



BANK OF JAMAICA

STANDARD OF SOUND PRACTICE

on the

LIQUIDITY COVERAGE RATIO

(for Licensees under the Banking Services Act)

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Standard of Sound Practice on the Liquidity Coverage Ratio (for licensees under the Banking Services Act)

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List of Abbreviations

BSA	Banking Services Act
ECAI	External Credit Assessment Institution
FHC	Financial Holding Company
HQLA	High-Quality Liquid Asset
LCR	Liquidity Coverage Ratio
MSME	Micro Small and Medium Enterprise
PSE	Public Sector Entity
SPE	Special Purpose Entity

Glossary

“Cash management relationship” means the provision of cash management services to customers.

“Cash management services” means 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.

“Clearing relationship” means 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.

“Correspondent banking” means 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.

“Custody relationship” means 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 further 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.

“Deposit-taking institution”, means: (i) a deposit-taking institution as defined under the Banking Services Act (“BSA”), 2014 or (ii) a member of a financial group that is engaged in banking business under the laws of another jurisdiction.

“Financial holding company”, has the meaning assigned to it under the Banking Services Act (“BSA”), 2014.

“Financial institution”, means an institution that is: (i) a deposit-taking institution under the BSA or (ii) a member of a financial group under the BSA.

“Fully insured” means that 100% of the deposit amount, up to the deposit insurance limit, is covered by a qualifying 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”.

“Licensee”, is a licensee under the Banking Services Act, 2014.

“Prime brokerage” means 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.

“Public sector entity (PSE)” means a public organization that is a part of the government and delivers public programmes, goods, or services, but exists as a separate organization in its own right, possibly as a legal entity and operates with a partial degree of operational independence.

“Qualifying deposit insurance scheme”, means a deposit insurance scheme (i) that guarantees that it has the ability to make prompt pay-outs; (ii) for which the coverage is clearly defined; and (iii) of which public awareness is high.

“Re-hypothecation” means the practice by financial institutions of using, for their own purposes, assets that have been posted to them as collateral.

“Retail deposits” means deposits placed by a natural person.

“Secured funding” means those liabilities and general obligations that are collateralized by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution.

“Stable deposit” means the amount of the deposits that are fully insured by a qualifying deposit insurance scheme or by a public guarantee that provides equivalent protection.

“Total net cash outflows” means the total expected cash outflows minus total expected cash inflows in the LCR stress scenario for the subsequent 30 calendar days. Where applicable, cash inflows and outflows should include interest that is expected to be received and paid during the 30-day time horizon.

“Unencumbered” means free of legal, regulatory, contractual or other restrictions on the ability of the relevant financial institution to liquidate, sell, transfer, or assign the asset.

“Wholesale funding” means any liability or general obligation raised from non-natural persons (i.e. legal entities, including sole proprietorships and partnerships).

SECTION 1: INTRODUCTION

1. Following the global financial crisis beginning in 2007, one of the key reforms issued by the Basel Committee on Banking Supervision was the introduction of global liquidity standards for financial institutions with the intended purpose of promoting a more resilient financial sector. One such liquidity standard is the Liquidity Coverage Ratio (LCR), which has the primary objective of supporting and improving the short-term resilience of the liquidity profile of financial institutions by ensuring that they have sufficient high-quality liquid assets (HQLAs) to survive a significant stricture to funding sources lasting 30 calendar days.
2. This standard aims to ensure that a financial institution has an adequate stock of unencumbered HQLAs, consisting 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. For the purposes of the LCR, the stress scenario reflects a financial institution's total net cash outflows (i.e. the difference between cash outflows and inflows) that arise over a period of 30 calendar days. At a minimum, the stock of unencumbered HQLAs should enable the financial institution to survive until day 30 of the stress scenario, by which time it is assumed that management¹ would have taken appropriate corrective actions and the Supervisor would have implemented appropriate intervention measures to address the root cause of any liquidity problem. Furthermore, given the uncertain timing of outflows and inflows, financial institutions are also expected to be aware of any potential mismatches within the 30-day period and ensure that sufficient HQLAs are available to meet any cash flow gaps throughout the period.
3. 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 HQLAs should at least equal total net cash outflows) on an ongoing basis because the stock of unencumbered HQLAs is intended to serve as a defence against the potential onset of liquidity stress. Ultimately, the LCR is designed to improve the deposit-taking sector's ability to survive the shocks arising from financial and economic stress, thereby reducing spill over risks from the financial sector to the real economy.
4. Recent policy measures aimed at fiscal consolidation have materially changed the operating environment for liquidity risk management in Jamaica. This ongoing reform programme provides an opportunity for the modernization of Jamaica's prudential framework to be better aligned with international sound practice.
5. Taking into consideration the varying states of readiness of licensees for compliance with the full LCR requirement, Bank of Jamaica will phase in the LCR over a one-year period beginning end-October 2019. The minimum requirement will first be set at 75% in October 2019 and be increased to 100% as at end-October 2020.

¹ Management is ultimately responsible for ensuring that adequate systems, procedures and processes are put in place to support the ongoing identification, measurement, monitoring and control of liquidity risks.

Table 1: LCR Minimum Requirement Implementation Timeline

BANK'S PROPOSED TIMELINE FOR TRANSITION TO FULL LCR REQUIREMENT		
	October 2019	October 2020
Minimum LCR	75%	100%

6. Licensees will be, in the interim, required to submit a detailed plan indicating the steps they will take to be fully compliant with the LCR when the minimum LCR requirement of 100% becomes fully effective.
7. Any licensee that reports LCR below the minimum requirement will be required to provide the Supervisor with an assessment of its liquidity position, including factors that contributed to its LCR falling below the minimum requirement, the actions that have been and will be taken to remedy the breach and the length of time required to implement such measures.
8. In instances where a licensee reports LCR below the minimum requirement, the Supervisor, as is deemed appropriate, will have the authority under the LCR regime to require a licensee to execute one or more, of the following: (i) reduce its liquidity risk exposure; (ii) strengthen its overall liquidity risk management; and (iii) improve its contingency funding plan.

SECTION 2: LEGAL REQUIREMENT

9. The LCR requirements are issued pursuant to section 132(1)(f) of the Banking Services Act (BSA), 2014, which allows the Supervisory Committee to make rules for the operation of licensees in relation to prudential liquidity requirements.

SECTION 3: SCOPE OF APPLICATION

10. The LCR requirements are applied to licensees as defined in the BSA on the following bases:
 - (a) For each deposit-taking institution (DTI) licensed under the BSA, on a standalone basis; and
 - (b) For each financial holding company (FHC)² licensed under the BSA, on a consolidated basis³.
11. Further, the LCR provides the Supervisor with the authority to make determinations, on a case-by-case basis, in terms of members of financial groups that should be included or excluded from the scope of consolidation for the purposes of the LCR.
12. Notably, the scope of the LCR does not include liquidity risks stemming from insurance business conducted within financial groups. Nonetheless, pursuant to section 75(1) of the BSA, FHCs are required to manage risks, including liquidity risk, effectively on a

² The LCR applies equally to both operating and non-operating holding companies.

³ The entities within the scope for consolidation are the FHC, and other members of the group that perform maturity and liquidity transformation in the normal course of business, including DTIs and securities dealers.

group-wide basis, taking into account any legal, regulatory and operational limitations on the transferability of liquidity throughout their respective financial groups; and the resilience of group-wide liquidity risk profiles will need to be assessed under a separate framework that takes appropriate account of the unique liquidity risks associated with the business of insurance.

SECTION 4: MINIMUM LCR REQUIREMENT

13. Under the LCR, licensees are required to maintain a stock of HQLAs of at least 100% of total net cash outflows at all times.⁴ This can be expressed as a ratio, where the numerator of the LCR is the stock of HQLAs and the denominator is total net cash outflows. The stock of HQLAs may be comprised of Level 1 and Level 2 assets to which differential haircuts or market valuation discounts are applied, reflecting the relative quality of the respective assets. Expressed as a formula, the minimum LCR requirement is:

$$\frac{\text{Stock of HQLAs}}{\text{Total net cash outflows over the next 30 calendar days}^5} \geq 100\%$$

Where:

- (a) The stock of HQLAs = Level 1 + Level 2A + Level 2B assets where, after relevant haircuts or market valuation discounts have been applied to Level 1, Level 2A & Level 2B assets:
- (i) Level 2A assets + Level 2B assets \leq 40% of HQLAs; and
 - (ii) Level 2B assets \leq 15% of HQLAs.

and

- (b) Total Net Cash Outflows = Total Expected Cash Outflows – (the lesser of: (i) Total Expected Cash Inflows and (ii) 75% of Total Expected Cash Outflows⁶), over the next 30 calendar days.

14. The Supervisor will have the authority, under the LCR, to impose additional liquidity requirements as deemed necessary to promote the short-term resilience of the liquidity profile of DTIs on a standalone basis or FHCs on a consolidated basis.

SECTION 5: STOCK OF HIGH QUALITY LIQUID ASSETS

15. HQLAs are intended to be a defence against potential liquidity stress. Therefore, licensees are required to maintain a stock of unencumbered HQLAs equal to or greater than the total net cash outflows over a 30-day period. Assets qualifying as HQLAs must be liquid in markets during a time of stress and can be converted into cash at minimal or no loss of value in private markets to meet liquidity needs. Specifically, the

⁴ The requirement is to meet the overall LCR and the Jamaican dollar LCR as outlined in Section 7 of this Standard.

⁵ The denominator is calculated as total net cash outflows over the next 30 calendar days, plus the maturity mismatch add-on as in paragraphs 151-154, and Appendix 1.

⁶ The maximum amount of inflows that can offset outflows is limited to 75% of total expected cash outflows over the stress period. This translates to an ongoing requirement that licensees must maintain HQLAs equivalent to at least 25% of expected cash outflows associated with the 30-day stress scenario.

liquidity-generating capacity of HQLAs should remain intact even in periods of severe idiosyncratic and market stress.

16. For the purposes of the LCR, in addition to the specific qualifying criteria which apply to various asset classes, liquid assets must also exhibit certain fundamental and market characteristics and satisfy certain operational requirements in order to be classified as HQLAs. The following paragraphs outline these fundamental characteristics, market characteristics and operational requirements.

5.1 Fundamental Characteristics

17. The fundamental characteristics that assets must meet to qualify as HQLAs are as follows:

- (i) **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, low legal risk, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.
- (ii) **Ease and certainty of valuation:** An asset's liquidity increases if market participants are more likely to agree on its valuation. Assets with more standardized, homogenous and simple structures tend to be more readily exchangeable, 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.
- (iii) **Low correlation with risky assets:** The stock of HQLAs 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.
- (iv) **Listed on a developed and recognized exchange:** Being listed increases an asset's transparency, which enhances its liquidity.

5.2 Market Characteristics

18. The market characteristics that assets must meet to qualify as HQLAs are as follows:
 - (i) **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 in times of stress.

- 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 HQLAs.
- (ii) **Low volatility:** Assets whose prices remain relatively stable and are less prone to sharp price changes 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 or market valuation discounts) and volumes during stressed periods.
 - (iii) **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.

5.3 Operational Requirements

19. For the purposes of the LCR, to qualify as HQLAs, assets must satisfy certain operational requirements. These operational requirements are designed to ensure that the stock of HQLA is managed in such a way that licensees are able to demonstrate that they can immediately use the stock of assets as a source of contingent funds that is available for the licensee 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.
20. **Periodic testing of market access:** A bank should periodically monetize 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 monetization, the availability of the assets and to minimize the risk of negative signalling during a period of actual stress.
21. **All assets in the stock should be unencumbered:** “Unencumbered” means free of legal, regulatory, contractual or other restrictions on the ability of the financial institution to liquidate, sell, transfer, or assign the asset. An asset in the stock should not be pledged (either explicitly or implicitly) to secure, collateralize 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 financial institution, have not been re-hypothecated and are legally and contractually available for the financial institution's use can be considered as part of the stock of HQLAs. In addition, assets which qualify for the stock of HQLAs 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.
22. **Under the control of the liquidity risk management function:** The stock should be under the control of the function charged with managing the liquidity of the licensee (e.g. the treasurer), meaning the function that has the continuous authority and legal and operational capability to monetize 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 monetize 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.

23. **Operational capability to monetize assets:** Licensees should exclude from the stock those assets that they would not have the operational capability to monetize to meet outflows during the stress period. Operational capability to monetize assets requires having procedures and appropriate systems in place, including providing the function charged with managing the institution's liquidity with access to all necessary information to execute monetization of any asset at any time. Monetization of the asset must be executable, from an operational perspective, in the standard settlement period for the asset class in the relevant jurisdiction.
24. **Take account of close out risks from hedges:** Financial institutions are permitted to hedge the market risk associated with ownership of the stock of HQLAs and still include the assets in the stock of HQLAs. If it chooses to hedge the market risk, the financial 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).
25. **Subject to appropriate collateral management practices:** Financial institutions should monitor the legal entity and physical location where collateral is held and how it may be mobilized 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 HQLAs are held. In addition, the financial institutions should determine whether any such assets should be excluded for operational reasons and therefore have the ability to determine the composition and availability of its stock of HQLAs on a daily basis.
26. **Freely available to count towards consolidated LCR:** As a general principle, no excess liquidity should be recognized by a cross-border financial 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 financial group operates will affect the availability of liquidity by inhibiting the transfer of HQLAs and fund flows within the group. Accordingly, qualifying HQLAs 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 HQLAs 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.
27. The application of the foregoing requirement means that eligible HQLAs that is held by a legal entity within the scope of consolidation to meet local liquidity requirements (where applicable) can be included in the consolidated LCR to the extent that such

HQLAs are used to cover the total net cash outflows of that entity, notwithstanding that the assets are subject to liquidity transfer restrictions. However, if the HQLAs held in excess of the total net cash outflows of that entity within a group are not transferable, such surplus liquidity should be excluded from the consolidated LCR computation.

28. 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. A financial 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. Further, financial institutions should take reasonable steps to assess the impact of such restrictions, with a view to clarifying the potential impact that these restrictions could have on the availability of HQLAs across the group.
29. In assessing whether assets are freely transferable for regulatory purposes, financial 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 transferred freely to other entities that could monetize the assets.
30. **Take account of impediments to sale:** In certain jurisdictions, large, deep and active repo markets do not exist for eligible asset classes and therefore such assets are likely to be monetized through outright sale. In these circumstances, a licensee should exclude from the stock of HQLAs 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.
31. **Take account of constraints on liquidity generated from re-hypothecated assets:** Licensees should not include in the stock of HQLAs any assets or liquidity generated from assets they have received under right of re-hypothecation, if the beneficial owner has the contractual right to withdraw those assets during the 30-day stress period.
32. Assets received as collateral for derivatives transactions that are not segregated and are legally able to be re-hypothecated may be included in the stock of HQLAs provided the licensee records appropriate outflows for risks associated with derivatives positions taken.
33. **Management of intraday liquidity positions:** Licensees should actively manage their 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.
34. **Maintenance of LCR by Currency:** Licensees are expected to be able to meet their liquidity needs, as measured by the LCR, in each significant currency, where a significant currency is defined as one that comprises at least 5% of a DTI's total liabilities or at least 5% of an FHC's total consolidated liabilities. Licensees are also expected to maintain HQLAs consistent with the distribution of their liquidity needs by currency.

35. Licensees should be able to use the stock of HQLAs 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 licensees and the Supervisor to track any potential currency mismatch issues that could arise.
36. In managing foreign exchange liquidity risk, the licensee 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. Licensees 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.
37. **Transition before exclusion from HQLAs to avoid cliff effects:** In order to mitigate cliff effects that could arise, if an eligible liquid asset became ineligible (e.g. due to rating downgrade), a licensee is permitted to keep such assets in its stock of liquid assets for an additional 30 calendar days. This would allow the licensee additional time to adjust its stock as needed or replace the asset.

5.4 Components of HQLAs

38. The numerator of the LCR is the “stock of HQLAs” and is comprised of Level 1 and Level 2 assets. Level 2 assets may be further broken down into Level 2A and Level 2B assets.
39. There is no limit on the amount of Level 1 assets that can be included in HQLAs. However, Level 2 assets, which are less liquid than Level 1 assets, may only count for as much as 40% of total HQLAs. Furthermore, Level 2A assets may count for all Level 2 assets, whereas Level 2B assets can only count up to 15% of HQLAs. The value of the assets that are included in Level 2 is limited by certain haircuts or market valuation discounts prescribed under the LCR. However, the Supervisor has the authority to revise any haircut or market valuation discount prescribed under the LCR.
40. The following table summarizes the values of each HQLA item that are recognized in the calculation of the stock of HQLA.

Table 2: Valuation Factors for Calculating the Total Stock of HQLAs

STOCK OF HQLAs	
Item	Valuation Factor
A. Level 1 Assets	
1. Coins and banknotes	100%
2. Cash reserves placed at central banks	100%
3. Securities issued or guaranteed by Bank of Jamaica	100%
4. Benchmark Investment Notes and Treasury Bills issued or guaranteed by the Government of Jamaica, denominated in domestic or foreign currency	75%
5. GOJ Global Bonds and Other GOJ Bonds, denominated in domestic or foreign currency	40%
	100%

6. Qualifying marketable securities from sovereigns, central banks, and multilateral development banks	
B. Level 2 Assets (maximum of 40% of HQLAs)	
<i>Level 2A Assets</i>	
1. Qualifying marketable securities from foreign governments, foreign central banks, foreign public sector entities, multilateral development banks with 20% credit risk weighting	85%
2. Qualifying corporate debt securities rated AA- or higher	
<i>Level 2B Assets (maximum of 15% of HQLAs)</i>	
1. Qualifying corporate debt securities rated between A+ and BBB-	50%
2. Qualifying common equity shares	

5.4.1 Level 1 Assets

41. As stated earlier, Level 1 assets can comprise an unlimited share of the pool of HQLAs and are generally not subject to a haircut or market valuation discount under the LCR (i.e. they are reflected in the stock of HQLAs at their current market value). However, under the LCR, the Supervisor has the authority to impose either haircuts or market valuation discounts for Level 1 securities based on, among other things, their duration, credit and liquidity risk, and typical repo haircuts. For example, under the LCR rules, a market valuation discount is imposed on Government of Jamaica debt securities. The introduction of a market valuation discount on such securities is informed by current market dynamics as well as the absence of a robust trading platform to support transparency and price discovery in that market.
42. Level 1 assets are considered the highest quality liquid assets, which means, in the practical sense, that these assets should be capable of being converted into cash at minimal or no loss of value in private markets to meet liquidity needs. The following paragraph enumerates the classes of assets that may count towards Level 1. It should be noted that this listing of Level 1 assets is indifferent to nuances relating to currency and reporting basis (standalone or consolidated). Accordingly, licensees should, in every case, only count Level 1 items that are relevant to the currency and reporting basis for which they are satisfying the LCR requirements.
43. Level 1 assets, under the LCR, include:
- (a) coins and banknotes;
 - (b) cash reserves placed with Bank of Jamaica⁷;
 - (c) reserves at other central banks, as approved by the Supervisor;
 - (d) securities issued or guaranteed by Bank of Jamaica;
 - (e) 75% of the value of GOJ Benchmark Investment Notes and GOJ Treasury Bills, denominated in domestic or foreign currency;

⁷ For the purposes of the LCR, central bank reserves includes cash reserves, 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 financial institution; or (ii) that constitute a loan against which the financial institution can borrow on a term basis or on an overnight but automatically renewable basis (only where the financial institution has an existing deposit with the relevant central bank). Other term deposits with central banks are not eligible for the stock of HQLAs. However, if the term expires within 30 days, the term deposit could be considered as an inflow per Paragraph 136.

- (f) 40% of the value of GOJ Global Bonds and Other GOJ Bonds, denominated in domestic or foreign currency;⁸
- (g) marketable securities issued or guaranteed by:
 1. foreign governments, foreign central banks, and multilateral development banks, as approved by the Supervisor, or
 2. the Bank for International Settlements or the International Monetary Fund, satisfying all of the following conditions:
 - (i) assigned a 0% risk-weight under the Capital Adequacy Regulations applicable to licensees under the Banking Services Act,
 - (ii) traded in large, deep, active, and diversified repo or cash markets characterized by a low level of concentration,
 - (iii) have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, and
 - (iv) not an obligation of a financial institution or any of its affiliated entities;
- (h) certain non-0% risk weighted⁹ sovereign or central bank debt securities issued in the domestic currency of the sovereign or central bank, if the sovereign or central bank is:
 1. from a licensee's home country, or
 2. from a host jurisdiction where a licensee has a branch or subsidiary and the licensee or its subsidiary takes liquidity risk in that jurisdiction;
- (i) certain non-0% risk weighted¹⁰ sovereign or central bank debt securities issued in a currency other than the domestic currency of the sovereign or central bank, if the sovereign or central bank is:
 1. from a licensee's home country, or
 2. from a host jurisdiction where a licensee has a branch or subsidiary and the licensee or its subsidiary takes liquidity risk in that jurisdiction, up to the amount of a licensee's stressed net cash outflows in that specific foreign currency arising from the licensee or its subsidiary's operations in the jurisdiction where the licensee has a branch or subsidiary.¹¹

5.4.2 Level 2 Assets

44. Level 2 assets (comprising Level 2A assets and Level 2B assets) can count towards the stock of HQLAs in the LCR on the condition that they comprise no more than 40% of the overall stock of HQLAs after the application of relevant haircuts or market valuation discounts. Notably, Level 2A assets may count for all Level 2 assets, whereas Level 2B assets cannot count for more than 15% of total HQLAs.

⁸ The Bank is in the process of revising the Collateral Requirements and Haircuts applicable under its Emergency Liquidity Facility framework with a view to basing the applicable haircuts on factors including the credit quality of the issuer, time to maturity, and liquidity of the instrument in the secondary market. Once this framework is revised, the market valuation discounts applicable to GOJ securities under the LCR will be amended accordingly.

⁹ Where a sovereign has a non-0% risk weight under the Capital Adequacy Regulations applicable to licensees under the Banking Services Act.

¹⁰ Where a sovereign has a non-0% risk weight under the Capital Adequacy Regulations applicable to licensees under the Banking Services Act.

¹¹ The implication being that any excess HQLA would not contribute to the licensee's satisfaction of the overall LCR requirement.

Level 2A Assets

45. A 15% haircut is applied to the current market value of each Level 2A asset held in the stock of HQLAs. The following paragraph enumerates the classes of assets that may count towards Level 2A. It should be noted that this listing of Level 2A assets is indifferent to nuances relating to currency and reporting basis (standalone or consolidated). Accordingly, licensees should, in every case, only count Level 2A items that are relevant to the currency and reporting basis for which they are satisfying the LCR requirements.
46. Level 2A assets, under the LCR, include the following:
- (a) marketable securities issued or guaranteed by foreign governments, foreign central banks, foreign public sector entities, and multilateral development banks as approved by the Supervisor, satisfying all of the following conditions:
 - (i) assigned a 20% risk weight under the Capital Adequacy Regulations applicable to licensees under the BSA;
 - (ii) traded in large, deep, active, and diversified repo or cash markets characterized by a low level of concentration;
 - (iii) have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. a proven record is defined as the maximum decline in price not exceeding 10% or increase in haircut not exceeding 10 percentage points for any rolling 30-day period); and
 - (iv) not an obligation of a financial institution or any of its affiliated entities.
 - (b) corporate debt securities¹² satisfying all of the following conditions:
 - (i) not issued by a financial institution or any of its affiliated entities;
 - (ii) have a long-term credit rating from a designated external credit assessment institution (ECAI)¹³ of at least AA- or, in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating as characterized by the ECAI;
 - (iii) traded in large, deep, active, and diversified repo or cash markets characterized by a low level of concentration; and
 - (iv) have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. the maximum decline in price not exceeding 10% or increase in haircut not exceeding 10 percentage points for any rolling 30-day period).
 - (c) Jamaican corporate debt securities issued in Jamaican currency and satisfying all of the following conditions:
 - (i) not issued by a financial institution or any of its affiliated entities;
 - (ii) have a long-term credit rating, including a national scale rating, from a designated external credit assessment institution (ECAI) of at least AA- or, in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating as characterized by the ECAI;

¹² For the purposes of the LCR, corporate debt securities qualifying as HQLA must have a readily available valuation based on standard methods that does not depend on private knowledge. HQLA therefore excludes complex structured products or subordinated debt.

¹³ The current list of designated ECAIs may be found in Appendix 2 of this Standard.

- (iii) listed and traded on an acceptable market infrastructure that facilitates adequate price discovery and transparency;
- (iv) part of an active, reliable, robust, and diversified repo or cash market where there are no dominant investors with significant influence over the market; and
- (v) have not suffered a decline in price exceeding 10% or increase in haircut exceeding 10 percentage points for any rolling 30-day period.

Level 2B Assets

47. A 50% haircut is applied to the current market value of each Level 2B asset held in the stock of HQLAs. The following paragraph enumerates the classes of assets that may count towards Level 2B. It should be noted that this listing of Level 2B assets is indifferent to nuances relating to currency and reporting basis (standalone or consolidated). Accordingly, licensees should, in every case, only count Level 2B items that are relevant to the currency and reporting basis for which they are satisfying the LCR requirements.
48. Level 2B assets, under the LCR, include:
- (a) corporate debt securities¹⁴ satisfying all of the following conditions may be included in Level 2B:
 - (i) not issued by a financial institution or any of its affiliated entities;
 - (ii) have a long-term credit rating from a designated 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 as characterized by the ECAI;
 - (iii) traded in large, deep, active, and diversified repo or cash markets characterized by a low level of concentration; and
 - (iv) have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. the maximum decline in price not exceeding 20% or increase in haircut not exceeding 20 percentage points for any rolling 30-day period).
 - (b) Jamaican corporate debt securities issued in Jamaican currency and satisfying all of the following conditions may be included in Level 2B:
 - (i) not issued by a financial institution or any of its affiliated entities;
 - (ii) have a long-term credit rating, including a national scale rating, from a designated 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 as characterized by the ECAI;
 - (iii) listed and traded on an acceptable market infrastructure that facilitates adequate price discovery and transparency;
 - (iv) part of an active, reliable, robust, and diversified repo or cash market where there are no dominant investors with significant influence over the market; and
 - (v) have not suffered a decline in price exceeding 20% or increase in haircut exceeding 20 percentage points for any rolling 30-day period.

¹⁴ These corporate debt securities may include any qualifying corporate debt securities, both local and foreign, not included in category of HQLA outlined at Paragraph 48 (b) below.

- (c) common equity shares satisfying all of the following conditions may be included in Level 2B:
- (i) not issued by a financial institution or any of its affiliated entities;
 - (ii) exchange traded and centrally cleared;
 - (iii) a constituent of a major stock index in the home jurisdiction or where the liquidity risk is taken;
 - (iv) denominated in the domestic currency of a financial institution's home jurisdiction or in the currency of the jurisdiction where a financial institution's liquidity risk is being taken;
 - (v) traded in large, deep, active, and diversified repo or cash markets characterized by a low level of concentration; and
 - (vi) have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions (i.e. the maximum decline in price not exceeding 40% or increase in haircut not exceeding 40 percentage points for any rolling 30-day period).

SECTION 6: TOTAL NET CASH OUTFLOWS

49. The denominator of the LCR is total expected net cash outflows¹⁵, defined as 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. The maximum amount of inflows that can offset outflows is limited to 75% of total expected cash outflows over the stress period. This imposes an ongoing requirement that licensees must maintain a minimum stock of HQLAs equivalent to at least 25% of expected cash outflows associated with the 30-day stress scenario.
50. Total net cash outflows are expressed by the formula:
- Total Net Cash Outflows = Total Expected Cash Outflows – (the lesser of: (i) Total Expected Cash Inflows and (ii) 75% of Total Expected Cash Outflows), over the next 30 calendar days.
51. The method for calculating the denominator is detailed in **Section 7**.
52. The LCR uses a stress scenario which incorporates many of the shocks experienced during the crisis that started in 2007 into one significant stress scenario for which a licensee would, under the LCR, need sufficient liquidity on hand to survive for up to 30 calendar days. The LCR stress scenario, therefore, 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;

¹⁵ Where applicable, expected cash outflows and expected cash inflows should include interest that is expected to be paid and received during the 30-day time horizon.

- (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 licensee’s public credit rating, if externally rated, by up to and including three notches;
 - (e) increases in market volatilities that impact the quality of collateral which lead to increased collateral haircuts or additional collateral, or lead to other liquidity needs;
 - (f) unscheduled draws on committed but unused credit and liquidity facilities that the deposit-taking institution or securities dealer has provided to its clients; and
 - (g) the potential need for financial institutions to buy back debt or honour non-contractual obligations in the interest of mitigating reputational risk.
53. It should be noted that where there is potential that an item could be counted in multiple outflow categories, a licensee only has to assume up to the maximum contractual outflow for that item.
54. The table below summarizes the outflow rates to be applied to the various items. The table is followed by explanations for the various categories of items.

Table 3: Cash Outflow Rates

CASH OUTFLOWS	
Item	Outflow Rate
A. Retail Deposits	
1. Demand deposits and term deposits (less than 30 days maturity):	
a) Stable deposits	5%
b) Less stable deposits	10%
2. Term deposits with residual maturity greater than 30 days	0%
B. Unsecured Wholesale Funding	
1. Demand and Term deposits (less than 30 days maturity) provided by micro, small, and medium sized business customers:	
a) Stable deposits	5%
b) Less stable deposits	10%
2. a) Operational deposits generated by clearing, custody, and cash management activities; and	25%
b) the portion of operational deposits generated by clearing, custody, and cash management activities that are fully covered by deposit insurance	5%
3. Non-operational deposits from non-financial corporates, sovereigns, central banks, multilateral development banks, and PSEs:	
a) Deposits fully covered by a qualifying deposit insurance scheme	20%
b) Deposits not fully covered by a qualifying deposit insurance scheme	40%
4. Other legal entity customers	100%
C. Secured Funding	
1. Secured funding transactions with a central bank counterparty or backed by Level 1 assets with any counterparty except GOJ	0%
2. Secured funding transactions backed by securities issued or guaranteed by GOJ	25% or 60% ¹⁶
	15%

¹⁶For secured lending transactions backed by GOJ that were assigned a 25% market valuation discount in HQLA, these transactions will receive a 25% inflow rate. Similarly, for secured lending transactions backed by GOJ securities that were assigned a 60% market valuation discount in HQLA, these transactions will receive a 60% inflow rate.

3. Secured funding transactions backed by Level 2A assets, with any counterparty	
4. Secured funding transactions backed by non-Level 1 or non-Level 2A assets, with domestic sovereigns, multilateral development banks, or domestic PSEs that have a 20% or lower risk weight as a counterparty	25%
5. Backed by other Level 2B assets	50%
6. All other secured funding transactions	100%

Item	Outflow Rate
D. Contingent Funding Obligations	
1. Drawdowns on committed credit and liquidity facilities:	
a) Retail and small business clients	5%
b) Non-financial corporates, sovereigns and central banks, multilateral development banks, and PSEs	10% for credit 30% for liquidity
c) Deposit-taking institutions subject to prudential supervision	40%
d) Other financial institutions (include securities firms, insurance companies)	40% for credit 100% for liquidity
e) Other legal entity customers	100%
2. Treatment of Trade Finance Instruments	5%
3. Treatment of Direct Import or Export Financing	apply outflow rates specified under Item D 4 (a)
4. Other contingent funding obligations:	
a) Uncommitted credit and liquidity facilities	0%
b) Guarantees and letters of credit unrelated to trade finance obligations	10%
c) Non-contractual contingent funding obligations	10%
d) Non-Contractual Obligations such as structured products and stable value collective investment funds	10%
e) Customer short positions are covered by other customers' collateral	50%
f) Outflows from potential repurchases of outstanding debt obligations of issues with an affiliated dealer or market maker	10%
E. Additional Outflows	20% or 100%

55. The Supervisor has the authority to vary outflow rates prescribed under the LCR.

6.1 Expected Cash Outflows

56. 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. Cash outflows, under the LCR, are broken down into five broad categories: retail deposits, unsecured wholesale funding, secured funding, contingent funding obligations, and additional outflows. These five outflow categories are further broken down into subcategories of claims to which differential run-off rates are ascribed, reflecting the relative stability of those

claims. **Table 2** provides an illustrative summary of the factors applied to each category in the calculation of expected cash outflows.

6.1.1 Retail Deposits

57. For the purposes of the LCR, retail deposits are deposits placed with a deposit-taking institution or building society by natural persons. Retail deposits, under the LCR, include demand deposits and term deposits,¹⁷ unless otherwise excluded. The treatment of deposits from legal entities, sole proprietorships or partnerships is addressed in wholesale deposit categories below.
58. Retail deposits are divided into “stable” and “less stable” portions of funds as described below, with minimum run-off rates listed for each category.

Stable Deposits (run-off rate = 5%)

59. For the purposes of the LCR, stable deposits attract a run-off factor of 5%. Retail deposits are characterized as stable where such deposits are fully insured¹⁸ by a qualifying deposit insurance scheme,¹⁹ or by a public guarantee that provides equivalent protection, and where the deposit is either:
- (a) part of an established relationship making withdrawal highly unlikely (“the first limb”); or
 - (b) held in a transactional account (“the second limb”).
60. Under the LCR, the following relationships are presumed to constitute the type of relationship referred to under the first limb of the criteria for stable deposits.
- (i) Circumstances where a depositor has a borrowing relationship with the deposit-taking institution for mortgages or other long-term loans.
 - (ii) Circumstances where a depositor has at least one other active product, other than a loan, with the deposit-taking institution.
61. In order to apply the first limb of the criteria for stable retail deposits and benefit from the related preferential run-off treatment, reporting institutions have the burden of proof to establish that the relevant relationship is one which makes deposit withdrawal highly unlikely within the 30 day LCR stress scenario. Licensees are assigned the burden of proof for assessing whether deposits meet the criteria for stable deposits. This assessment should take into consideration relevant factors such as whether the relationship between the depositor and the licensee meets the first or second limb of the criteria for stable deposits above and where the depositor is domiciled.
62. Under the LCR, deposits are considered as being held in a transactional account, under the second limb of the criteria for stable deposits, where salaries and income are regularly credited and debited against the account.

¹⁷ It should be noted that, for this purpose, savings deposits may be categorized as either a demand deposit or a term deposit, depending on the features of the account.

¹⁸ “Fully insured” means that 100% of the deposit amount, up to the deposit insurance limit, is covered by a qualifying 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”.

¹⁹ The Jamaica Deposit Insurance Corporation is treated as a qualifying deposit insurance scheme under the framework.

Less Stable Deposits (run-off rates = 10% and higher)

63. Other retail deposits that do not meet the criteria for stable deposits outlined above are characterized as “less stable” and must be ascribed a 10% run-off rate. Furthermore, in instances where a deposit-taking institution is not able to readily identify which retail deposits would qualify as “stable” according to the definition of stable deposits outlined above, the full amount should be treated as “less stable”. Notably, the 10% run-off rate for “less stable” deposits is a minimum benchmark, and the Supervisor may prescribe differentiated categories of “less stable” deposits with higher run-off rates.

Treatment of Retail Term Deposits with Residual Maturity Greater than 30 Days

64. It should be noted that cash outflows related to retail term deposits with a residual maturity or withdrawal notice period of greater than 30 days are to 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. Accordingly, a 0% run-off factor would apply to such deposits. However, if the Supervisor is of the view that a deposit-taking institution has allowed a depositor to withdraw such deposits without applying a significant penalty²⁰, or despite a clause stating that the depositor has no legal right to withdraw, the entire category of these funds would be treated as demand deposits regardless of the remaining term and be subject to the applicable run-off rates for the respective categories of retail deposits under which they fall, as outlined above.

6.1.2 Unsecured Wholesale Funding

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 collateralized 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.
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 financial institution’s discretion, the Supervisor will take into account reputational factors that may limit a financial institution’s ability not to exercise the option²¹. In particular, where the market expects certain liabilities to be redeemed before their final legal maturity date, licensees should assume such behaviour for the purpose of the LCR and include these liabilities as outflows.
67. Wholesale funding that is callable by the funds provider subject to a contractually defined and binding notice period surpassing the 30-day horizon is not included.

²⁰ A significant penalty, for these purposes, is one where early withdrawal results in a penalty that is materially greater than the interest foregone.

²¹ This could reflect a case where a financial institution may imply that it is under liquidity stress if it did not exercise an option on its own funding.

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

Unsecured Wholesale Funding Provided by Micro, Small, and Medium Enterprise Customers: (run-off factor 5% and 10%)

69. Under the LCR, unsecured wholesale funding provided by micro, small and medium enterprise (MSME) customers, as defined in this section, may be treated in the same way as retail deposits. Following the approach to the treatment of retail deposits, the LCR distinguishes between a "stable" portion of funding provided by MSME customers and the "less stable" portion. The same criteria and associated run-off factors applies as for retail deposits.

70. This category consists of deposits and other extensions of funds made by non-financial MSME customers. For the purposes of the LCR, MSME customer deposits are treated as retail customer deposits where:

1. the customer satisfies the criteria for classification as an MSME (i.e. J\$425 million in annual turnover);
2. the total aggregate funding²² raised from the customer is less than J\$40 million (on a consolidated basis where applicable); and
3. the deposit is managed as a retail deposit.

71. The foregoing criterion requiring MSME deposits to be managed as a retail deposit means that licensees should treat 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.

Table 4: National Definition of Micro, Small, and Medium Enterprises²³

	Primary Indicator	Secondary Indicator
Firm Category	Total Annual Sales/Turnover	No. Employees
Micro	up to J\$15 million	up to 5
Small	greater than \$15 million and up to J\$75 million	6 to 20
Medium	greater than J\$75 million and up to J\$425 million	21 to 50
MSME	up to J\$425 million	up to 50

²² Aggregated funding for this purpose means the gross amount of all forms of funding, including deposits or debt securities or similar derivative exposure for which the counterparty is known to be a micro, small, or medium enterprise 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 from this group of customers.

²³http://www.micaf.gov.jm/sites/default/files/pdfs/MSME%20and%20Entrepreneurship%20Policy%20Updated%202017_0.pdf

Treatment of MSME Term Deposits

72. Term deposits from MSME customers should be treated in accordance with the earlier described treatment for retail term deposits.

Operational Deposits Generated by Clearing, Custody, and Cash Management Activities: 25%

73. Some customers (financial and non-financial) place deposits with DTIs for the purposes of accessing and using the payments and settlement systems and otherwise make payments. The LCR applies a preferential run-off treatment to certain categories of deposits where a customer has a substantive dependency on the DTI to access the payments and settlement systems in order to facilitate its clearing, custody and cash management activities. This category of deposits is called operational deposits. Such deposits may, with the approval of the Supervisor, receive a 25% run-off factor, if they meet the qualifying criteria for clearing custody and cash management relationships outlined below, and are in the opinion of the Supervisor, qualifying operational deposits.
74. For the purposes of the LCR, the qualifying criteria for clearing, custody and cash management relationships are as follows:
- (a) The customer is reliant on the deposit-taking institution to perform these services as an independent third party intermediary in order to fulfil its normal deposit-taking activities over the next 30 days.
 - (b) These services must be provided under a legally binding agreement to institutional customers.
 - (c) 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.
75. In making a determination as to whether deposits are qualifying operational deposits, the Supervisor must be satisfied that the relevant deposits:
- (a) are by-products of the underlying services provided by the deposit-taking institution and not sought out in the wholesale market in the sole interest of offering interest income; and
 - (b) 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 are close to zero, it would be expected that such accounts are non-interest bearing. Deposit-taking institutions should be particularly aware that during prolonged periods of low interest rates, excess balances could be significant.
76. Any excess balances that could be withdrawn and would still leave enough funds to fulfil 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 according to the treatment for non-operational deposits.

77. If deposit-taking 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.
78. Deposit-taking 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 evaluate 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 such as 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.
79. For the purposes of calculating inflows under **Section 6.2** below, 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.
80. Notwithstanding these operational categories, if the deposit under consideration arises out of correspondent banking²⁴ or from the provision of prime brokerage services²⁵, it is ascribed a 100% run-off factor per the treatment for “Unsecured Wholesale Funding provided by other legal entity customers”.
81. The following paragraphs describe circumstances that could constitute clearing, custody and cash management relationships for the purposes of the LCR. However, licensees 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.

(i) Clearing Relationship

82. 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.

(ii) Custody Relationship

83. Custody relationship, in this context, means 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,

²⁴ 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.

²⁵ Prime brokerage means 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.

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.

(iii) Cash Management

84. Cash management services, in this context, means 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.
85. Notably, under the LCR, the portion of the operational deposits generated by clearing, custody, and cash management activities that is fully covered by deposit insurance may attract the same run-off treatment as "stable" retail deposits (i.e. a 5% run-off rate).

Unsecured Wholesale Funding provided by Non-Financial Corporates and Sovereigns, Central Banks, Multilateral Development Banks, and PSEs: 20% or 40%

86. This category comprises all deposits and other extensions of unsecured funding from non-financial corporate customers (that are not categorized as micro, small, and medium enterprise 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 entire amount of the deposit is covered by a qualifying deposit insurance scheme or by a public guarantee, in which case a run-off factor of 20% may be applied.

Unsecured Wholesale Funding provided by Other Legal Entity Customers: 100%

87. This category consists of all deposits and other funding from other institutions (including financial institutions, securities firms, insurance companies), fiduciaries²⁶, beneficiaries, conduits and special purpose vehicles, affiliated entities of the financial institution and other entities that are not specifically held for operational purposes and not included in the prior three categories. The run-off factor for these funds is 100%.
88. All notes, bonds and other debt securities issued by the financial institution are included in this category regardless of the holder, unless the bond is sold exclusively in the retail market and held in retail accounts (including MSME customer accounts treated as retail), in which case the instruments can be treated as per the appropriate retail or MSME customer deposit category. To be treated in this manner, it is not sufficient that the debt instruments are specifically designed and marketed to retail or MSME customers. Rather, there should be limitations placed such that those instruments cannot be bought and held by parties other than retail or MSME customers.

²⁶ Fiduciary, in this context, means a legal entity that is authorized to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles.

89. Customer cash balances arising from the provision of prime brokerage services, including but not limited to the cash arising from prime brokerage services, 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 for these purposes. These offsetting balances held in segregated accounts are treated as (other wholesale) inflows and should be excluded from the stock of HQLAs.

6.1.3 Secured Funding run-off

90. For the purposes of the LCR, secured funding includes those liabilities and general obligations that are collateralized by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation, or resolution. Secured funding transactions or borrowing backed by collateral maturing within the 30 calendar-day period may give rise to cash outflows during the LCR stress period. This section outlines the treatment of cash outflows from such transactions for the purposes of the LCR.
91. In this scenario, the ability to continue to transact repurchase, reverse repurchase and other securities financing transactions is limited to transactions backed by HQLAs. 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 financial institution's customers to effect short positions should be treated as a form of secured funding. Under the LCR, licensees should apply the following factors to all outstanding secured funding transactions with maturities within the 30 calendar-day LCR stress period, including customer short positions²⁷ 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.
92. Due to the high quality of Level 1 assets, no reduction in funding availability against these assets is assumed to occur, with the exception of Level 1 GOJ securities, for which a 25% reduction in funding availability is assumed for GOJ Benchmark Investment Notes and GOJ Treasury Bills, and a 60% reduction in funding availability is assumed for GOJ Global Bonds and Other GOJ Bonds, consistent with the haircut treatment ascribed of the purposes of computing the numerator — HQLAs.
93. A reduction in funding availability is assigned to maturing transactions backed by Level 2 assets equivalent to the haircuts applicable to items under that category.
94. For all other maturing transactions, the run-off factor is 100%, including transactions where a financial institution has satisfied customers' short positions with its own long inventory. The applicable standards are summarized in the following table.

²⁷ Customer short position, in this context, means a transaction where a financial institution's customer sells a security it does not own, and the financial institution subsequently obtains the same security from internal or external sources to make delivery into the sale. Internal sources include the financial institution's own inventory of collateral as well as re-hypothecatable collateral held in other customer margin accounts. External sources include collateral obtained through a securities borrowing, reverse repo, or like transaction.

Table 5: Secured Funding Outflow Rates

CATEGORIES FOR OUTSTANDING MATURING SECURED FUNDING TRANSACTIONS	AMOUNTS TO ADD TO CASH OUTFLOWS
Backed by Level 1 assets (except GOJ) or with central banks	0%
Backed by Level 1 GOJ Benchmark Investment Notes and GOJ Treasury Bills	25%
Backed by Level 1 GOJ Global Bonds or Other GOJ Bonds	60%
Backed by Level 2A assets	15%
Backed by Level 2B assets	50%
All others	100%

6.1.4 Contingent Funding Obligations

Drawdowns on Committed Credit and Liquidity Facilities

95. For the purposes of the LCR, credit and liquidity facilities only include contractually irrevocable (“committed”) or conditionally revocable agreements to extend funds in the future. Unconditionally revocable facilities (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 Obligations” outlined at **Section 6.1.4**. 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, under the LCR, all facilities that are assumed to be drawn will remain outstanding at the amounts assigned throughout the duration of the test, regardless of maturity.
96. Under the LCR, the currently undrawn portion of these facilities is calculated net of any assets eligible for the stock of HQLAs, if the HQLAs 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, if the financial institution is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn, and if 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 HQLAs, in line with the principle stipulating that items cannot be double-counted for the purposes of computing the LCR.
97. A liquidity facility is defined as any committed, undrawn back-up facility that would be utilized 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 purposes of the LCR, 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. General working capital facilities for corporate entities are not classified as liquidity facilities, but as credit facilities.

98. Notwithstanding the above, any facilities provided to hedge funds, money market funds and special purpose funding vehicles, or conduits, or other vehicles used to finance the financial institution's own assets, should be captured in their entirety in the category labelled "liquidity facilities to other legal entities".

Outflow Rates for Drawdowns on Committed Credit and Liquidity Facilities

99. Any contractual loan drawdowns from committed facilities, that is, those that are irrevocable, and estimated drawdowns from revocable facilities within the 30-day period should be fully reflected as outflows. The following drawdown rates apply to the undrawn portions of the facilities outlined below.
- (i) Committed credit and liquidity facilities to retail or micro, small, and medium sized enterprises (drawdown rate = 5%)
 - (ii) Committed credit facilities to non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks (drawdown rate = 10%)
 - (iii) Committed liquidity facilities to non-financial corporates, sovereigns and central banks, PSEs, and multilateral development banks (drawdown rate = 30%)
 - (iv) Committed credit and liquidity facilities extended to deposit-taking institutions subject to prudential supervision (drawdown rate = 40%)
 - (v) Committed credit facilities to other financial institutions including securities firms, insurance companies, fiduciaries, and beneficiaries (drawdown rate = 40%)
 - (vi) Committed liquidity facilities to other financial institutions including securities firms, insurance companies, fiduciaries, and beneficiaries (drawdown rate = 100%)
 - (vii) Committed credit and liquidity facilities to other legal entities, including SPEs²⁸, conduits and special purpose vehicles, and other entities not included in the prior categories) (drawdown rate = 100%)
100. It should be noted that under the LCR, any contractual lending obligations to financial institutions, within the 30-day period, not captured elsewhere in this standard, should be captured here at a 100% outflow rate.
101. For the purposes of the LCR, 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.

²⁸ Special purpose entity (SPE) means a corporation, trust, or other entity organized 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.

Treatment of Trade Finance Instruments (drawdown rate = 5%)

102. Under the LCR, contingent funding obligations stemming from trade finance instruments are ascribed a drawdown rate of 5%, where such instruments are directly underpinned by the movement of goods or the provision of services, such as:
- a) documentary trade letters of credit, documentary and clean collection, import bills, and export bills; and
 - b) guarantees directly related to trade finance obligations, such as shipping guarantees.

Treatment of Direct Import or Export Financing

103. Lending commitments, such as direct import or export financing for non-financial corporate firms, are excluded from the foregoing treatment for Trade Finance Instruments under the LCR, and licensees should apply the drawdown rates specified in Paragraph 99 regarding “Drawdowns on Committed Credit and Liquidity Facilities” under **Section 6.1.4**.

Other Contingent Funding Obligations

104. For the purposes of the LCR, other contingent funding obligations are ascribed drawdown rates as follows.
- (i) Unconditionally revocable (“uncommitted”) credit and liquidity facilities: (drawdown rate = 0%).
 - (ii) Non-contractual contingent funding obligations related to potential liquidity draws by unconsolidated joint ventures or minority investments in entities: (drawdown rate = 10% of investment value).
 - (iii) Guarantees and letters of credit unrelated to trade finance obligations: (drawdown rate = 10% of the amount of guarantees and letters of credit).
 - (iv) Non-Contractual Obligations such as:
 - Potential requests for debt repurchases of the financial institution’s own debt or that of related conduits, special investment vehicles, and other such financing facilities: (drawdown rate = 10% of the total outstanding amount).
 - Structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes: (drawdown rate = 10% of total outstanding amount).
 - Managed funds that are marketed with the objective of maintaining a stable value (e.g. money market mutual funds, other types of stable value collective investment funds, etc.): (drawdown rate = 10% of total outstanding amount).
 - (v) Non-contractual obligations where customer’s short positions are covered by other customers’ collateral, where the collateral does not qualify as Level 1 or Level 2 asset: (drawdown rate = 50% of the collateral amount used to cover customer’s short positions).
 - (vi) Outflow amount to cover potential repurchases of any outstanding debt securities (unsecured and secured, term as well as short-term) having maturities greater than 30 calendar days where the issuer has an affiliate that is a dealer or market maker: (drawdown rate = 10% of total outstanding amount).

6.1.5 Additional Outflows

105. Additional items under the LCR are ascribed the outflow factors outlined under the following categories.

Derivatives Cash Outflows (outflow rate =100%)

106. The sum of all net cash outflows relating to derivatives should receive a 100% factor. Licensees 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. Licensees 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 (as treated with in other categories below). Options should be assumed to be exercised when they are ‘in the money’ to the option buyer.
107. Where derivative payments are collateralized by HQLAs, 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 licensee, if the licensee 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 licensees should not double count liquidity inflows and outflows.

Increased Liquidity Needs Related to Downgrade Triggers Embedded in Financing Transactions, Derivatives and Other Contracts (outflow rate =100%)

108. The LCR ascribes an outflow rate of 100% to 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 financial institution’s downgrade by a designated ECAI. The scenario therefore requires that for each contract in which “downgrade triggers” exist, the financial 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 financial institution’s long-term credit rating. Triggers linked to a financial 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 re-hypothecation rights for non-segregated collateral.
109. In order to mitigate cliff effects that could arise if an eligible liquid asset became ineligible, a licensee is permitted to keep such assets in its stock of HQLAs for an additional 30 calendar days. This would allow the licensee additional time to adjust its stock as needed, including replacing the asset.

Increased Liquidity Needs Related to the Potential for Valuation Changes on Posted Collateral Securing Derivative and Other Transactions (outflow rate =20%)

110. The LCR ascribes an outflow factor of 20% to the value of non-Level 1 posted collateral.
111. 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 capital adequacy regulations applicable to licensees under the Banking Services Act. When these Level 1 liquid asset securities are posted as collateral, the framework does not require that an additional stock of HQLAs 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 re-hypothecation) is to be added to the stock of required HQLAs by the financial 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.

Increased Liquidity Needs Related to Excess Non-Segregated Collateral Held by the Financial Institution that could contractually be called at any time by the Counterparty (outflow rate = 100%)

112. The LCR ascribes an outflow factor of 100% to non-segregated collateral that could contractually be recalled by the counterparty because the collateral is in excess of the counterparty's current collateral requirements.

Increased Liquidity Needs Related to Contractually Required Collateral on Transactions for which the Counterparty has not yet demanded the Collateral be posted (outflow rate = 100%)

113. The LCR ascribes an outflow factor of 100% to collateral that is contractually due but where the counterparty has not yet demanded the posting of such collateral.

Increased Liquidity Needs Related to Contracts that allow Collateral Substitution to Non-HQLAs (outflow rate = 100%)

114. The LCR ascribes an outflow factor of 100% to the amount of HQLAs collateral that can be substituted for non-HQLAs assets without the financial institution's consent that have been received to secure transactions that have not been segregated.

Loss of Funding on Structured Financing Instruments (outflow rate = 100%)

115. The scenario assumes the outflow of 100% of the funding transaction maturing within the 30-day period, when these instruments are issued by the financial institution itself (as this assumes that the re-financing market will not exist). Financial institutions with 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 a financial institution are conducted through a special purpose entity (such as a special purpose vehicle, conduit or structured investment vehicle - SIV), the financial institution should, in determining the HQLAs 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.

Increased Liquidity Needs Related to Market Valuation Changes on Derivative or Other Transactions (outflow rate = 100%)

116. As market practice requires collateralization of mark-to-market exposures on derivative and other transactions, financial 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 realized during the preceding 24 months. The absolute net collateral flow is based on both realized outflows and inflows.

Other Contractual Outflows (outflow rate = 100%)

117. Any other contractual cash outflows within the next 30 calendar days (not captured under any other category of outflows) should be counted as outflows for the purposes of the LCR and reported separately. These outflow items may include outflows to cover unsecured collateral borrowings, uncovered short positions, dividends, or contractual interest payments.

6.2 Expected Cash Inflows

118. When considering its available cash inflows, a licensee should only include contractual inflows (including interest payments) from outstanding exposures that are fully performing²⁹ and for which the financial institution has no reason to expect a default within the 30 day time horizon. Contingent inflows are not included in total net cash inflows.
119. In adhering to the LCR, licensees are required to monitor the concentration of expected inflows across wholesale counterparties in the context of the licensee’s 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.

²⁹ The treatment of the concept of “fully performing” is consistent with similar terminology used in the context of Expected Credit Loss (ECL) provisioning methodologies.

Cap on Total Inflows

120. In order to prevent licensees from relying solely on anticipated inflows to meet their liquidity requirement, and also to ensure a minimum level of HQLAs 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 reporting institutions to maintain a minimum amount of stock of HQLAs equal to 25% of the total cash outflows.
121. Under the LCR, cash inflows are broken down into four broad categories:
- A. Secured Lending Inflows;
 - B. Inflows Relating to Committed Facilities;
 - C. Inflows from Specified Counterparties; and
 - D. Other Cash Inflows.
122. The cash inflow rates for the LCR are summarized in **Table 6**, and is explained in further detail below.

Table 6: Cash Inflow Rates

CASH INFLOWS	
A. Secured Lending Inflows	Inflow Rate
1. Maturing secured lending transactions backed by the following collateral:	
a) Level 1 assets, except GOJ securities	0%
b) Level 1 GOJ securities ³⁰	25% or 60%
c) Level 2A assets	15%
d) Level 2B assets	50%
e) Margin Lending backed by all other collateral	50%
2. All other assets	100%
B. Inflows Relating to Committed Facilities	0%
C. Inflows from Specified Counterparties	
1. Amounts to be received from retail counterparties, except from credit card facilities	50%
2. Amounts to be received from credit card facilities	5%
3. Amounts to be received from non-financial wholesale counterparties, from transactions other than those listed in above inflow categories	50%
4. Amounts to be received from financial institutions and central banks, from transactions other than those listed in above inflow categories.	100%
D. Other Cash Inflows	
1. Net derivative cash inflows	100%
2. Other contractual cash inflows	0%

123. The Supervisor may vary any inflow rate prescribed under the LCR.

³⁰ For secured lending transactions backed by GOJ that were assigned a 25% market valuation discount in HQLA, these transactions will receive a 25% inflow rate. Similarly, for secured lending transactions backed by GOJ securities that were assigned a 60% market valuation discount in HQLA, these transactions will receive a 60% inflow rate.

Secured Lending Inflows

124. A financial 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, therefore attracting an inflow rate of 0%. Maturing reverse repurchase or securities borrowing agreements secured by Level 2 HQLAs will lead to cash inflows equivalent to the relevant haircut for the specific assets. A financial institution is assumed not to rollover maturing reverse repurchase or securities borrowing agreements secured by non-HQLAs assets, and can assume to receive back 100% of the cash related to those agreements. Collateralized 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, financial institutions may recognize 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.
125. As an exception to the preceding paragraph, if the collateral obtained through reverse repo, securities borrowing, or collateral swaps, which matures within the 30 day horizon, is re-used (i.e. re-hypothecated) and is used to cover short positions that could be extended beyond 30 days, a financial institution should assume that such reverse repo or securities borrowing arrangements will be rolled-over and will not give rise to any cash inflows, therefore attracting an inflow rate of 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 financial institution sold short a security outright as part of a trading or hedging strategy and instances where the financial 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).
126. It should be noted that in the case of a financial institution’s short positions, if the short position is being covered by an unsecured security borrowing, the financial 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 HQLAs 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 **Section 6.1.5**. If, however, the financial institution’s short position is being covered by a collateralized securities financing transaction, the financial institution should assume the short position will be maintained throughout the 30 day period and receive a 0% outflow.
127. Despite the roll-over assumptions relating to ‘Secured Lending’ outlined above, a financial institution should manage its collateral such that it is able to fulfil obligations to return collateral whenever the counterparty decides not to roll-over any reverse repo or securities lending transaction. This is especially the case for non-HQLAs collateral, since such outflows are not captured in the LCR framework.
128. The inflow rates relating to secured lending transactions are summarized in the table below.

Table 7: Inflow Rates for Maturing Secured Lending Transactions

BACKED BY THE FOLLOWING ASSET CATEGORY	INFLOW RATE (IF COLLATERAL IS NOT USED TO COVER SHORT POSITIONS)	INFLOW RATE (IF COLLATERAL IS USED TO COVER SHORT POSITIONS)
Level 1 assets (except GOJ securities)	0%	0%
Level 1 GOJ Benchmark Investment Notes and GOJ Treasury Bills	25%	0%
Level 1 GOJ Global Bonds or other GOJ Bonds	60%	0%
Level 2A assets	15%	0%
Level 2B assets	50%	0%
Margin lending backed by all other collateral	50%	0%
Other collateral	100%	0%

Inflows Relating to Committed Facilities

129. No credit facilities, liquidity facilities or other contingent funding facilities that the financial 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 financial institution causing shortages at other financial institutions and to reflect the risk that other financial 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 financial institution.

Inflows from Specified Counterparties

130. For all other types of transactions, either secured or unsecured, the inflow rate is to be determined by counterparty. In order to reflect the need for a financial 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.
131. When considering loan payments, the financial 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 under **Section 6.1.4**.
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, if such payments are contractually due within 30 days. These minimum payment amounts should be captured as inflows at the rates prescribed in the two paragraphs below.

Inflows Relating to Credit Card Facilities

133. Under the LCR, it is assumed that licensees will generally receive at least the amount of the minimum repayment requirement on outstanding credit card facilities with retail and MSME customers. The LCR ascribes an inflow rate of 5% to capture these inflows.

Limitation on the Calculation of Inflows from Credit Card Facilities to Retail and MSME Customers

134. The limitation on inflows relating to credit card facilities is geared towards accounting for customers whose common repayment practice is to satisfy only the minimum repayment requirement on their credit cards. Taking account of repayment and drawdown behaviours associated with these credit card facilities, an inflow rate of 5% is applied to balances associated with credit card facilities in the calculation of cash inflows under the LCR.

Other Retail and MSME Customer Inflows

135. This scenario assumes that financial institutions will generally receive all payments (including interest payments and instalments) from other (non-credit card) credit extensions to retail and MSME customers that are fully performing and contractually due within a 30-day horizon. At the same time, however, financial institutions are assumed to continue to extend loans to retail and MSME business customers, at a rate of 50% of contractual inflows. This results in a net inflow number of 50% of the contractual amount.

Other Wholesale Inflows

136. This scenario assumes that financial institutions will receive all payments (including interest payments and instalments) from wholesale customers that are fully performing and contractually due within the 30-day horizon. In addition, financial 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 results in inflow rates of:
- i. 100% for financial institution and central bank counterparties; and
 - ii. 50% for non-financial wholesale counterparties.
137. Inflows from securities maturing within 30 days not included in the stock of HQLAs should be treated in the same category as inflows from financial institutions (i.e. 100% inflow). Financial institutions may also recognize 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, if these segregated balances are maintained in HQLAs. This inflow should be calculated in line with the treatment of other related outflows and inflows covered in this document. 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 for HQLAs.
138. Deposits held at other financial institutions for operational purposes, such as those stemming from relationships described earlier under the category of outflows relating to clearing, custody, and cash management activities, are assumed to stay at those

institutions, and no inflows can be counted for these funds – i.e. they receive a 0% inflow rate.

Other Cash Inflows

139. The sum of all net cash inflows relating to derivatives should receive a 100% inflow factor. The amounts of derivatives cash inflows and outflows should be calculated in accordance with the methodology described under “Derivatives Cash Outflows” at **Section 6.1.5**.
140. Where derivatives are collateralized by HQLAs, 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 financial institution, given these contractual obligations would reduce the stock of HQLAs. This is in accordance with the principle that licensees should not double-count liquidity inflows or outflows.
141. It should be noted that cash inflows related to non-financial revenues are not taken into account in the calculation of the net cash outflows for the purposes of the LCR.
142. Under the LCR, all other contractual cash inflows not included elsewhere in this document are ascribed a cash inflow rate of 0%.

SECTION 7: REPORTING REQUIREMENTS

143. This section outlines general requirements for licensees with respect to the reporting of their various LCR positions at the consolidated and standalone bases.
144. Licensees must meet the overall minimum LCR requirement in Jamaican dollars on an ongoing basis. This means that the sum of:
 - (i) HQLAs denominated in Jamaican dollars; and
 - (ii) HQLAs denominated in foreign currencies (converted to Jamaican dollars),must at least be equivalent to the aggregate of net cash outflows in all currencies.
145. Licensees are expected to be able to meet the 100% LCR requirement in each significant currency, where a significant currency is defined as one that comprises at least 5% of a DTI’s total liabilities or at least 5% of an FHC’s total consolidated liabilities, and maintain HQLAs consistent with the distribution of their liquidity needs by currency. For amounts in currencies not deemed significant, the amounts are required to be converted into Jamaican dollars and reported in a residual currency category.
146. The monitoring and reporting of LCR in significant currencies is required for the purposes of tracking potential currency mismatch issues that could arise in a time of stress. There is no internationally defined minimum foreign currency LCR threshold. However, under this standard, licensees are required to adhere to the 100% minimum threshold for the Jamaican currency LCR (i.e. Jamaican dollar denominated HQLAs held against Jamaican dollar denominated net cash outflows).

147. Expressed as a formula, the minimum LCR requirement for each significant currency in the LCR is:

$$\frac{\text{Stock of HQLAs in each significant currency}}{\text{Total net cash outflows over the next 30 calendar days in each significant currency}^{31}} \geq 100\%$$

148. For the purposes of the LCR, funds that are necessary to fulfil the day-to-day operational needs of the licensee, including salaries and benefits, information technology, marketing, taxes, and other operating expenses, should be excluded from calculation of the stock of HQLAs.
149. Licensees would be required under the LCR to notify the Supervisor immediately if their domestic or foreign currency LCR has fallen, or is expected to fall, below 100%, with their report explaining the following:
- a) Factors leading to LCR falling below or the expectation thereof;
 - b) Remedial measures to restore LCR position; and
 - c) Expected duration of LCR falling below 100%.
150. Upon the passage of the LCR Supervisory Rules, licensees will be required to report their LCR positions no later than seven (7) business days after the end of each month pursuant to section 82(2) of the Banking Services Act. However, for the duration of the transition period as mentioned in Paragraph 5, the Bank will allow licensees 15 days after the end of each month to report their LCR positions.

Calculating Total Net Cash Outflows with a Maturity Mismatch Add-on

151. The calculation of total net cash outflows using the add-on approach, the denominator of the LCR, involves two steps. The first step is to take the total net cash outflows arising over the 30-calendar day stress period, with inflows capped at 75% of outflows. The second step is to apply a maturity mismatch add-on. The maturity mismatch add-on identifies the day when the difference between cumulative cash outflows and cumulative cash inflows is the largest.
152. The add-on approach takes into account potential maturity mismatches between a financial institution's outflows and inflows during the 30 calendar day period. That is, the risk that a financial institution could have a substantial amount of contractual inflows that occur late in a 30 calendar day period while also having substantial outflows occurring early in the same period. Such maturity mismatches have the potential to threaten the liquidity position of the organization during a time of stress. The add-on has the potential effect of requiring licensees to hold a greater stock of HQLAs to cover a potential maturity mismatch. The intention of this requirement is to ensure that licensees always maintain sufficient HQLAs to deal with the risk of maturity mismatches. By requiring the recognition of the day within the 30 calendar day period when the difference between cumulative cash outflows and cumulative cash inflows is the largest, the add-on approach aims to more effectively account for a licensee's liquidity risk and foster more sound liquidity risk management.

³¹ The denominator is calculated as total net cash outflows over the next 30 calendar days, in each significant foreign currency, plus the maturity mismatch add-on as in paragraphs 151-154, and Appendix 1.

153. The categories of inflows and outflows that are the focus of the add-on calculation are those categories possessing characteristics that expose financial institutions to potential maturity mismatches within the 30 calendar day period, such as repurchase agreements and reverse repurchase agreements with financial sector entities. The calculation does not assume that all transactions and instruments that do not have a contractual maturity date have an outflow amount on the first day of the 30 calendar day period. Therefore, outflows such as non-maturity retail deposits are not a part of the add-on calculation. However, the add-on calculation includes the non-maturity deposits that are not retail deposits and treats them as maturing on day 1 of the stress scenario. This approach avoids potential unintended consequences by eliminating the assumption that all non-maturity outflows occur on the first day of a 30 calendar day period while still achieving the underlying goal of recognizing maturity mismatches.
154. The categories of non-maturity outflows included in the add-on calculation comprise only those that are treated as having a contractual maturity date on the day after the calculation date (i.e. day 1 of the 30 calendar day stress scenario).

Appendix 1: Illustrative Example — Calculation of Total Net Cash Outflows with a Maturity Mismatch Add-On

1. For the purposes of the LCR, the add-on approach, which involves two steps, is used to calculate total net cash outflows for licensees. The first step involves calculating net aggregated outflows by netting the aggregated cash outflows and aggregated cash inflows over the 30-day period, mirroring the net cash outflows calculation from the Basel III LCR.
2. In the example below, the first step is calculated by Column (1) + Column (2) minus the lower of 75% of Column (1) + Column (2) and Column (4) + Column (5). That is, Net Cash Outflows = $250 + 715 - \text{MIN}(0.75 * (250 + 715), 100 + 845) = 241.25$.
3. The maturity mismatch add-on, however, expands on the approach in the Basel III LCR in the second step. The second step in the example below involves calculating the maturity mismatch add-on, which identifies the highest single-day maturity mismatch within the 30 calendar day period. This is done by calculating the daily difference in cumulative cash outflows and cash inflows that have maturity dates within the 30 calendar day period (Column 3 and Column 6). The day with the highest difference is the net cumulative peak day. That is, Net cumulative peak day = $120 - 80 = 40$.
4. Next, calculate the difference between the cumulative peak day and the net cumulative outflow amount on the final day of the 30 calendar day period for those same outflow and inflow categories (i.e. Column 3 and Column 6). The difference is the maturity mismatch add-on.
5. The net cumulative outflow amount on the final day of the 30 calendar day period is Column 3 minus Column 6 on day 30 = $715 - 845 = -130$.
6. In calculating the add-on, both the net cumulative peak day amount and the net cumulative outflow amount on the last day of the 30 calendar day period cannot be less than zero. Therefore, the higher of 40 and 0, minus the higher of 0 and -130, is the add-on, which in this instance is $40 - 0 = 40$.

Illustrative Example of Total Net Cash Outflow Calculation with a Maturity Mismatch Add-On

0	1	2	3	4	5	6	7
Day	Non-maturity outflows	Cash outflows with contractual maturity and open maturity outflows	Cumulative cash outflows (from column 2)	Non-maturity inflows ³²	Cash inflows with contractual maturity and open maturity inflows	Cumulative cash inflows (from column 5)	Net ³³ cumulative maturity outflows
Day 1		80	80		50	50	30
Day 2		40	120		30	80	40
Day 3		10	130		70	150	20
Day 4		30	160		10	160	0
Day 5		0	160		0	160	0
Day 6		10	170		5	165	5
Day 7		25	195		15	180	15
Day 8		5	200		10	190	10
Day 9		35	235		25	215	20
Day 10		10	245		35	250	-5
Day 11		40	285		55	305	-20
Day 12		20	305		90	395	-90
Day 13		80	385		20	415	-30
Day 14		10	395		10	425	-30
Day 15		10	405		25	450	-35
Day 16		15	420		25	475	-55
Day 17		25	445		20	495	-50
Day 18		30	475		10	505	-30
Day 19		15	490		35	540	-50
Day 20		25	515		30	570	-55
Day 21		20	535		60	630	-95
Day 22		15	550		15	645	-95
Day 23		10	560		20	665	-105
Day 24		5	565		10	675	-110
Day 25		0	565		20	695	-130
Day 26		50	615		30	725	-110
Day 27		40	655		60	785	-130
Day 28		15	670		10	795	-135
Day 29		10	680		5	800	-120
Day 30		35	715		45	845	-130
Total	250	715		100	845		

Total Net Cash Outflows = Aggregated Cash Outflows – MIN [0.75 * Aggregated Cash Outflows, Aggregated Cash Inflows] + Maturity Mismatch Add-On

$$= \text{Column 1 and Column 2} - \text{MIN} [0.75 * (\text{Column 1} + \text{Column 2}), (\text{Column 4} + \text{Column 5})] + [(\text{MAX}(0, \text{highest value in Column 7}) - \text{MAX}(0, \text{value in Column 7 on day 30}))^{34}$$

$$= 250 + 715 - \text{MIN}(0.75 * (250 + 715), 100 + 845) + [\text{MAX}(0, 40) - \text{MAX}(0, -130)]$$

$$= 965 - 723.75 + (40 - 0)$$

Total Net Cash Outflows = 241.25 + 40 = 281.25

³² The securities cash inflow amount as of the calculation date includes 100 percent of all contractual payments due to the financial institution on securities it owns that are not eligible HQLA.

³³ Net cumulative maturity outflows equal cumulative cash outflows minus cumulative cash inflows.

³⁴ The maturity mismatch add-on is the portion $[(\text{MAX}(0, \text{highest value in Column 7}) - \text{MAX}(0, \text{value in Column 7 on day 30}))]$.

Appendix 2: Designated External Credit Assessment Institutions

The designated External Credit Assessment Institutions are as follows:

1. CariCRIS;
2. Fitch Ratings;
3. Moody's Investors Services; and
4. Standard & Poor's