have clauses that require the posting of additional collateral, drawdown of contingent facilities, or early repayment of existing liabilities upon the institution’s downgrade by a recognised credit rating organisation. The scenario therefore requires that for each contract in which “downgrade triggers” exist, the institution assumes that 100% of this additional collateral or cash outflow will have to be posted for any downgrade up to and including a 3-notch downgrade of the institution’s long-term credit rating. Triggers linked to an institution’s short-term rating should be assumed to be triggered at the corresponding long-term rating in accordance with published ratings criteria. The impact of the downgrade should consider impacts on all types of margin collateral and contractual triggers which change rehypothecation rights for non-segregated collateral. [Basel Framework, LCR 40.51]



**OSFI Notes**

Unless expressly specified otherwise, the provisions outlined in paragraphs 98 to 102 apply to all derivative instruments (i.e. whether OTC or on-exchange; whether cleared or not). [Basel Framework, LCR 40.53]]

**99. Increased liquidity needs related to the potential for valuation changes on posted collateral securing derivative and other transactions:** (20% of the value of non-Level 1 posted collateral). Observation of market practices indicates that most counterparties to derivatives transactions typically are required to secure the mark-to-market valuation of their positions and that this is predominantly done using cash or sovereign, central bank, multilateral development banks, or PSE debt securities with a 0% risk weight under the Standardized Approach for credit risk as per Chapter 4 of the Capital Adequacy Requirements Guideline. When these Level 1 liquid asset securities are posted as collateral, the framework will not require that an additional stock of HQLA be maintained for potential valuation changes. If however, counterparties are securing mark-to-market exposures with other forms of collateral, to cover the potential loss of market value on those securities, 20% of the value of all such posted collateral, net of collateral received on a counterparty basis (provided that the collateral received is not subject to restrictions on reuse or rehypothecation) will be added to the stock of required HQLA by the institution posting such collateral. This 20% will be calculated based on the notional amount required to be posted as collateral after any other haircuts have been applied that may be applicable to the collateral category. Any collateral that is in a segregated margin account can only be used to offset outflows that are associated with payments that are eligible to be offset from that same account. [Basel Framework, LCR 40.52]

**OSFI Notes**

The notional amount to be collateralised in paragraph 99 is based on contractual terms (e.g. collateral agreements) that regularly include the methodology of calculating the amount to be covered (“notional amount”). [Basel Framework, LCR 40.52]

Netting of collateral inflows and outflows across counterparties is not permitted under paragraph 99 as the impacts of valuation changes (even of identical collateral) may be asymmetric across different counterparties. [Basel Framework, LCR 40.52]

The net outflows under paragraph 99 may not be calculated taking into account any additional eligible non-Level 1 collateral that is unencumbered as of the date of the LCR or that would become unencumbered as a result of the stresses – i.e. the LCR provides no basis for separate sub-pools of (non-Level 1) HQLA dedicated to specific liquidity needs or for considering contingent inflows of collateral. [Basel Framework, LCR 40.52]

**100. Increased liquidity needs related to excess non-segregated collateral held by the institution that could contractually be called at any time by the counterparty:** 100% of the non-segregated collateral that could contractually be recalled by the counterparty because the collateral is in excess of the counterparty’s current collateral requirements. [Basel Framework, LCR 40.53]

**OSFI Notes**

Paragraph 100 refers to excess collateral that is not subject to segregation requirements and that can count towards HQLA (i.e. where a recall by the counterparty would reduce the stock of HQLA) or where a recall by the counterparty would need to use additional funding. [Basel Framework, LCR 40.53]

**101. Increased liquidity needs related to contractually required collateral on transactions for which the counterparty has not yet demanded the collateral be posted:** 100% of the collateral that is contractually due but where the counterparty has not yet demanded the posting of such collateral. [Basel Framework, LCR 40.54]

**102. Increased liquidity needs related to contracts that allow collateral substitution to non-HQLA assets:** 100% of the amount of HQLA collateral that can be substituted for non-HQLA assets without the institution's consent that have been received to secure transactions that have not been segregated. [Basel Framework, LCR 40.55]

**OSFI Notes**

The risks associated with collateral substitution on secured lending transactions with a residual maturity greater than 30 days should also be considered under paragraph 102. [Basel Framework, LCR 40.55]

The 100% outflow factor in paragraph 102 refers to the market value of the received collateral that is subject to potential substitution after applying the respective haircut in the LCR – i.e. this provision does not require an outflow for potential collateral substitution that is greater than the liquidity value of the received HQLA collateral in the LCR. [Basel Framework, LCR 40.55]

Under paragraph 102, if HQLA collateral (e.g. Level 1 assets) may be substituted for other HQLA collateral (e.g. Level 2A assets), an outflow amounting to the market value of the received collateral multiplied by the difference between the haircuts of the received collateral and the potential substitute collateral should be applied. If the substituted collateral can be of different liquidity value in the LCR, the institution should assume that the potential substitute collateral with the lowest liquidity value will be posted. [Basel Framework, LCR 40.55]

Paragraph 102 does not consider outflows of HQLA that are excluded from the institution's stock of HQLA due to failure to comply with the operational requirements for HQLA. [Basel Framework, LCR 40.55]

**103. Increased liquidity needs related to market valuation changes on derivative or other transactions:** As market practice requires collateralisation of mark-to-market exposures on derivative and other transactions, institutions face potentially substantial liquidity risk exposures to these valuation changes. Inflows and outflows of transactions executed under the same master netting agreement can be treated on a net basis. Any outflow generated by increased needs related to market valuation changes should be included in the LCR calculated by identifying the largest

absolute net 30-day collateral flow realised during the preceding 24 months. The absolute net collateral flow is based on both realised outflows and inflows. [Basel Framework, LCR 40.56]

#### OSFI Notes

The largest absolute net 30-day collateral flow is the largest aggregated cumulative net collateral outflow or inflow at the end of all 30-day periods during the preceding 24 months. For this purpose, institutions have to consider all 30-day periods during the preceding 24 months. Netting should be considered on a portfolio level basis. Institution management should understand how collateral moves on a counterparty basis and is encouraged to review the potential outflow at that level. However, the primary mechanism for the “look-back approach” outlined in paragraph 103 is collateral flows at the portfolio level. [Basel Framework, LCR 40.56]

**104. Loss of funding on asset-backed securities,<sup>49</sup> covered bonds and other structured financing instruments:** The scenario assumes the outflow of 100% of the funding transaction maturing within the 30-day period, when these instruments are issued by the institution itself (as this assumes that the re-financing market will not exist). [Basel Framework, LCR 40.57]

#### OSFI Notes

Level 1 and Level 2 securities in a collateral pool (e.g. for covered bonds or other collateralised own issuances) that become unencumbered in the next 30 days due to the maturity of the instrument (covered bond or other collateralized own issuance) can be offset against the redemption payment for the maturing secured debt instrument. Such offsetting inflow amounts should consider the respective haircuts for Level 2 assets applied to the market value of the asset. Any net inflow should be considered as other contractual cash inflow under paragraph 140. [Basel Framework, LCR 40.57]

**105. Loss of funding on asset-backed commercial paper, conduits, securities investment vehicles and other such financing facilities:** (100% of maturing amount and 100% of returnable assets). Institutions having structured financing facilities that include the issuance of short-term debt instruments, such as asset backed commercial paper, should fully consider the potential liquidity risk arising from these structures. These risks include, but are not limited to, (i) the inability to refinance maturing debt, and (ii) the existence of derivatives or derivative-like components contractually written into the documentation associated with the structure that would allow the “return” of assets in a financing arrangement, or that require the original asset transferor to provide liquidity, effectively ending the financing arrangement (“liquidity puts”) within the 30-day period. Where the structured financing activities of an institution are

<sup>49</sup> To the extent that sponsored conduits/SPVs are required to be consolidated under liquidity requirements, their assets and liabilities will be taken into account. Supervisors need to be aware of other possible sources of liquidity risk beyond that arising from debt maturing within 30 days.

conducted through a special purpose entity<sup>50</sup> (such as a special purpose vehicle, conduit or structured investment vehicle - SIV), the institution should, in determining the HQLA requirements, look through to the maturity of the debt instruments issued by the entity and any embedded options in financing arrangements that may potentially trigger the “return” of assets or the need for liquidity, irrespective of whether or not the SPV is consolidated. [Basel Framework, LCR 40.58]

Potential Risk Element	HQLA Required
Debt maturing within the calculation period	100% of maturing amount
Embedded options in financing arrangements that allow for the return of assets or potential liquidity support	100% of the amount of assets that could potentially be returned, or the liquidity required

106. Drawdowns on committed credit and liquidity facilities: For the purpose of the standard, credit and liquidity facilities are defined as explicit contractual agreements or obligations to extend funds at a future date to retail or wholesale counterparties. For the purpose of the standard, these facilities only include contractually irrevocable (“committed”) or conditionally revocable agreements to extend funds in the future. Unconditionally revocable facilities that are unconditionally cancellable by the institution (in particular, those without a precondition of a material change in the credit condition of the borrower) are excluded from this section and included in “Other Contingent Funding Liabilities.” These off-balance sheet facilities or funding commitments can have long or short-term maturities, with short-term facilities frequently renewing or automatically rolling over. In a stressed environment, it will likely be difficult for customers drawing on facilities of any maturity, even short-term maturities, to be able to quickly pay back the borrowings. Therefore, for purposes of this standard, all facilities that are assumed to be drawn (as outlined in the paragraphs below) will remain outstanding at the amounts assigned throughout the duration of the test, regardless of maturity. [Basel Framework, LCR 40.59]

107. For the purposes of this standard, the currently undrawn portion of these facilities is calculated net of any HQLA eligible for the stock of HQLA, if the HQLA have already been posted as collateral by the counterparty to secure the facilities or that are contractually obliged to be posted when the counterparty will draw down the facility (e.g. a liquidity facility structured as a repo facility), if the institution is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn, and there is no undue correlation between the probability of drawing the facility and the market value of the collateral. The collateral can be netted against the outstanding amount of the facility to the extent that this collateral is not already counted in the stock of HQLA, in line with the principle in paragraph 53 that items cannot be double-counted in the standard. [Basel Framework, LCR 40.60]

<sup>50</sup> A special purpose entity (SPE) is defined in the Basel Consolidated Framework [Basel Framework, CRE 40.21] as a corporation, trust, or other entity organised for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPE, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures. SPEs are commonly used as financing vehicles in which exposures are sold to a trust or similar entity in exchange for cash or other assets funded by debt issued by the trust.

108. A liquidity facility is defined as any committed, undrawn back-up facility that would be utilised to refinance the debt obligations of a customer in situations where such a customer is unable to rollover that debt in financial markets (e.g. pursuant to a commercial paper programme, secured financing transactions, obligations to redeem units, etc.). For the purpose of this standard, the amount of the commitment to be treated as a liquidity facility is the amount of the currently outstanding debt issued by the customer (or proportionate share, if a syndicated facility) maturing within a 30-day period that is backstopped by the facility. The portion of a liquidity facility that is backing debt that does not mature within the 30-day window is excluded from the scope of the definition of a facility. Any additional capacity of the facility (i.e. the remaining commitment) would be treated as a committed credit facility with its associated drawdown rate as specified in paragraph 111. General working capital facilities for corporate entities (e.g. revolving credit facilities in place for general corporate or working capital purposes) will not be classified as liquidity facilities, but as credit facilities. [Basel Framework, LCR 40.61]

109. Notwithstanding the above, any facilities provided to hedge funds, money market funds and special purpose funding vehicles, for example SPEs (as defined in paragraph 105) or conduits, or other vehicles used to finance the institution's own assets, should be captured in their entirety as a liquidity facility to other legal entities. [Basel Framework, LCR 40.62]

110. For that portion of financing programs that are captured in paragraphs 104 and 105 (i.e. are maturing or have liquidity puts that may be exercised in the 30-day horizon), institutions that are providers of associated liquidity facilities do not need to double count the maturing financing instrument and the liquidity facility for consolidated programs. [Basel Framework, LCR 40.63]

111. Any contractual loan drawdowns from committed facilities<sup>51</sup> and estimated drawdowns from revocable facilities within the 30-day period should be fully reflected as outflows.

- a) *Committed credit and liquidity facilities to retail and small business customers:* Institutions should assume a 5% drawdown of the undrawn portion of these facilities.
- b) *Committed credit facilities to non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks:* Institutions should assume a 10% drawdown of the undrawn portion of these credit facilities.
- c) *Committed liquidity facilities to non-financial corporates, sovereigns and central banks, PSEs, and multilateral development banks:* Institutions should assume a 30% drawdown of the undrawn portion of these liquidity facilities.
- d) *Committed credit and liquidity facilities extended to deposit-taking institutions subject to prudential supervision:* Institutions should assume a 40% drawdown of the undrawn portion of these facilities.

<sup>51</sup> Committed facilities refer to those which are irrevocable.

- e) *Committed credit facilities to other financial institutions including securities firms, insurance companies, fiduciaries,<sup>52</sup> and beneficiaries.<sup>53</sup>* Institutions should assume a 40% drawdown of the undrawn portion of these credit facilities.
- f) *Committed liquidity facilities to other financial institutions including securities firms, insurance companies, fiduciaries, and beneficiaries:* Institutions should assume a 100% drawdown of the undrawn portion of these liquidity facilities.
- g) *Committed credit and liquidity facilities to other legal entities (including SPEs (as defined on paragraph 105), conduits and special purpose vehicles,<sup>54</sup> and other entities not included in the prior categories):* Institutions should assume a 100% drawdown of the undrawn portion of these facilities.

[Basel Framework, LCR 40.64]

112. **Contractual obligations to extend funds within a 30-day period:** Any contractual lending obligations to financial institutions not captured elsewhere in this standard should be captured here at a 100% outflow rate. [Basel Framework, LCR 40.65]

113. If the total of all contractual obligations to extend funds to retail and non-financial corporate clients within the next 30 calendar days (not captured in the prior categories) exceeds 50% of the total contractual inflows due in the next 30 calendar days from these clients, the difference should be reported as a 100% outflow. [Basel Framework, LCR 40.66]

114. Other contingent funding obligations: (run-off rates at national discretion). [Basel Framework, LCR 40.67]

115. These contingent funding obligations may be either contractual or non-contractual and are not lending commitments. Non-contractual contingent funding obligations include associations with, or sponsorship of, products sold or services provided that may require the support or extension of funds in the future under stressed conditions. Non-contractual obligations may be embedded in financial products and instruments sold, sponsored, or originated by the institution that can give rise to unplanned balance sheet growth arising from support given for reputational risk considerations. These include products and instruments for which the customer or holder has specific expectations regarding the liquidity and marketability of the product or instrument and for which failure to satisfy customer expectations in a commercially reasonable manner would likely cause material reputational damage to the institution or otherwise impair ongoing viability. [Basel Framework, LCR 40.68]

116. Some of these contingent funding obligations are explicitly contingent upon a credit or other event that is not always related to the liquidity events simulated in the stress scenario, but may nevertheless have the potential to cause significant liquidity drains in times of stress. For this standard, OSFI and the institution should consider which of these “other contingent funding

<sup>52</sup> Fiduciary is defined in this context as a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles.

<sup>53</sup> Beneficiary is defined in this context as a legal entity that receives, or may become eligible to receive, benefits under a will, insurance policy, retirement plan, annuity, trust, or other contract.

<sup>54</sup> The potential liquidity risks associated with the institution's own structured financing facilities should be treated according to paragraphs 104 and 105 (100% of maturing amount and 100% of returnable assets are included as outflows).



obligations” may materialise under the assumed stress events. The potential liquidity exposures to these contingent funding obligations are to be treated as a nationally determined behavioural assumption where it is up to OSFI to determine whether and to what extent these contingent outflows are to be included in the LCR. All identified contractual and non-contractual contingent liabilities and their assumptions should be reported, along with their related triggers. OSFI will and institutions should, at a minimum, use historical behaviour in determining appropriate outflows. [Basel Framework, LCR 40.69]

117. Non-contractual contingent funding obligations related to potential liquidity draws from joint ventures or minority investments in entities, which are not consolidated per paragraph 142 should be captured where there is the expectation that the institution will be the main liquidity provider when the entity is in need of liquidity. The amount included should be calculated in accordance with the methodology agreed by the institution’s supervisor. [Basel Framework, LCR 40.70]

#### **OSFI Notes**

Where required, an outflow rate of 100% should be applied to amounts resulting from the calculation prescribed in paragraph 117. As mentioned in paragraph 117, the amount to be multiplied by the 100% rate will be determined after OSFI’s assessment of the institution’s methodology related to such non-contractual contingent funding obligations, considering factors such as the nature of the exposure and the likelihood of draw.

118. In the case of contingent funding obligations stemming from trade finance instruments, national authorities can apply a relatively low run-off rate (e.g. 5% or less). Trade finance instruments consist of trade-related obligations directly underpinned by the movement of goods or the provision of services, such as:

- documentary trade letters of credit, documentary and clean collection, import bills, and export bills; and
- guarantees directly related to trade finance obligations, such as shipping guarantees.

[Basel Framework, LCR 40.71]

#### **OSFI Notes**

An outflow rate of 3% should be applied to trade finance instruments that fall under the scope of paragraph 118.

119. Lending commitments, such as direct import or export financing for non-financial corporate firms, are excluded from this treatment and institutions will apply the draw-down rates specified in paragraph 111. [Basel Framework, LCR 40.72]

120. National authorities should determine the run-off rates for the other contingent funding obligations listed below in accordance with paragraph 114. Other contingent funding obligations include products and instruments such as:



- unconditionally revocable "uncommitted" credit and liquidity facilities;

#### **OSFI Notes**

An outflow rate of 2% should be applied to unconditionally revocable “uncommitted” credit and liquidity facilities provided to retail and small business customers (as defined in paragraph 54 and paragraphs 70 and 71, respectively). Unconditionally revocable “uncommitted” credit and liquidity facilities provided to all other customers should be applied an outflow rate of 5%.

- guarantees and letters of credit unrelated to trade finance obligations (as described in paragraph 118);

#### **OSFI Notes**

An outflow rate of 5% should be applied to guarantees and letters of credit that do not fall under the scope of paragraph 118.

- non-contractual obligations such as:
  - potential requests for debt repurchases of the institution's own debt or that of related conduits, securities investment vehicles and other such financing facilities;

#### **OSFI Notes**

No outflow should be applied against these non-contractual obligations (i.e. 0% outflow rate).

- structured products with maturities beyond 30 days, where customers anticipate ready marketability during a period of idiosyncratic stress, such as adjustable rate notes and variable rate demand notes (VRDNs);
- autocallable notes, or those funding instruments with market-based maturity triggers, unless an outflow has already been applied due to maturity or customers anticipating ready marketability; and

#### **OSFI Notes**

A 5% outflow rate should be applied against these structured products and autocallable notes.

- managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds etc.

#### OSFI Notes

No outflow rate should be applied against these managed funds.

- For issuers with an affiliated dealer or market maker, there may be a need to include an amount of the outstanding debt securities (unsecured and secured, term as well as short-term) having maturities greater than 30 calendar days, to cover the potential repurchase of such outstanding securities.

#### OSFI Notes

No outflow should be applied against these non-contractual obligations (i.e. 0% outflow rate).

- **Non-contractual obligations where customer short positions are covered by other customers' collateral:** A minimum 50% run-off factor of the contingent obligations should be applied where institutions have internally matched client assets against other clients' short positions where the collateral does not qualify as Level 1 or Level 2, and the institution may be obligated to find additional sources of funding for these positions in the event of client withdrawals.

[Basel Framework, LCR 40.73]

#### OSFI Notes

A 50% outflow rate should be applied against non-contractual obligations where customer short positions are covered by other customers' collateral.

121. **Other contractual cash outflows:** (100%). Any other contractual cash outflows within the next 30 calendar days should be captured in this standard, such as outflows to cover unsecured collateral borrowings, uncovered short positions, dividends or contractual interest payments, with explanation given as to what comprises this bucket. Outflows related to operating costs, however, are not included in this standard. [Basel Framework, LCR 40.74]

## OSFI Notes

The following transactions should be ignored for purposes of the LCR calculation:

- Forward repos, forward reverse repos and forward collateral swaps that start and mature within the LCR's 30 day horizon,
- Forward repos, forward reverse repos and forward collateral swaps that start prior to and mature after the LCR's 30 day horizon,
- All forward sales and forward purchases of HQLA, and
- Unsettled sales and purchases of HQLA.

For forward reverse repos and collateral swaps that start within the 30 day horizon and mature beyond the LCR's 30 day horizon:

- Cash outflows from forward reverse repos (with a binding obligation to accept) count toward "other contractual cash outflows" according to paragraph 121 and should be netted against the market value of the collateral received after deducting the haircut applied to the respective assets in the LCR (15% to Level 2A, 25% to RMBS Level 2B assets, and 50% to other Level 2B assets).
- In case of forward collateral swaps, the net amount between the market values of the assets extended and received after deducting the haircuts applied to the respective assets in the LCR counts toward "other contractual cash outflows" or "other contractual cash inflows," depending on which amount is higher.

Cash flows arising from purchases of non-HQLA that are executed but not yet settled at the reporting date should be treated as "other cash outflows."

Note that any outflows or inflows of HQLA in the next 30 days in the context of forward and unsettled transactions are only considered if the assets do or will count toward the bank's stock of HQLA. Outflows and inflows of HQLA-type assets that are or will be excluded from the bank's stock of HQLA due to operational requirements are treated like outflows or inflows of non-HQLA.

[Basel Framework, LCR 40.74]

### 2.2.B.2. Cash inflows

122. When considering its available cash inflows, the institution should only include contractual inflows (including interest payments) from outstanding exposures that are fully performing and for which the institution has no reason to expect a default within the 30-day time horizon. Contingent inflows are not included in total net cash inflows. [Basel Framework, LCR 40.75]

123. Institutions and supervisors need to monitor the concentration of expected inflows across wholesale counterparties in the context of institutions' liquidity management in order to ensure that their liquidity position is not overly dependent on the arrival of expected inflows from one or a limited number of wholesale counterparties. [Basel Framework, LCR 40.76]

124. **Cap on total inflows:** In order to prevent institutions from relying solely on anticipated inflows to meet their liquidity requirement, and also to ensure a minimum level of HQLA holdings, the amount of inflows that can offset outflows is capped at 75% of total expected cash outflows as calculated in the standard. This requires that an institution must maintain a minimum amount of stock of HQLA equal to 25% of the total net cash outflows. [Basel Framework, LCR 40.77]

*(i) Secured lending, including reverse repos and securities borrowing*

125. An institution should assume that maturing reverse repurchase or securities borrowing agreements secured by Level 1 assets will be rolled over and will not give rise to any cash inflows (0%). Maturing reverse repurchase or securities lending agreements secured by Level 2 HQLA will lead to cash inflows equivalent to the relevant haircut for the specific assets. A bank is assumed **not** to roll-over maturing reverse repurchase or securities borrowing agreements secured by non-HQLA assets, and can assume to receive back 100% of the cash related to those agreements. Collateralised loans extended to customers for the purpose of taking leveraged trading positions ("margin loans") should also be considered as a form of secured lending; however, for this scenario institutions may recognise no more than 50% of contractual inflows from maturing margin loans made against non-HQLA collateral. This treatment is in line with the assumptions outlined for secured funding in the outflows section. [Basel Framework, LCR 40.78]

**OSFI Notes**

Paragraphs 125 to 128 refer only to the types of transactions explicitly mentioned therein and, unless the counterparty is a central bank, do not cover, for example, lending that is secured by non-tradable assets, such as property, plant and equipment. [Basel Framework, LCR 40.45]

Paragraph 125 and the table in paragraph 126 are specific to secured loans with a contractual maturity up to and including 30 days. Institutions should not assume any inflow for margin loans where funds are extended under "term" provisions – whereby the institution agrees to make funding available for a given period, but the client is not obliged to draw down on that funding, and where the client has drawn down on the funding – that give the client possibility to repay after more than 30 days. [Basel Framework, LCR 40.78]

126. As an exception to paragraph 125, if the collateral obtained through reverse repo, securities borrowing, or collateral swaps, which matures within the 30-day horizon, is re-used (i.e. rehypothecated) and is used to cover short positions that could be extended beyond 30 days, an institution should assume that such reverse repo or securities borrowing arrangements will be rolled over and will not give rise to any cash inflows (0%), reflecting its need to continue to cover the short position or to re-purchase the relevant securities. Short positions include both instances where in its 'matched book' the institution sold short a security outright as part of a trading or hedging strategy and instances where the institution is short a security in the 'matched'

repo book (i.e. it has borrowed a security for a given period and lent the security out for a longer period). [Basel Framework, LCR 40.79]

<b>Maturing secured lending transactions backed by the following asset category</b>	<b>Inflow rate (if collateral is not used to cover short positions)</b>	<b>Inflow rate (if collateral is used to cover short positions)</b>
Level 1 assets	0%	0%
Level 2A assets	15%	0%
Level 2B – eligible RMBS	25%	0%
Other Level 2B assets	50%	0%
Margin lending backed by all other collateral	50%	0%
Other collateral	100%	0%

### OSFI Notes

Cash inflows associated with collateral swaps occur where the collateral lent is of higher quality within the LCR framework than the collateral borrowed and the collateral borrowed has not been rehypothecated to cover short positions. Such cash inflow amounts are to be calculated as the difference between the inflow rate prescribed for non-rehypothecated collateral in the table in paragraph 126 for the collateral borrowed and outflow rate prescribed in the table in paragraph 95 for the collateral lent. For example, where Level 2B non-RMBS assets are borrowed but not rehypothecated to cover short positions and Level 2A assets are lent, a 35% inflow rate should be allocated. Similarly, where non-HQLA are borrowed but not rehypothecated to cover short positions and Level 2A assets are lent, an 85% inflow rate should be allocated. Note that inflows should not be allocated when the collateral lent and collateral borrowed are of the same LCR type or when the collateral borrowed has been used to cover short positions.

Forward reverse repos and forward collateral swaps that start previous to and mature within the LCR's 30-day horizon should be treated like reverse repos and collateral swaps according to paragraphs 125 to 128. [Basel Framework, LCR 40.74]

The inflow rates in the third column of the table in paragraph 126 apply to all reverse repos, securities borrowings or collateral swaps where the collateral obtained is used to cover short positions. The reference in the first sentence of paragraph 126 to “short positions that could be extended beyond 30 days” does not restrict the applicability of the 0% inflow rate to the portion of secured lending transactions where the collateral obtained covers short positions with a contractual (or otherwise expected) residual maturity of up to 30 days. Rather, it is intended to point out that the institution must be aware that such short positions may be extended, which would require the institution to roll the secured lending transaction or to purchase the securities in order to keep the short positions covered. In either case, the secured lending transaction would not lead to a cash inflow for the institution's liquidity situation in a way that it can be considered in the LCR. [Basel Framework, LCR 40.79]

127. In the case of an institution's short positions, if the short position is being covered by an unsecured security borrowing, the institution should assume the unsecured security borrowing of collateral from financial market participants would run-off in full, leading to a 100% outflow of either cash or HQLA to secure the borrowing, or cash to close out the short position by buying back the security. This should be recorded as a 100% other contractual outflow according to paragraph 121. If, however, the institution's short position is being covered by a collateralised securities financing transaction, the institution should assume the short position will be maintained throughout the 30-day period and receive a 0% outflow. [Basel Framework, LCR 40.80]

128. Despite the roll-over assumptions in paragraphs 125 and 126, an institution should manage its collateral such that it is able to fulfill obligations to return collateral whenever the counterparty decides not to roll-over any reverse repo or securities lending transaction.<sup>55</sup> This is especially the case for non-HQLA collateral, since such outflows are not captured in the LCR framework. OSFI will monitor the institution's collateral management. [Basel Framework, LCR 40.81]

## **(ii) Committed facilities**

129. No credit facilities, liquidity facilities or other contingent funding facilities that the institution holds at other institutions for its own purposes are assumed to be able to be drawn. Such facilities receive a 0% inflow rate, meaning that this scenario does not consider inflows from committed credit or liquidity facilities. This is to reduce the contagion risk of liquidity shortages at one institution causing shortages at other institutions and to reflect the risk that other institutions may not be in a position to honour credit facilities, or may decide to incur the legal and reputational risk involved in not honouring the commitment, in order to conserve their own liquidity or reduce their exposure to that institution. [Basel Framework, LCR 40.82]

## **(iii) Other inflows by counterparty**

130. For all other types of transactions, either secured or unsecured, the inflow rate will be determined by counterparty.<sup>56</sup> In order to reflect the need for an institution to conduct ongoing loan origination/roll-over with different types of counterparties, even during a time of stress, a set of limits on contractual inflows by counterparty type is applied. [Basel Framework, LCR 40.83]

<sup>55</sup> This is in line with Principle 9 of the BCBS *Sound Principles* and Principle 8 of OSFI's *Guideline B-6: Liquidity Principles*.

<sup>56</sup> Unsecured loans in precious metals extended by an institution or deposits in precious metals placed by an institution may be treated according to paragraphs 133-137 if the loan or deposit uniquely settles in cash. In the case of physical delivery or any optionality to do so, no inflow should be considered unless:

- contractual arrangements give the institution the choice between cash settlement or physical delivery and
  - physical delivery is subject to a significant penalty, or
  - both parties expect cash settlement; and
- there are no factors such as market practices or reputational factors that may limit the institution's ability to settle the loan or deposit in cash (irrespective of whether physical delivery is subject to a significant penalty).

This provision is strictly limited in scope to precious metal loans and does not extend to derivatives or other products that have similar economic features as precious metal loans.

131. When considering loan payments, the institution should only include inflows from fully performing loans. Further, inflows should only be taken at the latest possible date, based on the contractual rights available to counterparties. For revolving credit facilities, this assumes that the existing loan is rolled over and that any remaining balances are treated in the same way as a committed facility according to paragraph 111. [Basel Framework, LCR 40.84]

132. Inflows from loans that have no specific maturity (i.e. have non-defined or open maturity) should not be included; therefore, no assumptions should be applied as to when maturity of such loans would occur. An exception to this would be minimum payments of principal, fee or interest associated with an open maturity loan, provided that such payments are contractually due within 30 days. These minimum payment amounts should be captured as inflows at the rates prescribed in paragraphs 133 and 134. [Basel Framework, LCR 40.85]

*(a) Retail and small business customer inflows*

133. This scenario assumes that institutions will receive all payments (including interest payments and installments) from retail and small business customers that are fully performing and contractually due within a 30-day horizon. At the same time, however, institutions are assumed to continue to extend loans to retail and small business customers, at a rate of 50% of contractual inflows. This results in a net inflow number of 50% of the contractual amount. [Basel Framework, LCR 40.86]

*(b) Other wholesale inflows*

134. This scenario assumes that institutions will receive all payments (including interest payments and installments) from wholesale customers that are fully performing and contractually due within the 30-day horizon. In addition, institutions are assumed to continue to extend loans to wholesale clients, at a rate of 0% of inflows for financial institutions and central banks, and 50% for all others, including non-financial corporates, sovereigns, multilateral development banks, and PSEs. This will result in an inflow percentage of:

- 100% for financial institution and central bank counterparties; and
- 50% for non-financial wholesale counterparties.

[Basel Framework, LCR 40.87]

135. Inflows from securities maturing within 30 days not included in the stock of HQLA should be treated in the same category as inflows from financial institutions (i.e. 100% inflow). Institutions may also recognise in this category inflows from the release of balances held in segregated accounts in accordance with regulatory requirements for the protection of customer trading assets, provided that these segregated balances are maintained in HQLA. This inflow should be calculated in line with the treatment of other related outflows and inflows covered in this standard. Level 1 and Level 2 securities maturing within 30 days should be included in the stock of liquid assets, provided that they meet all operational and definitional requirements, as laid out in paragraphs 16 to 47. [Basel Framework, LCR 40.88]



**OSFI Notes**

Assets that fulfil the requirements of HQLA eligibility shall be considered as such and not as inflows. Institutions may not count as inflows the difference between the actual redemption amount of Level 2 securities and the amount considered as HQLA (i.e. after application of the LCR haircut).

Maturing assets including Level 1 and Level 2 assets that are not HQLA-eligible due to the operational requirements may be considered as inflows under paragraph 135.

Inflows from maturing securities in a collateral pool for covered bonds can be considered as inflows even if the maturing securities are (or have been) excluded from the stock of HQLA due to being “encumbered” according to paragraph 19. However, if the maturing securities need to be substituted in the collateral pool within the 30-day horizon, an “other cash outflow” per paragraph 121 should be considered amounting to the liquidity value of these securities in the LCR.

[Basel Framework, LCR 40.88]

136. *Operational deposits:* Deposits held at other financial institutions for operational purposes, as outlined in paragraphs 73 to 83, such as for clearing, custody, and cash management purposes, are assumed to stay at those institutions, and no inflows can be counted for these funds – i.e. they will receive a 0% inflow rate, as noted in paragraph 78. [Basel Framework, LCR 40.89]

## OSFI Notes

For purposes of paragraph 136, where an indirect clearer (that is not a subsidiary of a direct clearer) holds operational deposits at an OSFI- or provincially-regulated direct clearer in respect of clearing-related activities, the indirect clearer may recognize a 25% inflow rate for such deposits. In addition, these deposit inflows will not be subject to the 75% inflow cap calculation outlined in paragraph 124.

Deposits held for the purpose of correspondent banking are held for operational purposes and, as such, are subject to a 0% inflow rate according to paragraph 136. This does not affect the 100% outflow rate of these deposits at the part of the institution that has received the deposit according to paragraph 79. This treatment applies to all deposits that are used in the context of correspondent banking arrangements irrespective of the account name (e.g. nostro account). Within this scope, correspondent banking deposits refer to deposits a customer institution holds with another institution for the purpose that the other correspondent institution holds balances and settles payments in a currency other than the customer institution's domestic currency and on the customer institution's behalf. However, a 100% inflow rate would be applicable to the amount for which the institution is able to determine that the funds are "excess balances" in the sense of paragraph 76, i.e. they are not tied to operational purposes and may be withdrawn within 30 days. [Basel Framework, LCR 40.89]

The same methodology applied in paragraphs 73 to 84 for operational deposit outflows should also be applied to determine if deposits held at another financial institution are operational deposits and receive the inflow outlined in paragraph 136. As a general principle if the institution receiving the deposit classifies the deposit as operational, the institution placing it should also classify it as an operational deposit. [Basel Framework, LCR 40.89]

137. The same treatment applies for deposits held at the centralised institution in a cooperative network, that are assumed to stay at the centralised institution as outlined in paragraphs 85 and 86; in other words, the depositing institution should not count any inflow for these funds – i.e. they will receive a 0% inflow rate. [Basel Framework, LCR 40.90]

### (iv) *Other cash inflows*

138. *Derivatives cash inflows*: the sum of all net cash inflows should receive a 100% inflow factor. The amounts of derivatives cash inflows and outflows should be calculated in accordance with the methodology described in paragraph 96. [Basel Framework, LCR 40.91]

139. Where derivatives are collateralised by HQLA, cash inflows should be calculated net of any corresponding cash or contractual collateral outflows that would result, all other things being equal, from contractual obligations for cash or collateral to be posted by the institution, given these contractual obligations would reduce the stock of HQLA. This is in accordance with the principle that institutions should not double-count liquidity inflows or outflows. [Basel Framework, LCR 40.92]

140. *Other contractual cash inflows:* Other contractual cash inflows should be captured here, with explanation given to what comprises this bucket. Inflow percentages should be determined as appropriate for each type of inflow by supervisors in each jurisdiction. Cash inflows related to non-financial revenues are not taken into account in the calculation of the net cash outflows for the purposes of this standard. [Basel Framework, LCR 40.93]

### OSFI Notes

For forward repos and collateral swaps that start within the 30 day horizon and mature beyond the LCR's 30 day horizon:

- Cash inflows from forward repos are “other contractual cash inflows” according to paragraph 140 and should be netted against the market value of the collateral extended after deducting the haircut applied to the respective assets in the LCR.
- In case of forward collateral swaps, the net amount between the market values of the assets extended and received after deducting the haircuts applied to the respective assets in the LCR counts towards “other contractual cash outflows” or “other contractual cash inflows” depending on which amount is higher.

Cash flows arising from sales of non-HQLA that are executed but not yet settled at the reporting date should be treated as “other cash inflows.”

Note that any outflows or inflows of HQLA in the next 30 days in the context of forward and unsettled transactions are only considered if the assets do or will count toward the bank's stock of HQLA. Outflows and inflows of HQLA-type assets that are or will be excluded from the bank's stock of HQLA due to operational requirements are treated like outflows or inflows of non-HQLA.

[Basel Framework, LCR 40.93]

HQLA lent by an institution without any further offsetting transaction (i.e. no repo/reverse repo or collateral swap) can count towards “other contractual cash inflows” – at their market value after application of the relevant LCR haircut – if the assets will be returned or can be recalled during the next 30 days. [Basel Framework, LCR 40.93]

## 2.3. Application issues for the LCR

141. This section outlines a number of issues related to the application of the LCR. These issues include considerations related to the scope of application of the LCR (whether they apply at group or entity level and to foreign bank branches) and the aggregation of currencies within the LCR.

### A. *Scope of application*

142. In addition to the scope of application issues discussed in Chapter 1, OSFI will determine which investments in banking, securities and financial entities of a deposit-taking group that are not consolidated should be considered significant, taking into account the liquidity impact of

such investments on the group under the LCR standard. Normally, a non-controlling investment (e.g. a joint-venture or minority-owned entity) can be regarded as significant if the deposit-taking group will be the main liquidity provider of such investment in times of stress (for example, when the other shareholders are non-banks or where the institution is operationally involved in the day-to-day management and monitoring of the entity's liquidity risk). OSFI will agree with each relevant institution on a case-by-case basis on an appropriate methodology for how to quantify such potential liquidity draws, in particular, those arising from the need to support the investment in times of stress out of reputational concerns for the purpose of calculating the LCR standard. To the extent that such liquidity draws are not included elsewhere, they should be treated under "Other contingent funding obligations", as described in paragraph 117. [Basel Framework, LCR 10.2]

143. To ensure consistency in applying the consolidated LCR across jurisdictions, further information is provided below on two application issues.

*(a) Differences in home / host liquidity requirements*

144. While most of the parameters in the LCR are internationally "harmonised", national differences in liquidity treatment may occur in those items subject to national discretion (e.g. deposit run-off rates, contingent funding obligations, market valuation changes on derivative transactions, etc.) and where more stringent parameters are adopted by some supervisors. [Basel Framework, LCR 10.4]

145. When calculating the LCR on a consolidated basis, a cross-border deposit-taking group should apply the liquidity parameters adopted in the home jurisdiction to all legal entities being consolidated except for the treatment of retail / small business deposits that should follow the relevant parameters adopted in host jurisdictions in which the entities (branch or subsidiary) operate. This approach will enable the stressed liquidity needs of legal entities of the group (including branches of those entities) operating in host jurisdictions to be more suitably reflected, given that deposit run-off rates in host jurisdictions are more influenced by jurisdiction-specific factors such as the type and effectiveness of deposit insurance schemes in place and the behaviour of local depositors. [Basel Framework, LCR 10.5]

146. Home requirements for retail and small business deposits should apply to the relevant legal entities (including branches of those entities) operating in host jurisdictions if: (i) there are no host requirements for retail and small business deposits in the particular jurisdictions; (ii) those entities operate in host jurisdictions that have not implemented the LCR; or (iii) the home supervisor decides that home requirements should be used that are stricter than the host requirements. [Basel Framework, LCR 10.6]

*(b) Treatment of liquidity transfer restrictions*

147. As noted in paragraph 24, as a general principle, no excess liquidity should be recognised by a cross-border deposit-taking group in its consolidated LCR if there is reasonable doubt about the availability of such liquidity. Liquidity transfer restrictions (e.g. ring-fencing measures, non-convertibility of local currency, foreign exchange controls, etc.) in jurisdictions in which a deposit-taking group operates will affect the availability of liquidity by inhibiting the transfer of

HQLA and fund flows within the group. The consolidated LCR should reflect such restrictions in a manner consistent with paragraph 24. For example, the eligible HQLA that are held by a legal entity being consolidated to meet its local LCR requirements (where applicable) can be included in the consolidated LCR to the extent that such HQLA are used to cover the total net cash outflows of that entity, notwithstanding that the assets are subject to liquidity transfer restrictions. If the HQLA held in excess of the total net cash outflows are not transferable, such surplus liquidity should be excluded from the standard. [Basel Framework, LCR 10.7]

148. For practical reasons, the liquidity transfer restrictions to be accounted for in the consolidated ratio are confined to existing restrictions imposed under applicable laws, regulations and supervisory requirements.<sup>57</sup> A deposit-taking group should have processes in place to capture all liquidity transfer restrictions to the extent practicable, and to monitor the rules and regulations in the jurisdictions in which the group operates and assess their liquidity implications for the group as a whole. [Basel Framework, LCR 10.8]

## ***B. Currencies***

149. As outlined in paragraph 30, while the LCR is expected to be met on a consolidated basis and reported in a common currency, supervisors and institutions should also be aware of the liquidity needs in each significant currency. As indicated in the LCR, the currencies of the stock of HQLA should be similar in composition to the operational needs of the institution. Institutions and supervisors cannot assume that currencies will remain transferable and convertible in a stress period, even for currencies that in normal times are freely transferable and highly convertible. [Basel Framework, LCR 10.9]

<sup>57</sup> There are a number of factors that can impede cross-border liquidity flows of a banking group, many of which are beyond the control of the group and some of these restrictions may not be clearly incorporated into law or may become visible only in times of stress.