Date: 11 December 2024

NOTICE NO. BU/N-1/2024/77
NOTICE NO. BU/N-1/2024/78

Annex 1: Liquidity Coverage Ratio Framework

Contents

PART A: OVERVIEW 3

A1: CALCULATION 3

A2: APPLICATION 4

PART B: HIGH-QUALITY LIQUID ASSET 5

B1: DEFINITION OF HIGH-QUALITY LIQUID ASSET 5

B2: COMPOSITION OF HQLA 5

B3: ELIGIBLE HQLA 6

B4: DIVERSIFICATION OF HQLA 11

B5: OPERATIONAL REQUIREMENTS 11

PART C: EXPECTED CASH OUTFLOWS 16

C1: DEFINITION OF TOTAL NET CASH OUTFLOWS 16

C2: RETAIL DEPOSIT RUN-OFF 16

C3: UNSECURED WHOLESALE FUNDING RUN-OFF 19

C4: SECURED FUNDING RUN-OFF 24

C5: ADDITIONAL REQUIREMENTS 25

PART D: EXPECTED CASH INFLOWS 33

D1: CASH INFLOWS 33

D2: SECURED LENDING / FINANCING INCLUDING REVERSE REPOS AND SECURITIES BORROWING TRANSACTIONS 33

D3: COMMITTED FACILITIES 35

D4: OTHER INFLOWS BY COUNTERPARTY 35

D5: OTHER CASH INFLOWS 37

APPENDIX 1: CHARACTERISTICS OF HQLA 38

APPENDIX 2: CALCULATION OF THE CAP ON LEVEL 2 ASSETS WITH REGARD TO SHORT-TERM SECURITIES FINANCING TRANSACTIONS 40

APPENDIX 3: ILLUSTRATIVE SUMMARY OF THE LCR 42

PART A: OVERVIEW

1. Liquidity Coverage Ratio (LCR) is aimed to promote the short-term resilience of the liquidity risk profile of banks by ensuring that they have sufficient high-quality liquid assets (HQLA) to survive a significant stress scenario lasting 30 calendar days.

A1: CALCULATION

2. The LCR has two components:

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

(a) value of the stock of HQLA in stressed conditions as outlined in Part B; and
(b) total net cash outflows, calculated according to the scenario parameters as outlined in Part C.

3. The total net cash outflows for the scenario are to be calculated for 30 calendar days into the future.

4. The standard requires that, in absence of financial stress, the value of the ratio be no lower than 100% (i.e. the stock of HQLA should at least equal to total net cash outflows) on an ongoing basis because the stock of unencumbered HQLA is intended to serve as a defence against the potential onset of liquidity stress.

5. The scenario for this standard entails a combined idiosyncratic and market-wide shock that would result in:

(a) the run-off of a proportion of retail deposits;

(b) a partial loss of unsecured wholesale funding;

(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 bank's public credit rating by up to and including three notches, including collateral posting requirements;

(e) increases in market volatilities that impact the quality of collateral or potential future exposure of derivative positions and thus require larger collateral haircuts or additional collateral, or lead to other liquidity needs;

(f) unscheduled draws on committed but unused credit and liquidity facilities that the bank has provided to its clients; and

(g) the potential need for the bank to buy back debt or honour non-contractual obligations in the interest of mitigating reputational risk.

A2: APPLICATION

6. A bank shall **comply with the requirements in this document at the entity level ("Solo"),** referring to the operations of the bank in Brunei Darussalam on a stand-alone basis.

7. Nevertheless, a bank is encouraged to monitor the LCR at **consolidated level ("Group"),** which includes entities covered under the entity level requirement, and the consolidation of all branches and subsidiaries, except insurance and/or takaful subsidiaries. When applying LCR at the Group Level, the computations should take into account of the following factors:-

(a) The LCR for branches and subsidiaries outside Brunei Darussalam should be as per requirements in this Framework applied to all legal entities being consolidated except for the treatment of retail/small business deposits that should follow the relevant parameters adopted in host jurisdictions in which the bank operates.

(b) In cases of restrictions or reasonable doubt about the capability of bank licensees in Brunei Darussalam with foreign branches and subsidiaries to transfer surplus liquidity from these branches and subsidiaries to the parent entity, the banks should exclude this surplus liquidity from the calculation of the LCR on a consolidated basis.

(c) No excess liquidity should be recognized by a bank with overseas branch operation in its consolidated LCR. Thus, the eligible HQLA held by a legal entity being consolidated to meet its local LCR requirements (where applicable) can be included in the consolidated LCR to the extent that such HQLA are used to cover the total net cash outflows of that overseas branch. Any surplus at the legal entity level can only be included in the consolidated stock if the assets would also be freely available to the consolidated (parent) entity in times of stress.

PART B: HIGH-QUALITY LIQUID ASSET

B1: DEFINITION OF HIGH-QUALITY LIQUID ASSET

8. The numerator of the LCR is the stock of high-quality liquid assets (HQLA). Under this framework, banks must hold a stock of unencumbered HQLA to cover the total net cash outflows over a 30-day period under the stress scenario prescribed in Part A1.

9. Assets are considered to be HQLA if they can be easily and immediately converted into cash at little or no loss of value.

10. The stock of HQLA should comprise assets with the characteristics outlined in **Appendix 1**.

B2: COMPOSITION OF HQLA

11. The amount of HQLA held to meet the LCR shall be subject to the following caps:

Item	Asset	Cap
(a)	Level 1	Level 1 HQLA can be unlimited
(b)	Level 2A and 2B	In aggregate, no more than 40% of total HQLA held
(c)	Level 2B	No more than 15% of total HQLA held

12. The calculation of the 40% aggregate caps for Level 2A and 2B, and 15% cap for Level 2B by a bank shall be determined after the application of the required haircuts, and assuming the unwinding of all short-term securities financing transactions[1] maturing within 30 calendar days that involve the exchange of HQLA. In this context, short-term transactions shall refer to transactions with a maturity date up to and including 30 calendar days.

13. For paragraph 12, the details of the calculation methodology[2] are provided in **Appendix 2**.

14. If an asset no longer qualifies as HQLA[3], a bank is permitted to keep such liquid assets as HQLA for an additional 30 days. This would allow the bank additional time to adjust its HQLA as needed or replace the liquid asset.

[1] These include repo, securities borrowing and lending and collateral swap transactions
[2] Kindly note that the BDCB LCR reporting template has automatic built-in computation for this matter
[3] A bank may apply to the Authority for such approval with evidence supporting the less conservative treatment

B3: ELIGIBLE HQLA

15. Assets to be included in the stock of HQLA shall comprise only Level 1, Level 2A and Level 2B assets which are defined in the paragraphs 16 to 21 as summarised in **Appendix 3**.

<u>Level 1 HQLA</u>

16. Level 1 assets comprise of an unlimited share of the total pool and are not subject to haircuts.

17. Level 1 assets are limited to:

    (a) coins and bank notes;

    (b) Sukuk or debt securities issued by or on behalf of BDCB or Brunei Darussalam Government;

    (c) central bank reserves (including required reserves)[4], to the extent that the central bank policies allow them to be drawn down in times of stress;

    (d) marketable securities / Sukuk representing claims on or guaranteed by sovereigns, central banks, PSEs, the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Community, the European Stability Mechanism, the European Financial Stability Facility or multilateral development banks[5], and satisfying all of the following conditions:

        i. assigned a 0% risk weight under the standardised approach to credit risk as specified in paragraphs 30 to 37 of BDCB Capital Adequacy Framework;

        ii. traded in large, deep and active repo[6] or cash markets, characterised by a low level of concentration;

        iii. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions; and

---

[4] In this context, central bank reserves would include banks' overnight deposits with the central bank, and term deposits with the central bank: (i) that are explicitly and contractually repayable on notice from the depositing bank; or (ii) that constitute a loan / financing against which the bank can borrow on a term basis or on an overnight but automatically renewable basis (only where the bank has an existing deposit with the relevant central bank). Other term deposits with central banks are not eligible for the stock of HQLA; however, if the term expires within 30 days, the term deposit could be considered as an inflow per paragraph 122.

In Brunei Darussalam context, qualifying central bank reserves include balances with BDCB and Minimum Cash Balances (MCB) maintained for the purpose of Section 45 of the Banking Order, 2006 and Islamic Banking Order, 2008.

[5] The Basel III liquidity framework follows the categorisation of market participants applied in BDCB Capital Adequacy Framework, unless otherwise specified.

[6] Any reference to repo or repos in this document shall include all Shariah-compliant alternatives to repo such as Sell and Buy Back Agreement and Collateralised Murabahah instruments.

iv. not an obligation of a financial institution or any of its affiliated entities.

(e) where the sovereign has a non-0% risk weight, sovereign or central bank debt securities / Sukuk issued in domestic currencies by the sovereign or central bank in the country in which the liquidity risk is being taken or in the bank's home country; and

(f) where the sovereign has a non-0% risk weight, domestic sovereign or central bank debt securities / Sukuk issued in foreign currencies are eligible up to the amount of the bank's stressed net cash outflows in that specific foreign currency stemming from the bank's operations in the jurisdiction where the bank's liquidity risk is being taken.

Level 2A HQLA

18. A 15% haircut is applied to the current market value of each Level 2A asset held in the stock of HQLA.

19. Level 2A assets are limited to the following:

(a) Marketable securities / Sukuk representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks that satisfy all of the following conditions:

i. assigned a 20% risk weight as specified in paragraphs 30 to 37 of BDCB Capital Adequacy Framework;

ii. traded in large, deep and active repo or cash markets characterised by a low level of concentration;

iii. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions (i.e. maximum decline of price not exceeding 10% or increase in haircut not exceeding 10 percentage points over a 30-day period during a relevant period of significant liquidity stress); and

iv. not an obligation of a financial institution or any of its affiliated entities[7].

[7] This requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the bank also qualifies as a PSE under paragraph 33 to 35 of BDCB Capital Adequacy Framework where securities issued by the bank could qualify for Level 1 assets if all necessary conditions are satisfied.

(b) Corporate debt securities (including commercial paper)[8] / Sukuk and covered bonds[9] / Sukuk that satisfy all the following conditions:

i. in the case of corporate debt securities / Sukuk: not issued by a financial institution or any of its affiliated entities;

ii. in the case of covered bonds / Sukuk: not issued by the bank itself or any of its affiliated entities;

iii. have a long-term credit rating from a recognised 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;

iv. traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

v. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions: i.e. maximum decline of price or increase in haircut over a 30-day period during a relevant period of significant liquidity stress not exceeding 10%.

<u>Level 2B HQLA</u>

20. A larger haircut is applied to the current market value of each Level 2B asset held in the stock of HQLA.

21. Level 2B assets are limited to the following:

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

i. not issued by, and the underlying assets have not been originated by, the bank itself or any of its affiliated entities;

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

[9] Covered bonds are bonds issued and owned by a bank or mortgage institution and are subject by law to special public supervision designed to protect bondholders. Proceeds deriving from the issue of these bonds must be invested in conformity with the law in assets which, during the whole period of the validity of the bonds, are capable of covering claims attached to the bonds and which, in the event of the failure of the issuer, would be used on a priority basis for the reimbursement of the principal and payment of the accrued interest. As such, covered bonds may only be recognized under this framework if they are issued in jurisdictions where enabling legislation for the issuance and recognition of covered bonds is in place. Additionally, these covered bonds must be recognized by the respective banking supervisor as eligible for liquidity purposes under the LCR framework.

ii. have a long-term credit rating from a recognised ECAI of AA or higher, or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating;

iii. traded in large, deep and active repo or cash markets characterised by a low level of concentration;

iv. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress;

v. the underlying asset pools are restricted to residential mortgages and cannot contain structured products;

vi. the underlying mortgages are "full recourse" loans/financing (i.e. in the case of foreclosure the mortgage owner remains liable for any shortfall in sales proceeds from the property) and have a maximum loan/financing-to-value ratio (LTV or FTV) of 80% on average at issuance; and

vii. the securitisations are subject to "risk retention" regulations which require issuers to retain an interest in the assets they securitise.

(b) Corporate debt securities (including commercial paper)[10] / Sukuk that satisfy all of the following conditions may be included in Level 2B, subject to a 50% haircut:

i. not issued by a financial institution or any of its affiliated entities[11];

ii. have a long-term credit rating from a recognised ECAI of at least BBB- or in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or

iii. traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

---

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

[11] This requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the bank also qualifies as a PSE under CRE20 where securities issued by the bank could qualify for Level 1 assets if all necessary conditions are satisfied.

iv. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 20% or increase in haircut over a 30-day period not exceeding 20 percentage points during a relevant period of significant liquidity stress.

(c) Common equity shares that satisfy all of the following conditions may be included in Level 2B, subject to a 50% haircut:

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

ii. exchange-traded and centrally cleared;

iii. a constituent of major stock index (or indices) of the home jurisdiction where the liquidity risk is taken;

iv. denominated in the domestic currency of a bank's home jurisdiction or in the currency of the jurisdiction where a bank's liquidity risk is taken;

v. traded in large, deep and active repo or cash markets characterised by a low level of concentration; and

vi. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions, i.e. a maximum decline of price not exceeding 40% or increase in haircut over a 30-day period not exceeding 40 percentage points during a relevant period of significant liquidity stress.

(d) Marketable securities / Sukuk representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks that satisfy all of the following conditions:

i. It has a long-term credit rating from a recognised ECAI of at least BBB- or, in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or

ii. traded in large, deep and active repo or cash markets characterised by a low level of concentration;

iii. have a proven record as a reliable source of liquidity in the markets (through repo or outright sale) even during stressed market conditions (i.e. maximum decline of price or increase in haircut not exceeding 20 percentage points over a 30-day period during a relevant period of significant liquidity stress); and

iv. not an obligation of a financial institution or any of its affiliated entities[12].

B4: DIVERSIFICATION OF HQLA

22. The stock of HQLA should be well diversified within the asset classes themselves (except for Sukuk or debt securities issued by or on behalf of BDCB or Brunei Darussalam Government, central bank reserves, and cash).

23. A bank should have policies and limits in place in order to avoid concentration with respect to asset types, issue and issuer types, economic sector in which issuer participates, and currency (consistent with the distribution of net cash outflows by currency) within asset classes.

B5: OPERATIONAL REQUIREMENTS

24. A bank should ensure that it is able to immediately use the stock of HQLA as a source of contingent liquidity convertible into cash through outright sale or repo, to address funding gaps that may arise at any time within the 30-day stress period, with no restriction on the use of the liquidity generated.

Asset encumbrance

25. All assets in the stock must be unencumbered. "Unencumbered" means free of legal, regulatory, contractual or other restrictions on the ability of the bank to liquidate, sell, transfer or assign the asset. An asset in the stock must not be pledged (either explicitly or implicitly) to secure, collateralise or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries).

26. A bank should also assess whether an HQLA is encumbered based on the following factors:

(a) whether the monetisation of assets would directly conflict with its internal business or risk management strategy and policy (e.g. 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 to the bank in excess of internal limits);

(b) potential differences in financial market conventions in other jurisdictions, where applicable (e.g. settlement period, processing time, etc.) that may affect the timely monetisation of assets; and

[12] This requires that the holder of the security must not have recourse to the financial institution or any of the financial institution's affiliated entities. In practice, this means that securities, such as government-guaranteed issuance during the financial crisis, which remain liabilities of the financial institution, would not qualify for the stock of HQLA. The only exception is when the bank also qualifies as a PSE under paragraph 33 to 35 of BDCB Capital Adequacy Framework where securities issued by the bank could qualify for Level 1 assets if all necessary conditions are satisfied.

(c) whether the asset is internally designated to cover operational costs (e.g. rents and salaries).

27. Subject to paragraph 28, the following assets should be considered as unencumbered and should therefore be included in the bank's stock of HQLA:

(a) Assets received by a bank in reverse repo and securities financing transactions that have not been re-hypothecated, and are legally and contractually available for the bank's use;

(b) Assets received as collateral for derivatives transactions that are not segregated, and are legally and contractually available for the use or rehypothecation by the bank; and

(c) Assets that qualify for the stock of HQLA that have been pre-positioned or deposited with, or pledged to the central bank, or a PSE or a payment and settlement system[13], which have not been used to generate liquidity.

28. Where a bank has received an asset whereby the beneficial owner of that asset has the contractual right to withdraw the assets during the next 30 calendar days, such an asset should be excluded from the bank's stock of HQLA.

Monetising stocks of HQLA

29. A bank should periodically monetise a representative proportion of the assets in the stock through repo or outright sale, in order to test its access to the market, the effectiveness of its processes for monetisation, the availability of the assets, and to minimise the risk of negative signalling during a period of actual stress. This requirement for periodic monetisation may be satisfied by transactions carried out through a bank's normal course of business.

30. A bank should exclude from the stock those assets that, although meeting the definition of "unencumbered" specified in paragraph 25, the bank does not have the operational capability to monetise to meet outflows during the stress period. Operational capability to monetise assets requires having procedures and appropriate systems in place, including providing the function identified in paragraph 33 with access to all necessary information to execute monetisation of any asset at any time. Monetisation of the asset must be executable, from an operational perspective, in the standard settlement period for the asset class in the relevant jurisdiction.

[13] Including HQLA securities held in RTGS account, which have not been used to obtain liquidity.

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

Managing stocks of HQLA

32. A bank should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner. Specifically, it should have a policy in place that identifies legal entities, geographical locations, currencies and specific custodial or bank accounts where HQLA are held. In addition, the bank should determine whether any such assets should be excluded for operational reasons and therefore have the ability to determine the composition of its stock on a daily basis.

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

34. A bank is permitted to hedge the market risk associated with ownership of the stock of HQLA and still include the assets in the stock. If it chooses to hedge the market risk, the bank must 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).

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

36. A bank should actively manage its intraday liquidity positions and risks to meet payment and settlement obligations on a timely basis under both normal and stressed conditions and thus contribute to the smooth functioning of payment and settlement systems. Banks should be aware that the LCR stress scenario does not cover expected or unexpected intraday liquidity needs.

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

Transferability of assets

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

39. Qualifying HQLA that are held to meet statutory liquidity requirements at the legal entity or sub-consolidated level (where applicable) may only be included in the stock at the consolidated level to the extent that the related risks (as measured by the legal entity's or sub-consolidated group's net cash outflows in the LCR are also reflected in the consolidated LCR. Any surplus of HQLA held at the legal entity can only be included in the consolidated stock if those assets would also be freely available to the consolidated (parent) entity in times of stress

40. Where a bank maintains HQLA in its overseas branch to meet the liquidity requirements imposed by the host supervisory authority, the eligible stock of HQLA held by the overseas branch should be counted towards the stock of HQLA for purposes of computing the bank's entity and consolidated level LCR, up to the total net cash outflows for the branch.

41. Where a bank maintains HQLA in a subsidiary to meet the liquidity requirements imposed either by the bank or another supervisory authority of the subsidiary, the eligible stock of HQLA held by the subsidiary should be counted towards the stock of HQLA for purposes of computing the banking's consolidated level LCR, up to the total net cash outflows for the subsidiary.

42. In respect of paragraphs 40 and 41, a bank should recognise excess HQLA (e.g. assets held over and above the total net cash outflows of the branch or subsidiary) only if these assets are not:

    (a) subject to restrictions which impede the transferability of the HQLA and/or the liquidity generated from the HQLA between the bank and the branch or subsidiary (e.g. ring-fencing measures, non-convertibility of local currency, foreign exchange controls); and

    (b) encumbered based on the considerations set out in paragraphs 26 to 28 in this Section B5.

PART C: EXPECTED CASH OUTFLOWS

C1: DEFINITION OF TOTAL NET CASH OUTFLOWS

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

$$\begin{aligned}&\textit{Total net cash outflows over the next 30 days}\\&= \textit{Total expected cash outflows} - \min\left(\textit{Total expected cash inflows}, 75\%\ \textit{of total expected cash outflows}\right)\end{aligned}$$

(a) 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.

(b) Total expected cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in under the scenario up to an aggregate cap of 75% of total expected cash outflows.

C2: RETAIL DEPOSIT RUN-OFF

44. Retail deposits are defined as deposits placed with a bank by a natural person. Retail deposits subject to LCR include demand deposits and retail term deposits, unless otherwise excluded under the criteria set out in paragraphs 54 and 55.

45. These retail deposits are divided into "stable" and "less stable" portions of funds as described below, with minimum run-off rates listed for each category.

Stable deposits

46. Stable deposits are subject to a run-off rate of 5%[14].

[14] This may change to 3% when the insurance scheme meets the additional criteria of (i) the insurance scheme is based on a system of prefunding via the periodic collection of levies on banks with insured deposits; (ii) the scheme has adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, e.g. an explicit and legally binding guarantee from the government, or a standing authority to borrow from the government; and (iii) access to insured deposits is available to depositors no more than 7 business days once the deposit insurance scheme is triggered.

47. Stable deposits are the amount of the deposits that are fully insured[15] by an effective deposit insurance scheme or by a public guarantee[16] that provides equivalent protection and fulfil either one of the following criteria:

    (a) the depositors have other established relationships with the bank that make deposit withdrawal highly unlikely; or

    (b) the deposits are in transactional accounts which refer to accounts which are regularly credited or debited (e.g. accounts where salaries are automatically deposited).

48. An established relationship is deemed to exist between the depositor and the bank, if:

    (a) The depositor has an active contractual relationship with the bank of at least 12 months duration or will be contractually bound to the bank for the next 12 months;

    (b) The depositor has a borrowing / financing relationship with the bank for residential loans / financing or other long-term loans / financing; or

    (c) depositor has a minimum number of active products, other than loans / financing, with the bank.

49. With respect to paragraph 47, an effective deposit insurance scheme[17] refers to a scheme which fulfils the following criteria:

    (a) the scheme guarantees that it has the ability to make prompt payouts;

    (b) the coverage of the scheme is clearly defined;

    (c) public awareness of the scheme is high; and

    (d) in which the deposit insurer has formal legal powers to fulfil its mandate and is operationally independent, transparent and accountable.

50. For the avoidance of doubt, all deposits protected by the Brunei Darussalam Deposit Protection Corporation (BDPC) shall be deemed as deposits insured by an effective deposit insurance scheme.

---

[15] Fully insured" means that 100% of the deposit amount, up to the deposit insurance limit, is covered by an effective deposit insurance scheme. Deposit balances up to the deposit insurance limit may 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 must be treated as "less stable".

[16] This refers to an explicit public guarantee with a clearly defined coverage. For the avoidance of doubt, a public guarantee which is recognised by a host jurisdiction as equivalent to an effective deposit insurance scheme for the purpose of compliance with LCR requirements shall be deemed to have fulfilled the criteria specified in paragraph 8. In respect of deposits in Brunei Darussalam, public guarantee shall refer only to an explicit guarantee by the Government of Brunei Darussalam.

[17] Generally, an effective deposit insurance scheme should conform to core principles for effective deposit insurance systems set out by the International Association of Deposit Insurers.

51. A bank shall have an internal methodology in determining the regularity of crediting or debiting for purposes of classifying a deposit account as a transactional account as provided under paragraph 47(b).

Less Stable deposits

52. A bank shall categorise retail deposits which do not meet the criteria set out in paragraphs 46 and 47 as less stable deposits and shall assign a run-off rate of 10% to such deposits. These retail deposits shall include any amounts in excess of the maximum coverage limit by the deposit insurance scheme.

53. Foreign currency deposits should be considered as “less stable” if there is a reason to believe that such deposits are more volatile than domestic currency deposits.

Retail Term Deposits

54. A bank shall exclude the cash outflow from all qualifying retail term deposit with a residual maturity or withdrawal notice period of greater than 30 days, and which meet one of the following criteria:

    (a) depositor has no legal right[18] to withdraw the deposits within the next 30 calendar days; or

    (b) withdrawal prior to contractual maturity results in a penalty or waiver of profit amounting to at least the full amount of accrued interest or profit[19].

55. If a bank allows a depositor to withdraw such deposits without applying the corresponding penalty or waiver of profit despite a clause that says the depositor has no legal right to withdraw, the entire category of these funds must be treated as demand deposits (i.e. regardless of the remaining term, the entire category of such deposits would then have to be treated as either stable or less stable deposits depending on their fulfilment of the criteria in paragraphs 46 to 53).

56. Where a bank has a branch or subsidiary in other jurisdictions carrying on banking business, the bank shall apply the cash flow rates outlined in this framework when it calculates its LCR except for deposits from retail and small business customers where the bank shall follow

[18] This shall include deposits which are pledged by depositors (whereby a lien is created on the deposits) to secure a credit/financing facility from the bank.

[19] If a portion of the term deposit can be withdrawn without incurring such a penalty or waiver of profit, that portion must be treated as a demand deposit. Only the remaining balance of the deposit should be treated as a term deposit and excluded from total expected cash outflows.

the relevant treatment adopted in the host jurisdiction where the branch or subsidiary operates.

C3: UNSECURED WHOLESALE FUNDING RUN-OFF

57. "Unsecured wholesale funding" is defined as those liabilities and general obligations that are raised from non-natural persons[20] and are not collateralised by legal rights to specifically designated assets owned by the borrowing bank in the case of bankruptcy, insolvency, liquidation or resolution. Liabilities and obligations related to derivative contracts are excluded from this definition.

58. The wholesale funding included in the LCR is defined as:

    (a) 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 / Sukuk); and

    (b) funding with an undetermined maturity.

59. A bank shall exclude all qualifying wholesale term funding from the calculation of its expected cash outflows. Qualifying wholesale term funding shall refer to unsecured wholesale funding with a residual maturity or redemption or withdrawal notice period of greater than 30 days, and meeting one of the following criteria:

    (a) funds provider has no legal right[21] to call, redeem or withdraw the funds within the next 30 calendar days; or

    (b) where the funding is a deposit, withdrawal prior to contractual maturity results in a penalty or waiver of profit amounting to at least the full amount of accrued interest or profit[22].

<u>Unsecured wholesale funding provided by small business customers</u>

60. Small business customers shall refer to:

    (a) sole proprietorships, partnerships and or small and medium-sized enterprises; and

[20] legal entities, including sole proprietorships and partnerships

[21] This shall include deposits which are pledged by depositors (whereby a lien is created on the deposits) to secure a credit facility from the banking institution

[22] If a portion of the term deposit can be withdrawn without incurring such a penalty or waiver of profit, that portion shall be treated as a demand deposit and included in the calculation of total expected cash outflows. Only the remaining balance of the deposit may be treated as a term deposit and excluded from total expected cash outflows.

(b) non-individual customers for whom total aggregate[23] funding raised from the customer is less than BND1 million (on a consolidated basis[24], where applicable) and where deposits from the customer are managed as retail deposits in the bank's internal risk management systems consistently over time, and not individually managed like large corporate deposits.

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

62. Term deposits from small business customers shall be treated in accordance with the treatment for term retail deposits as outlined in paragraphs 54 and 55.

Operational deposits generated by clearing, custody and cash management activities:

63. Operational deposits shall refer to deposits placed by financial or non-financial customers with a bank arising from qualifying activities, namely clearing, custody or cash management activities (defined in paragraphs 67 to 69) that meet the criteria set out in paragraphs 64 to 66.

64. A bank shall assign a run-off rate of 25% to operational deposits. A bank shall apply a run-off rate of 5% on the portion of operational deposits which is fully covered by an effective deposit insurance scheme as referred to in paragraphs 46 and 47. To ensure that the bank utilising this treatment is conducting the clearing, custody and cash management activities at the level indicated, the bank shall obtain the approval of the Authority to utilise the cash outflow rates set out in this paragraph.

65. To qualify for the treatment of operational deposits, a bank should satisfy itself that the customers of qualifying activities are reliant on the bank as an independent third party to perform the activities over the next 30 days, based on the depth of relationship (e.g. length of relationship, other products and services provided, geographical coverage of services, other relationships with the customer's affiliates) as well as the materiality and frequency of transactions processed for the customer. In addition, the bank must ensure that either one of the following criteria are met:

(a) qualifying activities must be provided under a legally binding agreement whereby the termination of such agreements shall be subject to a notice period of at least 30 days; or

[23] "Aggregated funding" means the gross amount (i.e. not netting any form of credit extended to the legal entity) of all forms of funding (e.g. deposits or debt securities or similar derivative exposure for which the counterparty is known to be a small business customer).

[24] Applying the limit on a consolidated basis means that where one or more small business customers are affiliated with each other, they may be considered as a single creditor such that the limit is applied to the total funding received by the bank from this group of customers.

(b) significant switching costs for the customer to whom qualifying activities are being provided (e.g. transaction costs, early termination or legal costs, or information technology costs arising from the integration between the customer and bank's infrastructure to enable operational transactions).

66. The operational deposits arising from clearing, custody or cash management activities shall be the deposits which are:

(a) by-products of the underlying activities performed by a bank which were not sought out in the wholesale market with the sole purpose of offering interest/profit income; or

(b) held in specifically designated accounts and priced without giving an economic incentive to a customer (not limited to paying market interest rates or indicative profit rates[25]) to leave any excess funds in these accounts.

67. A **clearing relationship** shall refer to a service arrangement that enables customers to transfer funds or securities through direct participants in domestic settlement systems to final recipients. Such services shall be limited to the following activities: transmission, reconciliation and confirmation of payment orders; overdraft, overnight financing and maintenance of post-settlement balances; and determination of intra-day and final settlement positions.

68. A **custody relationship** shall refer to the provision of services connected with the safekeeping, reporting, and processing of financial assets on behalf of customers[26] that transact and hold financial assets. Such services shall be 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[27]. Also included are the receipt of dividends and other income, client subscriptions and redemptions.

69. A **cash management relationship** shall refer to the provision of cash management and related services to customers for the purposes of payment remittance, collection and aggregation of funds, payroll administration, and control over the disbursement of funds.

70. A bank shall identify the amounts held in accounts with operational deposits that would be considered as excess balances. The excess balances shall not qualify for the run-off rates provided in paragraph 64 and shall be treated as non-operational deposits in accordance with one of the categories set out in paragraphs 60 to 62 and paragraphs 76 to 83 based on the profile of the funds provider.

[25] Other examples of economic incentives include rebates and reduction on fees for other services

[26] Including trusts

[27] Custodial services can be extended 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.

(a) A bank shall determine the excess balances based on a methodology or set of criteria/indicators. The bank shall conduct the assessment of excess balances at a sufficiently granular level[28], taking into account relevant factors that would indicate whether a wholesale customer has above average balances in advance of specific payment needs[29].

(b) If the bank is unable to determine the amount of the excess balance, then the bank shall assume the entire deposit to be non-operational.

71. A bank shall treat deposits received under **correspondent banking or prime brokerage services** as non-operational deposits with a run-off rate of 100%.

72. In respect of paragraph 71, correspondent banking shall refer 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[30], while prime brokerage shall refer to a package of services[31] offered to large active investors, particularly institutional hedge funds.

<u>Treatment of deposits in institutional networks of cooperative banks</u>

73. An institutional network of cooperative (or otherwise named) banks is a group of legally autonomous banks with a statutory framework of cooperation with common strategic focus and brand where specific functions are performed by central institutions or specialised service providers. So long as both the bank that has received the monies and **the bank that has deposited participate in the same institutional network's mutual** protection scheme against illiquidity and insolvency of its members, a 25% run-off rate may be given to the amount of deposits of member institutions with the central institution or specialised central service providers that are placed:

(a) due to statutory minimum deposit requirements, which are registered at regulators; or

(b) in the context of common task sharing and legal, statutory or contractual arrangements.

---

[28] For example, a bank may undertake the assessment by observing the minimum and average balance over a historical period at the portfolio or account level. Nonetheless, a portfolio level assessment may not be appropriate under all circumstances, such as where there is a significant concentration of deposits by a single/group of customers.

[29] This may be reflected through a ratio to compare account balances against the actual needs of wholesale customers (e.g. payment or settlement volumes, assets under custody) over a period of time.

[30] For example, nostro and vostro accounts used to settle transactions in a currency other than the domestic currency of the respondent bank for the provision of clearing and settlement services

[31] These services usually include: clearing, settlement and custody; consolidated reporting; financing (margin, repo or synthetic); securities lending; capital introduction; and risk analytics

74. As with other operational deposits, these deposits must receive a 0% inflow assumption for the depositing bank, as these funds are considered to remain with the centralised institution.

75. A bank shall seek the Authority's approval before applying the treatment in paragraph 73. Correspondent banking activities must not be included in this treatment and must receive a 100% outflow treatment, as must funds placed at the central institutions or specialised service providers for any other reason other than those outlined in paragraph 73, or for operational functions of clearing, custody, or cash management as outlined in paragraphs 67 to 69.

Unsecured wholesale funding provided by non-financial corporates and sovereigns, central banks, multilateral development banks and public sector entities

76. This category comprises all deposits and other extensions of unsecured funding from non-financial corporate customers (that are not categorised as small business customers) and (both domestic and foreign) sovereign, central bank, multilateral development bank, and public sector entity (PSE) customers that are not specifically held for operational purposes (as defined above).

77. The run-off factor for these funds must be 40%, unless the entire amount of the deposit is fully covered by an effective deposit insurance scheme or by a public guarantee that provides equivalent protection, the run-off factor shall be 20%.

Unsecured wholesale funding provided by other legal entity customers

78. This category consists of all deposits and other funding from other institutions (including banks, securities firms, insurance companies, etc), fiduciaries, beneficiaries, conduits and special purpose vehicles, affiliated entities of the bank[32] and other entities that are not specifically held for operational purposes (as defined above) and not included in the prior three categories. The run-off factor for these funds must be 100%.

79. In respect of paragraph 78:
    (a) a fiduciary refers to a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles which do not qualify as PSEs; and

    (b) a beneficiary refers to a legal entity that receives, or may become eligible to receive, benefits under a will, hibah (gift), insurance policy, takaful certificate, retirement plan, annuity, trust, or other contract.

[32] Outflows on unsecured wholesale funding from affiliated entities of the bank are included in this category unless the funding is part of an operational relationship, a deposit in an institutional network of cooperative banks or the affiliated entity is a non-financial corporate.

80. Except as provided in paragraph 81, a bank shall include all funding raised from the issuances of notes, commercial papers, bonds / Sukuk and other debt securities by the bank in this category regardless of the holder and assign a 100% run-off rate to such funding.

81. A bank shall assign a run-off rate of 10% to securities[33] issued by the bank which are sold exclusively in the retail market to retail and small business customers, and cannot be bought and held by parties other than retail or small business customers.

82. Customer cash balances arising from the provision of prime brokerage services, including but not limited to the cash arising from prime brokerage services as identified in paragraphs 71 and 72, must be considered separate from any required segregated balances related to client protection regimes imposed by national regulations, and must not be netted against other customer exposures included in this standard. These offsetting balances held in segregated accounts are treated as inflows in paragraph 122 and must be excluded from the stock of HQLA.

83. Outflows from unsecured wholesale funding over the 30-day LCR horizon and provided by intragroup banking entities may be computed on a net basis with inflows from unsecured wholesale funding over the 30-day LCR horizon provided by intragroup banking entities.

C4: SECURED FUNDING RUN-OFF

84. "Secured funding" is defined as those liabilities and general obligations that are collateralised by legal rights to specifically designated assets owned by the borrowing bank in the case of bankruptcy, insolvency, liquidation or resolution. Repos, collateral swaps, collateral lending to customers[34] and any other transaction with a similar form shall be considered as secured funding transaction.

85. A bank shall calculate the amount of outflow based on the amount of funds raised through the transaction and not the value of the underlying collateral. For collateral swap or collateral lending transactions, the amount of outflow shall be calculated based on the market value of the asset received.

86. If a pool of assets is used as collateral for a secured funding transaction, and a bank is unable to determine specifically which assets are used to collateralise the transaction, it shall assume that the assets are encumbered in the following order:

[33] in which case the instruments may be treated in the appropriate retail or small business customer deposit category.

[34] Typically, such a transaction is conducted to enable a bank's customers to cover their short positions. A customer short position in this context describes a transaction where a bank's customer sells a security it does not own, and the bank subsequently obtains the same security from internal or external sources to make delivery into the sale. Internal sources include the bank's own inventory of collateral as well as rehypothecatable collateral held in other customer margin accounts. External sources include collateral obtained through a securities borrowing, reverse repo, or like transactions.

(a) firstly, non-HQLA eligible assets;
(b) secondly, Level 2B(II) HQLA;
(c) thirdly, Level 2B(I) HQLA;
(d) fourthly, Level 2A HQLA;
(e) fifthly, Level 1 HQLA.

87. A bank shall apply the following factors to all outstanding secured funding transactions with maturities within 30 calendar days:

Categories for outstanding maturing secured funding transactions	Amount to add to cash outflows
With central bank counterparty	0%
Backed by Level 1 HQLA with any counterparty	0%
Backed by Level 2A HQLA with any counterparty	15%
Backed by non-Level 1 or non-Level 2A HQLA, with domestic sovereigns, multilateral development banks, or domestic PSEs that have a risk weight of 20% or lower, as a counterparty.	25%
Backed by residential mortgage-backed securities (RMBS) eligible for inclusion in Level 2B HQLA	25%
Backed by other Level 2B HQLA	50%
All other secured funding transactions	100%

C5: ADDITIONAL REQUIREMENTS

88. **Derivatives cash outflows:** The sum of all net derivative cash outflows must receive a 100% factor.

(a) Banks must 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.

(b) Where derivative payments are collateralised by HQLA, cash outflows should be calculated net of any corresponding cash or collateral inflows that would result, all other things being equal, from contractual obligations for cash or collateral to be provided to the bank, if the bank is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received. Where the corresponding cash or collateral inflow has been received, the bank shall only include the asset either as part of its stock of HQLA or by netting the amount against its expected derivative cash flows to ensure that there is no double-counting of liquidity buffers.

(c) Banks should exclude from such calculations those liquidity requirements that would result from increased collateral needs due to market value movements or declines in value of collateral posted[35].

(d) Options that can be exercised within the next 30 days, including options that expire in greater than 30 days (e.g. an American-style option), must be assumed to be exercised when they are "in the money" to the option buyer. For transactions involving a delivery obligation that can be fulfilled with a variety of asset classes, delivery of the least valuable asset possible ("cheapest to deliver") must be assumed. This should apply symmetrically to both the inflow and outflow perspective, such that the obligor is assumed to deliver the security with the lowest liquidity value.

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

Collateral Outflows

89. Increased liquidity needs related to downgrade triggers embedded in financing transactions, derivatives and other contracts:

(a) 100% of the amount of collateral that would be posted for, or contractual cash outflows associated with, any downgrade up to and including a 3-notch downgrade.

(b) 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 bank's downgrade by a recognised credit rating organisation.

(c) The scenario therefore requires that for each contract in which "downgrade triggers" exist, the bank assumes that 100% of this additional collateral or cash outflow must be posted for any downgrade up to and including a 3-notch downgrade of the bank's long-term credit rating.

(d) Triggers linked to a bank'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 must consider impacts on all types of margin collateral and contractual triggers which change rehypothecation rights for non-segregated collateral.

[35] These risks are captured in paragraphs 50 and 54, respectively.

90. **Increased liquidity needs related to the potential for valuation changes on posted collateral securing derivative and other transactions:** 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 / Sukuk with a 0% risk weight under the Basel II standardised approach. When these Level 1 HQLA securities are posted as collateral, the framework will not require that additional HQLA be maintained for potential valuation changes. If however, counterparties are securing mark-to-market exposures with other forms of collateral, to cover the potential loss of market value on those securities, 20% of the value of all such posted collateral, net of collateral received on a counterparty basis (provided that the collateral received is not subject to restrictions on reuse or rehypothecation) will be added to the stock of required HQLA by the bank 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.

    (a) 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. The notional amount to be collateralised shall be based on the contractual terms of the transaction. The bank shall not net collateral inflows and outflows across counterparties. The bank shall compute the amount of collateral to be posted in accordance with the relevant contract governing the respective transactions.

91. **Increased liquidity needs related to excess non-segregated collateral held by the bank that could contractually be called at any time by the counterparty:** 100% of the non-segregated collateral (i.e. where the collateral is unencumbered and included in the stock of HQLA or where a recall of collateral by the counterparty would need to use additional funding) that could contractually be recalled by the counterparty because the collateral is in excess of the counterparty's current collateral requirements.

92. **Increased liquidity needs related to contractually required collateral on transactions for which the counterparty has not yet demanded the collateral be posted:** 100% of the collateral that is contractually due but where the counterparty has not yet demanded the posting of such collateral.

93. **Increased liquidity needs related to contracts that allow collateral substitution to non-HQLA assets or lower-quality HQLA:** A bank shall include a cash outflow equivalent to the market value of the initial HQLA collateral received multiplied by the difference in LCR haircuts of the received collateral and the potential substitute collateral. This shall apply to initial HQLA collateral received that is counted in the bank's HQLA, and that can be substituted for non-HQLA assets or lower-quality HQLA assets without the bank's consent, where such HQLA collateral has been received to secure transactions that have not been segregated.

94. **Increased liquidity needs related to market valuation changes on derivative or other transactions:** As market practice requires collateralisation of mark-to-market exposures on derivative and other transactions, banks face potentially substantial liquidity risk exposures to these valuation changes. Inflows and outflows of transactions executed under the same master netting agreement may be treated on a net basis. Any outflow generated by increased needs related to market valuation changes must be included in the LCR calculated by identifying the largest absolute net 30-day collateral flow realised during the preceding 24 months. The absolute net collateral flow must be based on both realised outflows and inflows, including payments and receipts which are deemed to settle outstanding exposures from exchange-traded and over-the-counter derivatives structured as "settled-to-market". The largest absolute net 30-day collateral flow shall be assessed on a portfolio level.

<u>Loss of funding from structured finance instruments</u>

95. **Loss of funding on asset-backed securities, covered bonds / Sukuk and other structured financing instruments:** A bank shall assign a 100% outflow rate to the total outstanding amount of these instruments maturing within 30 calendar days (as this assumes that the re-financing market will not exist). For products maturing within the next 30 days, a bank may offset inflows from Level 1 or Level 2 HQLA used as collateral for the products against the redemption payment of the products. Any net inflow shall be considered as other contractual cash inflows in paragraph 130.

96. **Loss of funding on asset-backed commercial paper, conduits, securities investment vehicles and other such financing facilities:** Where a bank has structured financing facilities which remain outstanding, such as the issuance of short-term asset-backed commercial paper, the bank shall assume that it is potentially unable to refinance the maturing debt, and shall include 100% of the amount of the structured finance instrument maturing within the next 30 calendar days in its expected cash outflows.

    (a) In cases where derivatives or derivative-like components which may allow the **"return" of assets to a bank** or **require the bank ("asset originator") to provide liquidity**[36] are contractually written into the documentation associated with the structured financing facility, the bank shall include 100% of the amount of assets that could potentially be returned, or the liquidity required, in its expected cash outflows.

    (b) Where the structured financing activities of a bank are conducted through a special purpose entity (or SPE, such as special purpose vehicle[37], conduit or structured

[36] Effectively ending the financing arrangement within the next 30 calendar days.
[37] An SPE is defined as a corporation, trust, or other entity organised for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPE, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures. SPEs, normally a trust or similar entity, are commonly used as financing vehicles in which exposures are sold to the SPE in exchange for cash or other assets funded by debt issued by the trust.

investment vehicle), the bank shall look through to the maturity of the debt instruments issued by the SPE and any embedded options in financing arrangements that may potentially trigger the "return" of assets or the need for liquidity, irrespective of whether the SPE issuing the structured finance instrument is consolidated.

Committed credit facilities[38]

97. For the purposes of paragraphs 97 to 103, a credit facility shall refer to any contractually irrevocable (i.e. "committed") or conditionally revocable agreements to extend funds in the future.

98. A bank shall apply the following drawdown rates on the undrawn portion of the committed credit facilities:

Counterparty	Drawdown rate of credit facility (% of undrawn portion)
Retail and small business customers	5%
Non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks	10%
Banks subject to prudential supervision	40%
Other financial institutions including securities firms, insurance companies, takaful operators, fiduciaries and beneficiaries	40%
Other legal entities (including SPEs[39], conduits and special purpose vehicles, and other entities not included in the prior categories)	100%

99. To the extent that the counterparty has already posted HQLA to secure the facility or the posting of collateral (in the form of HQLA) is contractually required for the counterparty to draw down the facility, a bank shall calculate the undrawn portion of such facilities net of any HQLA posted, if:

(a) the bank is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn; and

(b) there is no undue correlation between the probability of drawing the facility and the market value of the collateral.

[38] These off-balance sheet facilities or funding commitments can have long- or short-term maturities, with short-term facilities frequently renewing or automatically rolling-over. In a stressed environment, it will likely be difficult for customers drawing on facilities of any maturity, even short-term maturities, to be able to quickly pay back the borrowings. Therefore, for purposes of this framework, all facilities are assumed to be drawn at the rates specified in paragraph 58, regardless of maturity. For the avoidance of doubt, this category includes facilities granted to corporate entities for general working capital purposes (e.g. revolving credit facilities).

[39] The potential liquidity risks associated with the bank's own structured financing facilities should be treated according to paragraphs 55 to 56 of this document (100% of maturing amount and 100% of returnable assets are included as outflows).

100. The collateral shall be netted against the undrawn portion of the facility only if the collateral is not already counted in the stock of HQLA to avoid double-counting.

<u>Liquidity facilities</u>

101. A liquidity facility shall refer to any committed, undrawn back-up facility that would be utilised to refinance the debt obligations of a customer in situations where such a customer is unable to rollover that debt in financial markets (e.g. pursuant to a commercial paper programme, secured financing transactions, obligations to redeem units). This shall include any facility provided to hedge funds, money market funds and special purpose funding vehicles or other vehicles used to finance the bank's own assets, but shall exclude:

(a) the portion of a liquidity facility that is backing debt that does not mature within the 30-day period; and

(b) any additional amount of the liquidity facility over and above the amount required to backstop the currently outstanding debt issued. This additional amount shall be treated as a committed credit facility based on the corresponding drawdown rates as specified in paragraph 98.

102. The amount of the undrawn commitment arising from a liquidity facility shall be 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. To calculate the expected cash outflows from the liquidity facility, a bank shall multiply this amount of outstanding debt issued with the following drawdown rates:

Counterparty	Drawdown rate of liquidity facility (% of undrawn portion)
Retail and small business customers	5%
Non-financial corporates, sovereigns and central banks, PSEs and multilateral development banks	30%
Banks subject to prudential supervision	40%
Other financial institutions including securities firms, insurance companies, takaful operators, fiduciaries and beneficiaries	100%
Other legal entities (including SPEs, conduits and special purpose vehicles, and other entities not included in the prior categories)	100%

103. A bank that is also the provider of liquidity facilities for financing programs referred to in paragraphs 95 to 96 that are maturing or have liquidity puts that may be exercised within 30 calendar days shall not count both the maturing financing instrument and the liquidity facility. The bank shall apply a 100% outflow rate to the amount of financing instrument

maturing in the 30-day horizon, or the maximum amount of liquidity facility that would be extended, whichever is higher.

Contingent Funding Obligations

104. These contingent funding obligations may be either contractual or non-contractual and are not lending commitments. Non-contractual contingent funding obligations include associations with, or sponsorship of, products sold or services provided that may require the support or extension of funds in the future under stressed conditions. Non-contractual obligations may be embedded in financial products and instruments sold, sponsored, or originated by the institution that can give rise to unplanned balance sheet growth arising from support given for reputational risk considerations. These include products and instruments for which the customer or holder has specific expectations regarding the liquidity and marketability of the product or instrument and for which failure to satisfy customer expectations in a commercially reasonable manner would likely cause material reputational damage to the institution or otherwise impair ongoing viability. The full amount of the obligations that is expected to materialise will receive a cash outflow rate of 100%.

105. The table below shows the cash outflow run-off rates for other contingent funding obligations:

Category	Outflow Rate
(a) unconditionally revocable "uncommitted" credit and liquidity facilities;	10%
(b) Obligations related to trade finance instruments directly underpinned by the movement of goods or the provision of services, such as – • documentary trade letters of credit, documentary and clean collection, import bills and export bills; and • guarantees directly related to trade finance obligations, such as shipping guarantees.	10% of trade finance obligations
(c) guarantees and letters of credit unrelated to trade finance obligations;	10% of the amount of guarantees and letters of credit
(d) non-contractual obligations such as: potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities	10% of total outstanding amount
(e) structured products where customers anticipate ready marketability, such as adjustable rate notes and variable-rate demand notes	10% of total outstanding amount

(f)	**managed funds** that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds etc	10% of total outstanding amount
(g)	for issuers with an affiliated dealer or market-maker, there may be a need to include an amount of the outstanding debt securities / Sukuk (unsecured and secured, term as well as short-term) having maturities greater than 30 calendar days, to cover the potential repurchase of such outstanding securities	10% of total outstanding amount
(h)	Non-contractual contingent funding obligations related to potential liquidity draws from joint venture or minority investments in entities.	10% of the investment value
(i)	Any other non-contractual obligations not captured above	10%

<u>Other Contractual Obligations</u>

106. A bank shall treat any other contractual obligations to extend funds within 30 calendar days not provided for elsewhere in this document as follows:

(a) for any contractual obligations to extend funds to financial institutions, a 100% outflow rate shall be applied to the contractual amount; and

(b) for any contractual obligations to extend funds to retail, small business and non-financial corporate customers, a 100% outflow rate shall apply, if these obligations exceed 50% of the aggregated contractual inflows due from these customers in the next 30 calendar days. The 100% outflow rate shall be applied to the difference between the contractual outflow and the 50% of the total contractual inflows.

107. A bank shall assign a 100% outflow rate to any other contractual cash outflows within the next 30 calendar days, such as outflows to cover unsecured collateral borrowings, uncovered short positions, declared dividends or contractual interest/profit payments. For the avoidance of doubt, the bank shall exclude outflows related to operating costs from the calculation of the LCR.

PART D: EXPECTED CASH INFLOWS

D1: CASH INFLOWS

108. When considering its available cash inflows, a bank shall only include contractual inflows (including interest or profit payments) from outstanding exposures that are fully performing and for which the bank has no reason to expect a default within the next 30 calendar days. The bank shall not include contingent inflows in total net cash inflows.

109. In order to prevent banks from relying solely on anticipated inflows to meet their liquidity requirement, and also to ensure a minimum level of HQLA holdings, the amount of inflows that can offset outflows must be capped at 75% of total expected cash outflows as calculated in the standard. This requires that a bank must maintain a minimum amount of stock of HQLA equal to 25% of the total cash outflows.

D2: SECURED LENDING / FINANCING INCLUDING REVERSE REPOS AND SECURITIES BORROWING TRANSACTIONS

110. For maturing reverse repurchase or securities borrowing agreements –

    (a) if the agreement is secured by Level 1 HQLA, the agreement will be rolled-over and will not give rise to any cash inflows. Therefore, a cash inflow rate of 0% shall be assumed;

    (b) if the agreement is secured by Level 2 HQLA, a cash inflow rate equivalent to the relevant haircut for the specific HQLA shall be assumed; or

    (c) if the agreement is secured by non-HQLA, the agreement is assumed not to roll over and the bank may assume to receive back 100% of the cash related to those agreements. Therefore, a cash inflow rate of 100% shall be assumed.

    (d) Collateralised loans / financing extended to customers for the purposes of taking leveraged trading positions ("margin loans/financing") are to receive 50% of contractual inflows (i.e. a cash inflow rate of 50%) from maturing margin loans / financing made against collateral which would not be considered as HQLA.

111. As an exception to paragraph 110, if the collateral obtained through reverse repurchase, securities borrowing, or collateral swaps is used to cover short positions that could be extended beyond 30 days, a bank shall assume that such reverse repurchase or securities borrowing arrangements will be rolled-over and will not give rise to any cash inflows (i.e. a cash inflow rate of 0%), reflecting its need to continue to cover the short position or to re-purchase the relevant securities.

112. The table below lists the relevant inflow rates for paragraphs 110 and 111.

Matured secured lending 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 HQLA	0%	0%
Level 2A HQLA	15%	0%
Level 2B HQLA		
• Eligible RMBS	25%	0%
• Other Level 2B HQLA	50%	0%
Margin lending / financing backed by all other collateral	50%	0%
Other collateral	100%	0%

113. In the case of a bank's short positions, if the short position is being covered by an unsecured security borrowing, the bank shall assume the unsecured security borrowing of collateral from financial market participants would run-off in full, leading to a 100% outflow of either cash or HQLA to secure the borrowing, or cash to close out the short position by buying back the security. This shall be recorded as a 100% other contractual outflow according to paragraph 107. If, however, the bank's short position is being covered by a collateralised securities financing transaction, the bank shall assume the short position will be maintained throughout the 30-day period and receive a cash inflow rate of 0%.

114. If a pool of assets is used as collateral for a secured lending transaction, and a bank is unable to determine specifically which assets are used to collateralise the transaction, it shall assume that the assets are encumbered in the following order:

a. firstly, non-HQLA eligible assets;
b. secondly, Level 2B(II) HQLA;
c. thirdly, Level 2B(I) HQLA;
d. fourthly, Level 2A HQLA;
e. fifthly, Level 1 HQLA.

115. Notwithstanding the roll-over assumptions in paragraphs 110, 111 and 112, a bank shall 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.

116. A bank shall include forward reverse repurchase transactions and collateral swaps that start prior but mature within the 30-day LCR horizon in this category.

117. Paragraphs 110 to 116 shall not apply to any transaction where there is a possibility of the inflow occurring after 30 days.

D3: COMMITTED FACILITIES

118. No credit facilities, liquidity facilities or other contingent funding facilities that the bank holds at other institutions for its own purposes are assumed to be able to be drawn. Such facilities must 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 bank causing shortages at other banks and to reflect the risk that other banks 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 bank.

D4: OTHER INFLOWS BY COUNTERPARTY

119. For loan/financing payments, a bank shall only include cash inflows from fully performing loans/financing. In addition, a bank shall only include cash inflows at the latest possible date, based on the contractual rights available to counterparties. For revolving credit/financing facilities, the bank shall assume that the existing loan/financing will be rolled over and any remaining balances are treated as a committed facility according to paragraph 97 to 103.

120. Cash inflows from loans/financing that have no specific maturity (i.e. have non-defined or open maturity) shall not be included. This treatment must also apply to credit/financing facilities that can be contractually terminated within 30 days, because any such inflows from termination would be contingent in nature. As an exception, only minimum payments of principal, fees or interest/profit associated with open maturity loans/financing that are contractually due within 30 days can be included. These minimum payment amounts are captured as inflows at the rates prescribed in paragraphs 121 and 122.

<u>Retail and small business customer inflows</u>

121. A bank shall assume that all payments (including interest/profit payments and instalments) from retail and small business customers that are fully performing and contractually due within the next 30 calendar days will be received in full. At the same time, the bank shall assume that it will continue extending loans/financing to retail and small business customers at a rate of 50% of contractual inflows. This results in a net cash inflow rate of 50% of the contractual amount.

<u>Other wholesale inflows</u>

122. A bank shall assume that all payments (including interest/profit payments and instalments) received from wholesale customers that are fully performing and contractually due within the next 30 calendar days will be received in full. In addition, the bank is to assume to

continue extending loans/financing to wholesale customers at a rate of 0% of contractual inflows for financial institutions and central banks, and at a rate of 50% of contractual inflows for all others, including non-financial corporates, sovereigns, multilateral development banks, and PSEs. This will result in a net cash inflow rate of –

(a) 100% for financial institutions and central bank counterparties; and
(b) 50% for non-financial wholesale counterparties.

123. Inflows from securities maturing within 30 days not included in the stock of HQLA must be treated in the same category as inflows from financial institutions (i.e. 100% inflow). Banks 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, provided that these segregated balances are maintained in HQLA. Liquid assets from level 1 and level 2 securities maturing within 30 days must be included as HQLA (must not be considered as inflows), provided that they meet all operational and definitional requirements, as laid out in Sections B3 and B5. Payments arising from Level 1 and Level 2 assets which settle within 30 days that do not meet the operational requirements may be considered as inflows.

124. Operational deposits of a bank held at other financial institutions for operational purposes are to receive a cash inflow rate of 0%. A bank shall assess operational deposits according to the methodology in paragraphs 63 to 72. A deposit that has been classified by a receiving bank or financial institution, as the case may be, as operational shall also be considered by a depositing bank as an operational deposit. However, a 100% inflow rate may be applied to the amount for which the bank is able to determine that the funds are "excess balances" in as laid out in paragraph 70 i.e. they are not tied to operational purposes and may be withdrawn within 30 days.

125. Similarly, deposits held at the centralised institution in a cooperative banking network, which are assumed to stay at the centralised institution, are to receive a cash inflow rate of 0%.

126. Notwithstanding the exclusion of deposit liabilities raised from correspondent banking activities from the treatment of operational deposits, deposits placed for the purpose of correspondent banking are held for operational purposes and, as such, must receive a 0% inflow rate.

127. Inflows from intragroup banking entities may be computed on a net basis with outflows from intragroup banking entities.

128. The table below lists the inflow rates for paragraphs 121 and 122 in table format: -

Counterparty	Inflow Rates
Retail and small business customers	50%
Non-financial corporates[40], sovereigns, multilateral development banks and PSEs	50%
Financial institutions and central banks	100%

D5: OTHER CASH INFLOWS

129. **Cash inflows from derivative contracts:** the sum of all net cash inflows from derivative contracts shall be assigned a cash inflow rate of 100%. Where derivatives are collateralised by HQLA, a bank shall calculate the cash inflows for the derivatives net of any corresponding cash or contractual collateral outflows. The bank shall not double-count liquidity inflows or outflows. The amounts of cash inflows from derivative contracts shall be calculated in accordance to the methodology described in paragraph 88. A bank shall treat inflows from an option with a delivery settlement as a secured lending transaction, with the appropriate inflows assigned as per paragraphs 110 and 115. If the contractual arrangements allow for both physical delivery and cash settlement, cash settlement may be assumed. For physical delivery, where not otherwise stated in the derivative contract, delivery of the least value security ("cheapest to deliver") may be assumed.

130. **Other contractual cash inflows**: All other contractual cash inflows shall receive a cash inflow rate of 0%. A bank shall include any other contractual cash inflows not captured in any other earlier category here, with an explanation as to what has been included in this category.

131. A bank shall not include the following items as contractual cash inflows:

(a) any cash inflow related to non-financial revenues;
(b) any forward repurchase, forward reverse repurchase agreements or forward collateral swap that starts and matures within the 30-day LCR horizon;
(c) any forward repurchase, forward reverse repurchase agreements or forward collateral swap that starts prior to and matures after the 30-day LCR horizon;
(d) any forward sales of HQLA.

[40] Includes societies and trade unions.

APPENDIX 1: CHARACTERISTICS OF HQLA

1. Assets are considered to be high-quality liquid assets (HQLA) if they can be easily and immediately converted into cash at little or no loss of value. The liquidity of an asset depends on the underlying stress scenario, the volume to be monetised and the timeframe considered. Nevertheless, there are certain assets that are more likely to generate funds without incurring large discounts due to fire-sales even in times of stress.

2. This appendix outlines the factors that influence whether or not the market for an asset can be relied upon to raise liquidity when considered in the context of possible stresses.

Fundamental characteristics

3. Low credit and market risk: Assets that are less risky tend to have higher liquidity. High credit standing of the issuer and a low degree of subordination increases an asset's liquidity. Low duration, low volatility, low inflation risk and denomination in a convertible currency with low foreign exchange risk all enhance an asset's liquidity.

4. Ease and certainty of valuation: An asset's liquidity increases if market participants are more likely to agree on its valuation. The pricing formula of a HQLA 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.

5. Low correlation with risky assets: The stock of HQLA should not be subject to wrong-way (highly correlated) risk. For example, assets issued by financial institutions are more likely to be illiquid in times of liquidity stress in the banking sector.

6. Listed on a developed and recognised exchange market: Being listed increases an asset's transparency.

Market-related characteristics:

7. Active and sizable market: the asset should have active outright sale or repo markets at all times. This means that:

   (a) 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.
   (b) There should be robust market infrastructure in place. The presence of multiple committed market makers increases liquidity as quotes will most likely be available for buying or selling HQLA.

8. Low volatility: Assets whose prices remain relatively stable and are less prone to sharp price declines over time will have a lower probability of triggering forced sales to meet liquidity requirements. Volatility of traded prices and spreads over benchmarks are simple proxy measures of market volatility. There should be historical evidence of relative stability of market terms (eg prices and haircuts) and volumes during stressed periods.

9. 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.

Other characteristics

10. As outlined by these characteristics, the test of whether liquid assets are of "high-quality" is that, by way of sale or secured borrowing, their liquidity-generating capacity is assumed to remain intact even in periods of severe idiosyncratic and market stress. Such assets often benefit from flight to quality in these circumstances. Lower quality assets fail to meet that test. An attempt by a bank to raise liquidity from lower quality assets under conditions of severe market stress would entail acceptance of a large fire-sale discount or haircut to compensate for high market risk. That may not only erode the market's confidence in the bank, but would also generate mark-to-market losses for banks holding similar instruments and add to the pressure on their liquidity position, thus encouraging further fire sales and declines in prices and market liquidity. In these circumstances, private market liquidity for such instruments is likely to disappear extremely quickly. Taking into account the system-wide response, only HQLA that meet the test can be readily converted into cash under severe stress in private markets.

11. HQLA should also ideally be eligible at central banks for intraday liquidity needs and overnight liquidity facilities. In the past, central banks have provided a further backstop to the supply of banking system liquidity under conditions of severe stress. Central bank eligibility should thus provide additional confidence that banks are holding assets that could be used in events of severe stress without damaging the broader financial system. This in turn would raise confidence in the safety and soundness of liquidity risk management in the banking system.

APPENDIX 2: CALCULATION OF THE CAP ON LEVEL 2 ASSETS WITH REGARD TO SHORT-TERM SECURITIES FINANCING TRANSACTIONS

1. A bank shall apply the method described in this Appendix for its computation of the cap on Level 2A and Level 2B with regard to short-term securities financing transactions.

   (a) The calculation of the 40% cap on Level 2 assets should take into account the impact on the stock of HQLA of the amounts of Level 1 and Level 2 assets involved in secured funding[41], secured lending[42] and collateral swap transactions maturing within 30 calendar days. The maximum amount of adjusted Level 2 assets in the stock of HQLA is equal to two-thirds of the adjusted amount of Level 1 assets after haircuts have been applied. The calculation of the 40% cap on Level 2 assets will take into account any reduction in eligible Level 2B assets on account of the 15% cap on Level 2B assets.

   (b) Further, the calculation of the 15% cap on Level 2B assets should take into account the impact on the stock of HQLA of the amounts of HQLA assets involved in secured funding, secured lending and collateral swap transactions maturing within 30 calendar days. The maximum amount of adjusted Level 2B assets in the stock of HQLA is equal to 15/85 of the sum of the adjusted amounts of Level 1 and Level 2 assets, or, in cases where the 40% cap is binding, up to a maximum of 1/4 of the adjusted amount of Level 1 assets, both after haircuts have been applied.

   (c) The adjusted amount of Level 1 assets is defined as the amount of Level 1 assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 1 assets (including cash) that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 24 to 42. The adjusted amount of Level 2A assets is defined as the amount of Level 2A assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 2A assets that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 24 to 42. The adjusted amount of Level 2B assets is defined as the amount of Level 2B assets that would result after unwinding those short-term secured funding, secured lending and collateral swap transactions involving the exchange of any HQLA for any Level 2B assets that meet, or would meet if held unencumbered, the operational requirements for HQLA set out in paragraphs 24 to 42. In this context, short-term transactions are transactions with a maturity date up to and including 30 calendar days. Relevant haircuts would be applied prior to calculation of the respective caps.

[41] As outlined in part C4
[42] As outline Part D2

2. The formula for the computation of HQLA is as follows:

Stock of HQLA = Level 1 + Level 2A + Level 2B – Adjustment for 15% cap – Adjustment for 40% cap

Where:-

Adjustment for 15% cap = Max (Adjusted Level 2B – 15/85*(Adjusted Level 1 + Adjusted Level 2A), Adjusted Level 2B - 15/60*Adjusted Level 1, 0)

Adjustment for 40% cap = Max ((Adjusted Level 2A + Adjusted Level 2B – Adjustment for 15% cap) - 2/3*Adjusted Level 1 assets, 0)

3. Alternatively, the formula for the computation of HQLA is as follows:

Stock of HQLA = Level 1 + Level 2A + Level 2B – Max ((Adjusted Level 2A+Adjusted Level 2B) – 2/3*Adjusted Level 1, Adjusted Level 2B – 15/85*(Adjusted Level 1 + Adjusted Level 2A), 0)

4. The BDCB LCR reporting template has incorporated an automatic built-in computation for such methodology under this Appendix.

APPENDIX 3: ILLUSTRATIVE SUMMARY OF THE LCR

HQLA	Haircut
A. Level 1 HQLA	
• Coins and bank notes • Sukuk or debt securities issued by or on behalf of BDCB or Brunei Darussalam Government • Qualifying central bank reserves (including balances with BDCB such as overnight and term placements and Minimum Cash Balances (MCB) maintained for the purpose of Section 45 of the Banking Order, 2006 and Islamic Banking Order, 2008) • Qualifying marketable securities or Sukuk from sovereigns, central banks, public sector entities (PSEs) and multilateral development banks • Domestic sovereign or central bank debt / Sukuk for non-0% risk-weighted sovereigns	0%
B. Level 2 HQLA (maximum 40% of HQLA)	
Level 2A HQLA:	
• Sovereign, central bank, multilateral development banks and PSE assets qualifying for 20% risk weighting • Qualifying corporate debt securities or Sukuk rated AA- or higher • Qualifying covered bonds rated AA- or higher	15%
Level 2B HQLA (maximum of 15% of HQLA)	
• Qualifying residential mortgage-backed securities (RMBS) rated AA or higher	25%
• Qualifying corporate debt securities or Sukuk rated between A+ and BBB- • Qualifying common equity shares • Sovereign, central bank and PSE debt securities or Sukuk rated BBB- or higher that do not qualify as a Level 1 or Level 2A asset	50%

Cash Outflows	Outflow rate
A. Retail deposits	
Demand deposits and term deposits (less than 30 days maturity): • Stable deposits • Less stable retail deposits	 5% 10%
Term deposits with residual maturity greater than 30 days	0%
B. Unsecured wholesale funding	
Demand deposits and term deposits (less than 30 days maturity) provided by small business customers: • Stable deposits • Less stable deposits	 5% 10%
Operational deposits generated by clearing, custody and cash management activities • Portion covered by deposit insurance	25% 5%

Non-operational deposits by non-financial corporates, sovereigns, central banks, multilateral development banks and PSEs • If the entire amount fully covered by deposit insurance scheme	40% 20%
Cooperative banks in an institutional network (qualifying deposits with the centralised institution)	25%
Banks deposits	100%
Other FIs deposits	100%
Other legal entity customers	100%
C. Secured funding	
Secured funding transactions with a central bank counterparty or backed by Level 1 assets with any counterparty	0%
Secured funding transactions backed by Level 2A assets, with any counterparty	15%
Secured funding transactions backed by non-Level 1 or non-Level 2A assets, with domestic sovereigns, multilateral development banks, or domestic PSEs as a counterparty	25%
Backed by RMBS eligible for inclusion in Level 2B	
Backed by other Level 2B assets	50%
All other secured funding transactions	100%
D. Additional requirements	
Net derivative cash outflows	100%
Liquidity needs (e.g. collateral calls) related to financing transactions, derivatives and other contracts	3 notch downgrade
Market valuation changes on derivatives transactions (largest absolute net 30-day collateral flows realised during the preceding 24 months)	Look-back approach
Valuation changes on non-Level 1 posted collateral securing derivatives	20%
Excess collateral held by a bank related to derivative transactions that could contractually be called at any time by its counterparty	100%
Liquidity needs related to collateral contractually due from the reporting bank on derivatives transactions	100%
Increased liquidity needs related to derivative transactions that allow collateral substitution to non-HQLA assets	100%
Asset-backed commercial paper (ABCP), structured investment vehicles (SIVs), conduits, special purpose entities (SPEs) etc: • Liabilities from maturing ABCP, SIVs, SPEs etc (applied to maturing amounts and returnable assets) • Asset-backed securities (including covered bonds) applied to maturing amounts	100% 100%
Currently undrawn committed credit and liquidity facilities provided to: • Retail and small business clients • Non-financial corporates, sovereigns and central banks, multilateral development banks and PSEs • Banks subject to prudential supervision • Other financial institutions (include securities firms, insurance companies) • Other legal entity customers, credit and liquidity facilities	5% 10% for credit 30% for liquidity 40% 40% for credit 100% for liquidity 100%

Other contingent funding liabilities (such as guarantees, letters of credit, revocable credit and liquidity facilities etc)	10%
Any other contractual cash outflows	100%
Total expected cash outflows	

Cash Inflows	Inflow rate
Maturing secured lending transactions backed by the following collateral: • Level 1 assets • Level 2A assets • Level 2B assets o Eligible RMBS o Other assets	 0% 15% 25% 50%
• Margin lending / financing backed by all other collateral	50%
• All other assets	100%
Credit or liquidity facilities provided to the reporting bank	0%
Other inflows by counterparty: • Amounts to be received from retail counterparties • Amounts to be received from non-financial wholesale counterparties, from transactions other than those listed in above inflow categories • Amounts to be received from financial institutions and central banks, from transactions other than those listed in above inflow categories.	 50% 50% 100%
Operational deposits held at other financial institutions (include deposits held at centralised institution of network of co-operative banks)	0%
Net derivative cash inflows	100%
Contractual inflows from securities maturing ≤ 30 days, not included anywhere above	100%
Other contractual cash inflows	100%
Total expected cash inflows	
Total net cash outflows = Total expected cash outflows minus min [total expected cash inflows, 75% of total expected cash outflows]	

- END -