



**Ontario**

**Deposit Insurance  
Corporation of Ontario**

**Société ontarienne  
d'assurance-dépôts**

# **Completion Guide:**

## *Liquidity Coverage Ratio*

**May 2017**

Ce document est également disponible en français.

## Table of Contents

1. INTRODUCTION.....	3
2. ASSUMPTIONS.....	3
3. HQLA.....	3
4. CASH OUTFLOWS.....	5
5. CASH INFLOWS.....	8
APPENDIX 1: SUMMARY HAIRCUTS AND CASH FLOW RATES .....	11

## 1. INTRODUCTION

1. The LCR is a measure that aims to ensure that a credit union has an adequate stock of unencumbered high-quality liquid assets (HQLA) that can be converted into cash at little or no loss of value, 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. Also, given the uncertain timing of outflows and inflows, institutions are 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.

## 2. ASSUMPTIONS

2. These assumptions are based on a stressed liquidity scenario that encompasses a combination of idiosyncratic and systemic stresses which measure the impacts of assumptions over a 30 day liquidity horizon. Stress assumptions include:

- cash flows from eligible unencumbered liquid assets;
- partial run-off of retail deposits;
- partial loss of unsecured wholesale funding and secured financing capacity; and
- unscheduled draws on committed but unused credit facilities.

3. This stress test should be viewed as a minimum requirement. Credit unions 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 30 days.

4. The LCR has two components:

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

Net cash outflows is defined as the total expected cash outflows minus total expected cash inflows in the specified stress scenario for the subsequent 30 calendar days.

5. The value of the ratio should be no lower than 100% (i.e. the stock of HQLA should at least equal total net cash outflows) on an ongoing basis as the stock of unencumbered HQLA is intended to serve as a defense against the potential onset of liquidity stress.

## 3. HQLA

6. All assets in the stock of HQLA should be unencumbered. “Unencumbered” means free of legal, regulatory, contractual or other restrictions on the ability of the credit union 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.

7. There are two categories of assets that can be included in the stock of HQLA. Assets to be included in each category are those that the credit union is holding on the first day of the stress period, irrespective of their residual maturity.

### 3.1 Level 1 Assets

8. "Level 1" assets can be included without limit and include:

- Cash on hand currently held by the credit union;
- Liquidity Reserve Deposit with Central 1 or a League;
- Securities issued under the NHA MBS (including holdings of NHA MBS, and CMBs and unencumbered qualifying replacement assets where (a) there is sufficient guarantee allocation room to allow for the re-designation of replacement NHA MBS as NHA MBS for sale to the market OR the guarantee fee has been paid at issuance, AND (b) the credit union has the ability to monetise the NHA MBS in a timely manner; and
- Qualifying marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks assigned a 0% risk-weight under the Basel II including any debt instrument that can be readily converted into cash through repo or cash markets.

### 3.2 Level 2 Assets

9. Level 2 assets are limited to a 40% cap of total HQLA after applicable haircuts.

### 3.3 Level 2A Assets

10. A 15% haircut is applied to the current market value of each Level 2A asset which includes:

- Qualifying marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks assigned a 20% risk-weight under the Basel II; and
- Qualifying corporate debt securities (including commercial paper) and covered bonds that have a long-term credit rating from a recognised external credit assessment institution (ECAI) of at least AA-.

### 3.4 Level 2B Assets

11. Level 2B assets are also limited to a 15% cap of total HQLA after applicable haircuts.

12. Level 2 B assets include:

- 25% haircut - Residential mortgage backed securities (RMBS);
- 50% haircut - Qualifying corporate debt securities (including commercial paper) and covered bonds that have a long-term credit rating from a recognised external credit assessment institution (ECAI) between A+ and BBB-;and
- 50% haircut - Qualifying corporate (non-financial) common equity shares.

## 4. CASH OUTFLOWS

13. 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. Where amounts cannot be readily determined for any specific category, credit unions must report amounts using the more conservative (higher run offs) category under each funding source. Credit unions may report monthly amounts by applying percentage factors based on the most up to date financial year end balances for each category as applicable.

### 4.1 Retail Deposits (Personal and Small Business)

14. “Small business customers” are defined in line with the definition of loans extended to small businesses in paragraph 231 of the Basel II framework that are managed as retail exposures and are generally considered as having similar liquidity risk characteristics to retail accounts provided the total aggregated funding raised from one small business customer is less than CAD \$1.5 million (on a consolidated basis where applicable).

#### *Stable Deposits*

15. Term Deposits with a residual maturity greater than 30 days – 0% run off

Total retail, insured and uninsured, term deposits with a residual maturity or withdrawal notice period greater than 30 days where the depositor has no legal right to withdraw deposits within 30 days, or where early withdrawal results in a significant penalty that is materially greater than the loss of interest. If the Credit Union allows depositors to withdraw such deposits without applying the corresponding penalty, or despite a clause stating the depositor has no legal right to withdraw, the entire category of these funds would have to be treated as demand deposits.

16. Insured deposits with established relationship or in transactional accounts – 3% run off

Examples of established relationships include members that also have a loan, line of credit or investments with the credit union. Examples of transactional accounts include accounts where there are automatic regular deposits of salary, pensions or other sources of income. Where a credit union is not readily able to identify which retail deposits would qualify as stable deposits under paragraph 16, it should report the full amount under paragraph 17. Where a credit union is not readily able to identify which retail deposits would qualify as insured deposits under paragraph 17 it should report the full amount under paragraph 18 as appropriate.

17. Other insured deposits – 5% run off

This includes other insured deposits that are not included in any other category.

#### *Less Stable Deposits*

18. Less stable deposits – 10% run off

These deposits include; Uninsured demand and term deposits, brokered deposits, large deposits, foreign currency deposits and other deposits (e.g. trust accounts, internet accounts etc.) not already identified. Brokered deposits are deposits sourced from unaffiliated third parties or acquired through deposit agents.

## 4.2 Unsecured Wholesale Funding

19. 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.

20. 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.

### **Operational Deposits**

21. Certain activities lead to financial and non-financial customers needing to place, or leave, deposits with a credit union in order to facilitate their access and ability to use payment and settlement systems and otherwise make payments.

22. Qualifying activities in this context refer to clearing, custody or cash management activities where (a) the customer is reliant on the credit union to perform these services as an independent third party intermediary in order to fulfill its normal banking activities over the next 30 days, and (b) these services must be provided under a legally binding agreement to institutional customers.

23. Qualifying operational deposits generated by such an activity are ones where (a) the deposits are by-products of the underlying services provided by the credit union and not sought out in the wholesale market in the sole interest of offering interest income, and (b) 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.

### **Operational Deposits (Insured)**

24. Insured operational deposits – 5% run off

### **Operational Deposits (Uninsured)**

25. Uninsured operational deposits - 25% run off

### **Non-Operational Deposits**

26. This category comprises all deposits and other extensions of unsecured funding from **non-financial** corporate customers and sovereign, central bank, multilateral development bank, and PSE customers that are not specifically held for operational purposes.

### **Non-Financial Institution - Non-Operational (Insured)**

27. Insured non-operational deposits – 20% run off

### **Non-Financial Institution – Non-Operational (Uninsured)**

28. Uninsured non-operational deposits – 40% run off

### **Other non-operational deposits – 100% run off**

29. All other non-operational deposits and other funding from banks, other financial institutions and other legal entities (includes borrowings from Central 1, a league or other financial institution that are not secured by specific assets).

### 4.3 Secured Wholesale Funding

30. This includes liabilities or general obligations that are collateralised by legal rights to specifically designated assets owned by the Credit Union and repo transactions<sup>1</sup> that mature within 30 days.

31. Secured Funding and repo transactions with a domestic central bank or central credit union or league counterparty or backed by level 1 assets which would otherwise have been reported in the institution's eligible HQLA receive a 0% run off factor. This includes NHA MBS pledged as part of a secured funding transaction and NHA MBS sold under the CMB program, including replacement NHA MBS intended as reinvestment assets for CMB issuances prior to July 1, 2016.

32. All other secured funding and repo transactions receive outflows in accordance with the following schedule.

Categories for outstanding maturing secured funding transactions	Cash Outflows
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%
Other	100%

33. All other secured funding transactions include borrowings from Central 1, a league or other financial institution that are secured by specific assets.

### 4.4 Other Outflows

34. Derivatives – 5% run off

All derivative-related cash outflows should be included at the expected contractual payment dates in accordance with their existing valuation methodologies. 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. Options should be assumed to be exercised when they are 'in the money' to the option buyer. Credit unions should not double count liquidity inflows or outflows.

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<sup>1</sup> A repurchase transaction (repo) is an agreement whereby an entity agrees to sell securities at a specified price and then repurchase the securities on a specified date at a specified price in exchange for cash.

Where derivative payments are collateralized by eligible liquid assets, outflows should be calculated net of any corresponding inflows that would result from contractual obligations for collateral to be provided to the credit union; this is conditioned on the credit union being legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received.

#### 35. Guarantees and Letters of Credit – 5% run-off

Trade finance instruments consist of trade-related obligations directly underpinned by the movement of goods or the provision of services. Amounts to be reported include items such as outstanding documentary trade letters of credit, documentary and clean collection, import bills, and export bills; and outstanding guarantees directly related to trade finance obligations, such as shipping guarantees. Lending commitments, such as direct import or export financing for non-financial corporate firms, should not be reported here, and rather reported as committed facilities.

#### 36. Committed Lines of Credit: Retail and Small Business (Undrawn) – 5% run off

Report balances of undrawn committed credit and liquidity facilities extended by the Credit Union to natural persons (retail) and small business customers.

#### 37. Committed Lines of Credit: Commercial/Corporate (Undrawn) – 10% run off

Balances of undrawn committed credit facilities extended by the Credit Union to non-financial institutions corporations (excluding small business customers). The amount reported should also include any 'additional capacity' of liquidity facilities provided to non-financial corporates.

#### 38. Uncommitted Lines of Credit: Retail and Small Business (Undrawn) – 2% run off

Balances of undrawn credit and liquidity facilities provided to retail and small business customers where the Credit Union has the right to unconditionally revoke the undrawn portion of these facilities.

#### 39. Uncommitted Lines of Credit: Commercial/Corporate (Undrawn) – 5% run off

Balances of undrawn credit and liquidity facilities provided to other customers where the Credit Union has the right to unconditionally revoke the undrawn portion of these facilities.

## 5. CASH INFLOWS

40. 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.

### 5.1 Maturing Reverse Repurchase or Securities Borrowing Transactions

41. Due to the high-quality of Level 1 assets, credit unions 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%) Credit unions are assumed **not** to roll-over maturing reverse repurchase or securities borrowing agreements secured by non-HQLA assets, and can assume to receive cash inflows of 100% related to those agreements.

42. Cash inflows will be assigned to all other maturing transactions secured by Level 2 assets in accordance with the following schedule.

Categories for outstanding maturing secured funding transactions	Cash Inflow <sup>2</sup>
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%

## 5.2 Loans

43. Credit unions should only include inflows from fully performing loans. Non-performing loans are those that are greater than 90 days delinquent. Further, inflows should only be taken at the latest possible date, based on the contractual rights available to counterparties.

44. Inflows from loans that have no specific 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.

### *Retail, Small Businesses and Non-Financial Corporate*

45. Credit unions are assumed to receive all payments (including interest payments and instalments) from retail, small business and non-financial corporate members that are fully performing and contractually due within a 30-day horizon.

Only **contractual payments** due should be reported (e.g. required minimum payments of principal, fee or interest) and not total loan balances of undefined or open maturity. At the same time, however, credit unions are assumed to continue to extend loans at a rate of 50% of contractual inflows. This results in a net inflow rate of 50% of the contractual amount.

### *Financial Institutions*

46. Credit unions are assumed to receive all payments (including interest payments and installments) from financial institutions that are fully performing and contractually due within the 30-day horizon and are assumed to discontinue to extend loans. This results in an inflow rate of 100% of the contractual amount.

## 5.3 Maturing Securities

47. Contractual inflows from securities, including certificates of deposit, maturing ≤ 30 days that are not already included in any other classification code, provided that they are fully performing (no default expected). Inflows from securities maturing within 30 days not included in the stock of HQLA 1 should receive 100% inflow.

<sup>2</sup> EXCEPTION: Where securities are rehypothecated, the credit union must assume a 0% cash inflow.

48. Level 1 and Level 2 securities maturing within 30 days should be included in the stock of HQLA, provided that they meet all related operational and definitional requirements.

#### **5.4 Deposits at Other Financial Institutions**

49. Deposits held at other financial institutions for operational purposes are assumed to stay at those institutions, and no inflows can be counted for these funds. All other deposits that are or become available within the 30 days LCR time horizon receive 100% inflow. Includes deposits held at Central 1 or a League.

#### **5.5 Derivatives**

50. All derivative-related cash outflows should be included at the expected contractual payment dates in accordance with their existing valuation methodologies. 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. Options should be assumed to be exercised when they are 'in the money' to the option buyer. Credit unions should not double count liquidity inflows or outflows. Where derivative payments are collateralized by eligible liquid assets, outflows should be calculated net of any corresponding inflows that would result from contractual obligations for collateral to be provided to the credit union; this is conditioned on the credit union being legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received. The sum of all net cash inflows should receive a 100% inflow.

#### **5.6 Committed LOC with Central 1, League or Other Financial Institution**

51. Committed LOC with Central Credit union, League or other financial institution that is available within 30 days receive a 100% inflow. The amount should only be included if reserves are not reported in HQLA.

## APPENDIX 1: SUMMARY HAIRCUTS AND CASH FLOW RATES

Reference	Balance Sheet Items	Haircut/Cash Flow
<b>HQLA</b>		
Level 1	Cash on Hand Liquidity Reserves NHA MBS Qualifying marketable securities (0% RW)	0%
Level 2A	Qualifying marketable securities (0% RW) Qualifying corporate debt AA- or higher	15%
Level 2B	Qualifying RMBS Qualifying corporate debt A+ to BBB- Corporate Common equity shares	25% 50% 50%
<b>LIABILITIES</b>		<b>CASH OUTFLOWS</b>
<b>Retail Deposits (Personal, and Small Business)</b>		
<b>Stable Deposits</b>	Term Deposits with residual maturity >30 days	0%
<b>Term &amp; other deposits with residual maturity/callable within 30 days</b>		
	Insured deposits with established relationships or in transactional accounts	3%
	Other Insured deposits	5%
<b>Less Stable Deposits</b>	Uninsured deposits Brokered deposits Large deposits Other deposits (e.g. trust accounts, internet)	10%
<b>Unsecured Wholesale Funding</b>		
<b>Term &amp; other deposits with residual maturity/callable within 30 days</b>		
<b>Operational Deposits</b>	Insured	5%
	Uninsured	25%
<b>Non-Operational Deposits</b>	Insured	20%
	Uninsured	40%
	Non-operational deposits and other funding from banks, other financial institutions and other legal entities (includes borrowings from Central 1, a league or other financial institution that are not secured by specific assets)	100%

Reference	Balance Sheet Items	Haircut/Cash Flow
<b>Secured Funding</b>		
<b>Term &amp; other deposits with residual maturity/callable within 30 days</b>		
<b>Secured Funding</b>	Transactions with a central bank counterparty or backed by Level 1 assets with any counterparty	0%
	Transactions backed by Level 2A assets	15%
	Transactions backed by non-Level 1 or non-Level 2A assets, with domestic sovereigns, development banks, or domestic PSEs as a counterparty	25%
	Backed by Residential Mortgage Backed Securities (Level 2B eligible)	25%
	Backed by other Level 2B assets	50%
	All other transactions (includes borrowings from Central 1, a league or other financial institution that are secured by specific assets)	100%
<b>Other</b>		
	Derivatives	5%
	Guarantees and Letters of Credit	5%
	Committed Lines of Credit - Retail and Small Business (Undrawn)	5%
	Committed Lines of Credit – Commercial/Corporate (Undrawn)	10%
	Uncommitted Lines of Credit - Retail and Small Business (Undrawn)	2%
	Uncommitted Lines of Credit – Commercial/Corporate (Undrawn)	5%
<b>ASSETS</b>		<b>CASH INFLOWS</b>
<b>Maturing reverse repurchase or securities borrowing agreements</b>		
	Secured by level 1 assets	0%
	Secured by level 2A assets	15%
	Secured by non-Level 1 or non-Level 2A assets, with domestic sovereigns, development banks, or domestic PSEs as a counterparty	25%
	Secured by Residential Mortgage Backed Securities (Level 2B eligible)	25%
	Secured by other Level 2B assets	50%
<b>Loans</b>	Payments on loans to retail, small business and non-financial corporate	50%
	Payments on loans to financial institutions	0%
<b>Other</b>	Maturing Securities	100%
	Deposits at other financial institutions - maturing or callable within 30 days (Includes deposits at Central 1 or a League)	100%

Reference	Balance Sheet Items	Haircut/Cash Flow
	Derivatives	100%
	Committed LOC with Central 1, League or other FI - Used only if Central Reserves not included in HQLA	100%