Annex 3

G.N. [**number*]

BANKING ORDINANCE (CHAPTER 155)

CODE OF PRACTICE

The Monetary Authority, having consulted with the persons specified in section 97M(2) of the Banking Ordinance (Chapter 155) and amended and approved the amendment of an approved code of practice pursuant to section 97M(4) of that Ordinance, hereby, as required pursuant to section 97M(3) and (4) of that Ordinance—

(a) identifies the following code (with English and Chinese versions) as being the code concerned:

(i) in English— 'Code of Practice for the Purposes of Providing Guidance in Respect of the Provisions of Division 5 (Calculation of Total Net Cash Outflows) of Part 7 of the Banking (Liquidity) Rules (Chapter 155Q)'; and

(ii) in Chinese—「就《銀行業(流動性)規則》(第 155Q 章)第 7 部第 5 分部(淨現金流出總額的計算)的條文提供指引的實務守則」; and

(b) specifies [1 January 2025] as the date on which the Monetary Authority's approval of the amendment of the code is to take effect; and

(c) specifies Division 5 (Calculation of Total Net Cash Outflows) of Part 7 of the Banking (Liquidity) Rules (Chapter 155Q) as the relevant provisions for which the amended code is approved.

Eddie W. M. YUE *Monetary Authority*

[Date]

DRAFT

Code of Practice

for the Purposes of Providing Guidance in Respect of
the Provisions of Division 5 (Calculation of Total Net Cash Outflows) of
Part 7 of the Banking (Liquidity) Rules
(Chapter 155Q)

Code of Practice for the Purposes of Providing Guidance in Respect of the Provisions of Division 5 (Calculation of Total Net Cash Outflows) of Part 7 of the Banking (Liquidity) Rules (Chapter 155Q)

Table of Contents

Code of Practice for the Purposes of Providing Guidance in Respect of the Provisions of Division 5 (Calculation of Total Net Cash Outflows) of Part 7 of the Banking (Liquidity) Rules (Chapter 155Q)

(Approved and issued pursuant to section 97M(1) of the Banking Ordinance (Cap.155) and subsequently amended by the Monetary Authority pursuant to section 97M(4) of that Ordinance)

1. Citation

This code of practice may be cited as the Banking (Liquidity Coverage Ratio – Calculation of Total Net Cash Outflows) Code.

2. Interpretation

(1) In this code of practice—

(a) ***Liquidity Rules*** (流動性規則) means the Banking (Liquidity) Rules (Chapter 155Q); and

(b) an expression specified below has the same meaning as it has in section 2(1) of the Capital Rules—

domestic public sector entity (本地公營單位)

exchange rate contract (匯率合約)

foreign public sector entity (非本地公營單位)

valid bilateral netting agreement (有效雙邊淨額結算協議)

(2) All words and expressions used in this code of practice and defined in the Liquidity Rules have the same meaning as in the Liquidity Rules.

(3) Unless the context otherwise requires, a reference to a "rule" in this code of practice means a rule in the Liquidity Rules.

(4) Rule 40 provides that in calculating its total net cash outflows under the LCR, a category 1 institution must, among other things, calculate its total expected cash outflows and total expected cash inflows in accordance with rules 41 and 42 respectively. This code of practice provides guidance on the calculation of total expected cash outflows and total expected cash inflows by a category 1 institution.

(5) The "standard calculation methodology templates" referred to in rules 41(8) and 42(3) are those specified by the Monetary Authority for the purpose of calculating the LCR. Such templates also form the basis of the Return of Liquidity Position of an Authorized Institution (Form MA(BS)1E) required by the Monetary Authority pursuant to section 63(2) of the Ordinance.

3. Calculation of total expected cash outflows—stable retail deposits

(1) Subject to subclauses (2) and (3), the expected cash outflow of a category 1 institution within the LCR period arising from stable retail deposits is calculated by multiplying the principal amount of each stable retail deposit by an outflow rate of 5%.

(2) A category 1 institution may calculate its expected cash outflow arising from stable retail deposits by multiplying the principal amount of each stable retail deposit by an outflow rate of 3% if that outflow rate is not inconsistent with the historical run-off behaviour of the deposits during a period of financial stress, and the effective deposit insurance scheme covering the deposits—

(a) is based on a system of prefunding through periodic collection of levies on the members of the scheme;

(b) has an adequate means of ensuring ready access to additional funding in the event of a large call on its reserves, based on an explicit and legally binding guarantee from the relevant government, a standing authority to borrow from the government, or any other similar arrangement; and

(c) is ordinarily capable of making a payment to depositors in respect of their insured deposits within not more than 7 working days after the scheme is activated.

(3) If a category 1 institution cannot readily determine whether a retail deposit (which is not a retail term deposit) is a stable retail deposit, the entire amount of that deposit is to be treated by the institution as a less stable retail deposit in accordance with clause 4.

4. Calculation of total expected cash outflows—less stable retail deposits

The expected cash outflow of a category 1 institution within the LCR period arising from less stable retail deposits is calculated by multiplying the principal amount of each less stable retail deposit by an outflow rate of 10%, unless the Monetary Authority notifies the institution otherwise by issuing a notice pursuant to section 97K(1) of the Ordinance to increase the outflow rate to a level above 10% for all or part of those deposits, if the Monetary Authority is satisfied that the liquidity risks associated with those deposits are such that it is prudent and reasonable to apply that higher level of outflow rate to those deposits.

5. Calculation of total expected cash outflows—retail term deposits

(1) Subject to subclause (2), the expected cash outflow of a category 1 institution within the LCR period arising from retail term deposits is calculated by multiplying the principal amount of each retail term deposit by an outflow rate of 5%.

(2) If a retail term deposit of a category 1 institution (which is a deposit-taking company)—

(a) is subject to the repayment restriction specified in section 12(3) of the Ordinance at the time the institution makes the calculation referred to in subclause (1), the institution may exclude that deposit from the calculation;

(b) is not subject to the repayment restriction specified in section 12(3) of the Ordinance because the Monetary Authority has given written permission referred to in that section, the expected cash outflow arising from that deposit is calculated by multiplying the principal amount of that deposit by an outflow rate of 100% with effect from the date on which the institution receives that permission.

6. Calculation of total expected cash outflows—small business funding

The expected cash outflow of a category 1 institution within the LCR period arising from small business funding is calculated in accordance with clause 3, 4 or 5 (where applicable) with all necessary modifications.

7. Calculation of total expected cash outflows—operational deposits

(1) Subject to subclauses (2) to (6), the expected cash outflow of a category 1 institution within the LCR period arising from operational deposits is calculated by multiplying the principal amount of each operational deposit by—

(a) in the case of that portion of the deposit that is fully insured by an effective deposit insurance scheme, the applicable outflow rate under clause 3 as if that portion of the deposit were a stable retail deposit; and

(b) in any other case, an outflow rate of 25%.

(2) An operational deposit placed with a category 1 institution by a customer can only be included in the calculation under subclause (1) if—

(a) the customer has become significantly dependent on the institution for the provision of operational services as an independent third party to support the customer's business operations;

(b) the institution is unaware of any adequate back-up arrangements of the customer that the customer could call upon should the institution not be able to provide the operational services referred to in paragraph (a) to the customer;

(c) the operational services referred to in paragraph (a) provided by the institution to the customer are so provided under a legally binding agreement;

(d) the agreement referred to in paragraph (c) is not due for expiry within the LCR period and cannot be terminated by the customer by giving the institution less than 30 calendar days' notice;

(e) any early termination of the agreement referred to in paragraph (c) within the LCR period will result in significant costs being borne by the customer for moving that deposit out of the institution within the LCR period;

(f) that deposit is a by-product of the underlying operational services referred to in paragraph (a) provided by the institution to the customer, and has not been solicited by the institution from the wholesale funding market solely through the offering of interest income;

(g) that deposit is kept in a specifically designated account and priced at a level, or coupled with other benefits, that does or do not give the customer an economic incentive to maintain excess operational deposit in that account;

(h) the institution has an effective methodology for identifying the amount of excess operational deposit maintained in the customer's operational deposit account, having regard to all relevant factors affecting the risk of withdrawal by the customer of the excess operational deposit when the institution is in financial stress;

(i) that portion of the deposit maintained in the customer's operational deposit account that is identified by the institution to be excess operational deposit is not included in the calculation under subclause (1); and

(j) the deposits included by the institution in the calculation under subclause (1) are not provided by a small number of customers that may potentially expose the institution to the risk of over-reliance on funding provided by those customers.

(3) If a category 1 institution is unable to determine the amount of excess operational deposit in an operational deposit account, the entire balance of the deposit in that account is treated as if that deposit were not an operational deposit.

(4) A category 1 institution should assess if the criteria under subclause (2) are met in respect of its deposits before they are treated as operational deposits, and the institution should be able to provide its assessment to the Monetary Authority for review upon request.

(5) A category 1 institution should not include its deposits in the calculation under subclause (1) if the Monetary Authority notifies the institution that one or more of the criteria specified in subclause (2) are not met in respect of those deposits, unless and until the failure to meet the relevant criterion or criteria is rectified.

(6) In this clause—

excess operational deposit (超額營運存款), in relation to an operational deposit account in which an operational deposit placed with a category 1 institution by a customer is kept, means that portion of deposit kept in that account that is in excess of the level of operational deposit necessary to be kept in that account in order for the institution to provide operational services to the customer to meet the customer's operational needs;

operational deposit account (營運存款帳户) means a specifically designated account referred to in subclause (2)(g);

relevant factors (相關因素), in relation to the risk of withdrawal of excess operational deposit, includes—

(a) the likelihood that the customer concerned will have above average balances in the customer's operational deposit account in advance of specific payment needs; and

(b) appropriate indicators to identify those customers that are not actively or efficiently managing the balances in their respective operational deposit accounts.

8. Calculation of total expected cash outflows—unsecured wholesale funding (other than operational deposits) provided by corporates (other than small business customers), sovereigns, Monetary Authority for account of Exchange Fund, central banks, multilateral development banks and public sector entities

The expected cash outflow of a category 1 institution within the LCR period arising from unsecured wholesale funding (that does not qualify as operational deposits) provided to the institution by a corporate (other than a small business customer), sovereign, the Monetary

Authority for the account of the Exchange Fund, central bank, multilateral development bank or public sector entity is calculated by multiplying the principal amount of the funding by—

(a) if the entire amount of the funding is fully insured by an effective deposit insurance scheme, an outflow rate of 20%; and

(b) in any other case, an outflow rate of 40%.

9. Calculation of total expected cash outflows—unsecured wholesale funding other than funding mentioned in clauses 6 to 8

(1) Subject to subclauses (2) and (3), the expected cash outflow of a category 1 institution within the LCR period arising from unsecured wholesale funding (other than the funding mentioned in clauses 6 to 8) is calculated by multiplying the principal amount of the funding by an outflow rate of 100%.

(2) If the funding referred to in subclause (1) is—

(a) received from customers by a category 1 institution in the course of providing prime brokerage services to those customers; and

(b) withdrawable within the LCR period,

the entire amount of that funding is included in the calculation of the institution's expected cash outflow under that subclause, irrespective of whether the institution has maintained, or is required to maintain, all or any portion of the funding in segregated accounts for the protection of customer assets.

(3) Subclause (1) also applies to any unsecured wholesale funding of a category 1 institution (which is a deposit-taking company) that is not subject to the repayment restriction specified in section 12(3) of the Ordinance because the Monetary Authority has given written permission referred to in that section, with effect from the date on which the institution receives that permission.

10. Calculation of total expected cash outflows—debt securities and prescribed instruments issued by category 1 institution and redeemable within LCR period

Irrespective of whether the holders of the debt security or prescribed instrument concerned are retail customers or wholesale customers, the expected cash outflow of a category 1 institution arising from any debt security or prescribed instrument issued by the institution that is redeemable within the LCR period is calculated by multiplying the redeemable amount of the security or instrument, as the case may be, by an outflow rate of 100%.

11. Calculation of total expected cash outflows—liabilities or obligations arising from secured funding transactions (including securities swap transactions)

(1) Subject to subclause (3), the expected cash outflow of a category 1 institution arising from secured funding transactions (other than securities swap transactions) which are due for settlement within the LCR period is calculated by multiplying the principal amount of the institution's liability or obligation (that is, the money to be repaid by the institution) under each of those transactions within that period by the outflow rate applicable to the transaction concerned as shown in Table 1.

Table 1

Outflow rates for calculation of expected cash outflow arising from secured funding transactions (other than securities swap transactions)

Item	Type of secured funding transaction (other than securities swap transaction) entered into by category 1 institution	Outflow rate
1.	The counterparty of the transaction is—	0%
	(a) the Monetary Authority for the account of the Exchange Fund (if the institution is incorporated in Hong Kong); or	
	(b) the central bank of the country in which the institution is incorporated,	
	irrespective of the type of collateral backing the transaction.	
2.	The counterparty of the transaction is the Government or a qualifying domestic public sector entity (if the institution is incorporated in Hong Kong), the sovereign or a qualifying foreign public sector entity of the country in which the institution is incorporated, or a multilateral development bank, and the transaction is collateralized by—	
	(a) level 1 assets	0%
	(b) level 2A assets	15%
	(c) approved RMBS	25%
	(d) level 2B assets that are not approved RMBS	25%
	(e) assets that do not fall within any of paragraphs (a) to (d)	25%
3.	The counterparty of the transaction is an entity that does not fall within item 1 or 2, and the transaction is collateralized by—	
	(a) level 1 assets	0%
	(b) level 2A assets	15%
	(c) approved RMBS	25%
	(d) level 2B assets that are not approved RMBS	50%
	(e) assets that do not fall within any of paragraphs (a) to (d)	100%

(2) For the purposes of item 2 of Table 1—

(a) ***qualifying domestic public sector entity*** (合資格本地公營單位) means a domestic public sector entity that qualifies for a risk-weight not exceeding 20% under the standardized (credit risk) approach pursuant to section 57 of the Capital Rules; and

(b) ***qualifying foreign public sector entity*** (合資格非本地公營單位) means a foreign public sector entity that qualifies for a risk-weight not exceeding 20% under the standardized (credit risk) approach pursuant to section 57 of the Capital Rules.

(3) For the purposes of items 2 and 3 of Table 1, a secured funding transaction (other than a securities swap transaction) entered into by a category 1 institution is not regarded as being collateralized by an asset that falls within level 1 assets, level 2A assets, approved RMBS or level 2B assets that are not approved RMBS referred to in those items unless that asset satisfies the requirements set out in rule 25(a) and (b) that are applicable to it.

(4) Subject to subclauses (5) and (6), if a category 1 institution has entered into a securities swap transaction with a counterparty, which is due for settlement within the LCR period, the expected cash outflow of the institution arising from the transaction is calculated by multiplying the principal amount of the securities to be delivered by the institution to the counterparty within that period by the outflow rate applicable to the transaction concerned as shown in Table 2.

Table 2

Outflow rates for calculation of expected cash outflow arising from securities swap transactions

	Column 1 Type of securities to be delivered by category 1 institution to counterparty within LCR period	Column 2 Type of securities to be received by category 1 institution from counterparty within LCR period	Column 3 Outflow rate
(a)	level 1 assets	level 1 assets	0%
(b)	level 1 assets	level 2A assets	15%
(c)	level 1 assets	approved RMBS	25%
(d)	level 1 assets	level 2B assets that are not approved RMBS	50%
(e)	level 1 assets	assets that are not level 1 assets, level 2A assets or level 2B assets	100%
(f)	level 2A assets	level 2A assets	0%
(g)	level 2A assets	approved RMBS	10%
(h)	level 2A assets	level 2B assets that are not approved RMBS	35%
(i)	level 2A assets	assets that are not level 1 assets, level 2A assets or level 2B assets	85%
(j)	approved RMBS	approved RMBS	0%
(k)	approved RMBS	level 2B assets that are not approved RMBS	25%
(l)	approved RMBS	assets that are not level 1 assets, level 2A assets or level 2B assets	75%

	Column 1 Type of securities to be delivered by category 1 institution to counterparty within LCR period	Column 2 Type of securities to be received by category 1 institution from counterparty within LCR period	Column 3 Outflow rate
(m)	level 2B assets that are not approved RMBS	level 2B assets that are not approved RMBS	0%
(n)	level 2B assets that are not approved RMBS	assets that are not level 1 assets, level 2A assets or level 2B assets	50%
(o)	assets that are not level 1 assets, level 2A assets or level 2B assets	assets that are not level 1 asses, level 2A assets or level 2B assets	0%

(5) The principal amount of the securities referred to in subclause (4) is—

(a) if the securities are marketable, the fair value of the securities; and

(b) in any other case, the book value (including any accrued interest) of the securities.

(6) For the purposes of Table 2, a security to be delivered, or received, by a category 1 institution under a securities swap transaction is not regarded as a level 1 asset, level 2A asset, approved RMBS, or level 2B asset that is not approved RMBS referred to in that Table unless that security satisfies the requirements set out in rule 25(a) and (b) that are applicable to it.

12. Calculation of total expected cash outflows—contractual net cash outflows arising from derivative contracts

(1) Subject to subclauses (2) to (5), a category 1 institution, in calculating its contractual net cash outflows within the LCR period arising from derivative contracts entered into by the institution—

(a) determines the fair value of the contractual cash outflow to be paid, and the fair value of the contractual cash inflow to be received, by the institution under each of those contracts within the LCR period;

(b) subject to paragraph (c), derives the contractual cash outflow of those contracts on a gross rather than on a net basis (that is, the contractual cash inflow of those contracts within the LCR period is not to be offset against the contractual cash outflow of those contracts within the same period);

(c) in the case of derivative contracts to which subclause (3) or (4) applies, or both subclauses (3) and (4) apply, may derive the contractual cash outflow of those contracts within the LCR period on a net basis (that is, by offsetting against such outflow the contractual cash inflow of those contracts within the same period); and

(d) aggregates the amounts derived under paragraphs (b) and (c) and applies an outflow rate of 100% to the aggregated amount.

(2) If a category 1 institution has posted an asset to its counterparty as collateral to secure the institution's payment obligations under a derivative contract and—

(a) the asset satisfies all the requirements of rule 25(a) and (b) that are applicable to it;

(b) the asset satisfies, or will satisfy when it is returned to the institution, all the requirements referred to in rule 25(c) that are applicable to it; and

(c) the institution satisfies, or will satisfy when the asset is returned to the institution, all the requirements referred to in rule 25(d) that are applicable to it insofar as those requirements relate to the asset,

the institution, for the purpose of calculating its contractual cash outflow arising from the contract, deducts from such outflow the fair value of the asset after applying the post-haircut factor specified in Table 1 in rule 35 that is applicable to the asset.

(3) If a category 1 institution has entered into an exchange rate contract which involves the exchange of cash flows in 2 currencies within the LCR period, the contractual cash outflow in one currency is offset by the contractual cash inflow in the other currency under the contract if the 2 amounts are fully exchanged on a simultaneous basis (or within the same day), irrespective of whether the contract is subject to a valid bilateral netting agreement.

(4) If a category 1 institution has entered into derivative contracts with a counterparty that are subject to a valid bilateral netting agreement, the contractual net cash outflows within the LCR period arising from those contracts are calculated by offsetting the contractual cash inflows against the contractual cash outflows under those contracts within the LCR period.

(5) If a category 1 institution sells an option to a counterparty under a derivative contract, and the option is in-the-money to, and exercisable by, the counterparty within the LCR period, it is assumed that the counterparty will exercise the option and the contractual cash outflow arising from the exercise of the option is included in the institution's calculation under subclause (1).

13. Calculation of total expected cash outflows—derivative contracts or other transactions with material adverse event clauses

(1) If a category 1 institution has entered into a derivative contract which contains a material adverse event clause, the institution, in calculating its expected cash outflow within the LCR period arising from that contract—

(a) determines the principal amount of—

(i) any additional contractual cash outflow arising from that contract;

(ii) any additional collateral (measured at fair value) required to be posted to the institution's counterparty in respect of that contract; and

(iii) any funding required to be provided as a result of adverse changes in the institution's contractual rights to re-hypothecate collateral received from the institution's counterparty,

as if the material adverse event were to occur within the LCR period; and

(b) applies an outflow rate of 100% to the amount derived pursuant to paragraph (a).

(2) Subclause (1) applies, with all necessary modifications, to other transactions entered into by a category 1 institution which are not derivative contracts but which are subject to a material adverse event clause.

14. Calculation of total expected cash outflows—potential loss in market value of posted collateral securing derivative contracts or other transactions

(1) If a category 1 institution has posted an asset, other than a level 1 asset, to a counterparty as collateral to secure the counterparty's exposure to the institution under a derivative contract or other transaction (***posted collateral***), the expected cash outflow of the institution within the LCR period calculated in respect of that contract is increased by an amount equal to the contracted amount of the posted collateral multiplied by an outflow rate of 20%, in order to cater for the risk of potential changes in the valuation of the collateral within the LCR period.

(2) For the purposes of calculating the expected cash outflow referred to in subclause (1), a category 1 institution—

(a) subject to subclause (3), offsets the contracted amount of the posted collateral by the contracted amount of any collateral, other than a level 1 asset, received from the same counterparty to which the posted collateral is posted (***received collateral***) if the institution has the right to re-hypothecate the received collateral without restriction; and

(b) determines the contracted amount of the posted collateral and the received collateral in accordance with the terms and conditions of the derivative contract or transaction concerned, after applying any haircut that may be applicable to the collateral as required under that contract or transaction.

(3) If the received collateral is kept in a segregated margin account of the counterparty, the collateral can only be used to offset outflows arising from payments that are eligible to be offset from the same account of the counterparty.

15. Calculation of total expected cash outflows—excess non-segregated collateral callable by counterparty under derivative contracts or other transactions

If—

(a) a category 1 institution is holding collateral posted by a counterparty and the fair value of the collateral is in excess of the amount of collateral contractually required to be posted to the institution under a derivative contract or other transaction;

(b) the counterparty has the right to withdraw the excess collateral (being the amount of collateral in excess of the contractual collateral requirement) from the institution within the LCR period; and

(c) the collateral is not segregated from other assets held by the institution, it is assumed that the counterparty will exercise the right to withdraw the excess collateral during the LCR period and the associated expected cash outflow within the LCR period is calculated by multiplying the fair value of the excess collateral by an outflow rate of 100%.

16. Calculation of total expected cash outflows—collateral substitution under derivative contracts or other transactions

(1) Subject to subclauses (2) and (3), if—

(a) a category 1 institution has received assets that qualify for inclusion as HQLA under the LCR as collateral from a counterparty under a derivative contract or other transaction entered into by the institution with the counterparty (***HQLA collateral***);

(b) the HQLA collateral is not segregated from other assets held by the institution; and

(c) the counterparty has a contractual right to substitute the HQLA collateral posted to the institution by one or more than one type of collateral of lower liquidity quality within the LCR period,

it is assumed that the counterparty will exercise that right during the LCR period and the associated expected cash outflow within the LCR period is calculated by multiplying the fair value of the HQLA collateral held by the institution by the applicable outflow rate set out in column 3 of Table 2 in clause 11(4).

(2) The outflow rate referred to in subclause (1) is determined by reference to the particular row of Table 2 in which—

(a) column 1 of Table 2 corresponds to the type of HQLA collateral held by the institution; and

(b) column 2 of Table 2 corresponds to the type of collateral of lower liquidity quality assumed to be used by the counterparty to substitute the HQLA collateral held by the institution (after applying the order of collateral substitution determined in accordance with subclause (3)).

(3) For the purposes of subclause (1), it is assumed that the counterparty will substitute the HQLA collateral held by the institution by the type of collateral in the following order (to the extent allowed under the relevant contract)—

(a) first order of substitution: assets that are not level 1 assets, level 2A assets or level 2B assets;

(b) second order of substitution: level 2B assets that are not approved RMBS;

(c) third order of substitution: approved RMBS;

(d) fourth order of substitution: level 2A assets; and

(e) fifth order of substitution: level 1 assets.

17. Calculation of total expected cash outflows—contractual obligations to post collateral to counterparty under derivative contracts or other transactions

(1) Subject to subclause (2), if a category 1 institution has a contractual obligation to provide collateral to its counterparty under a derivative contract or other transaction

within the LCR period, the expected cash outflow of the institution within the LCR period arising from the provision of such collateral to the counterparty is calculated by multiplying the fair value of the collateral required to be provided to the counterparty by an outflow rate of 100% unless the expected cash outflow arising from this obligation is already captured in another cash outflow item.

(2) Subclause (1) applies irrespective of whether the counterparty referred to in that subclause has demanded the institution to post the required collateral.

18. Calculation of total expected cash outflows—increase in collateral needs arising from adverse changes in market value of derivative contracts or other transactions

(1) If a category 1 institution has entered into derivative contracts or other transactions that will subject the institution to collateral requirements, in order to cater for the risk of increased collateral needs arising from adverse changes in the market value of such contracts and transactions within the LCR period, the associated expected cash outflow of the category 1 institution in respect of those contracts and transactions is calculated by multiplying Value X, as determined in accordance with subclause (2), by an outflow rate of 100%.

(2) For the purposes of subclause (1), ***Value X*** (X 值), being the largest absolute value of the total cumulative amount of net collateral flow of a category 1 institution realized in any period of 30 calendar days during the 24 months preceding the day on which the LCR is calculated, is determined by applying Formula A (unless the institution is unable to use Formula A due to data insufficiency or other reasons, in which event the institution should agree with the Monetary Authority on an alternative calculation method).

Formula A

Calculation of Value X

Value X =

$$\max\left\{\left|\sum_{n=1}^{30}(\text{daily net collateral flow})_n\right|, \left|\sum_{n=2}^{31}(\text{daily net collateral flow})_n\right|, \ldots, \left|\sum_{n=701}^{730}(\text{daily net collateral flow})_n\right|\right\};$$

where—

(a) $(\text{daily net collateral flow})_n$ means net amount of collateral inflows or outflows on day "n" caused by changes in the fair value of derivative contracts or other transactions subject to collateral requirements; and

(b) it is assumed that 24 months consist of 730 calendar days.

19. Calculation of total expected cash outflows—repayment of funding obtained from structured financial instrument issued by category 1 institution and redeemable within LCR period

(1) Subject to subclause (2), if a category 1 institution has issued any structured financial instrument which will mature within the LCR period, the expected cash outflow of the institution arising from the repayment of funding obtained from the issue of the instrument is calculated by multiplying the principal amount of the funding repayable by the institution within the LCR period by an outflow rate of 100%.

(2) If a category 1 institution has posted any asset as collateral in respect of the structured financial instrument issued by the institution, as referred to in subclause (1), and—

(a) the asset satisfies all the requirements of rule 25(a) and (b) that are applicable to it;

(b) the asset satisfies, or will satisfy when it is returned to the institution, all the requirements referred to in rule 25(c) that are applicable to it; and

(c) the institution satisfies, or will satisfy when the asset is returned to the institution, all the requirements referred to in rule 25(d) that are applicable to it insofar as those requirements relate to the asset,

the institution, for the purpose of calculating its expected cash outflow under subclause (1), deducts from such outflow the principal amount of the asset after applying the post-haircut factor specified in Table 1 in rule 35 that is applicable to the asset.

20. Calculation of total expected cash outflows—obligations for repayment of maturing debt or provision of funding or asset arising from any embedded option in structured financing transactions

(1) Subject to subclause (2), if a category 1 institution has any obligations under a structured financing transaction to repay any debt maturing within the LCR period or to provide any funding or asset that may arise from any embedded option in the transaction, the expected cash outflow of the institution arising from such obligations is calculated by applying an outflow rate of 100% to—

(a) the principal amount of any debt maturing within the LCR period; or

(b) the principal amount of any funding or asset that may need to be provided by the institution under the embedded option in the transaction.

(2) If a category 1 institution conducts a structured financing transaction through any special purpose entity, subclause (1) applies as if that entity were a part of the institution irrespective of whether the entity is a specified associated entity of the institution.

21. Calculation of total expected cash outflows—potential drawdown of undrawn committed facilities

(1) Subject to subclauses (2) to (6), the expected cash outflow of a category 1 institution arising from the potential drawdown of committed facilities (whether committed credit facilities or committed liquidity facilities) within the LCR period is calculated by multiplying the principal amount of the undrawn portion of those facilities by the outflow rate applicable to the facility concerned as shown in Table 3.

Table 3

Outflow rates for calculation of expected cash outflow arising from potential drawdown of undrawn committed facilities

Item		Type of committed facility	Outflow rate
1.	Committed credit facilities granted to—		
	(a)	retail customers	5%
	(b)	small business customers	5%
	(c)	corporates (other than small business customers), sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks, public sector entities or multilateral development banks	10%
	(d)	banks or other financial institutions	40%
	(e)	any entities that do not fall within any of paragraphs (a) to (d)	100%
2.	Committed liquidity facilities granted to—		
	(a)	retail customers	5%
	(b)	small business customers	5%
	(c)	corporates (other than small business customers), sovereigns, the Monetary Authority for the account of the Exchange Fund, central banks, public sector entities or multilateral development banks	30%
	(d)	banks	40%
	(e)	financial institutions (other than banks) or entities that do not fall within any of paragraphs (a) to (d)	100%

(2) If a committed facility granted by a category 1 institution to its customer is collateralized by an asset that satisfies all the requirements referred to in rule 25(a) to (c) that are applicable to the asset and the institution satisfies all the requirements referred to in rule 25(d) that are applicable to it insofar as those requirements relate to the asset, the institution may, in calculating the principal amount of the undrawn portion of the facility for the purposes of subclause (1), deduct the fair value of the asset (after applying the post-haircut factor specified in Table 1 in rule 35 that is applicable to the asset) if—

(a) the customer—

(i) has posted the asset to the institution as collateral; or

(ii) is legally obliged to post the asset to the institution as collateral upon the drawdown of the facility;

(b) the institution is legally entitled and operationally capable of re-hypothecating the asset to obtain funding once the facility is drawn;

(c) the institution has no obligation to return the asset to the customer or to any third party on demand or at any time within the LCR period;

(d) the institution does not count the asset as HQLA for the purpose of calculating the LCR; and

(e) there is no undue correlation between the probability of drawing on the facility and any potential decline in the fair value of the asset.

(3) Subject to subclauses (4) and (6), if a committed facility (or a portion of it)—

(a) is granted by a category 1 institution to its customer to provide standby liquidity support for the customer's debt obligations; and

(b) is treated as a committed liquidity facility for the purpose of the calculation under subclause (1),

only the principal amount of those obligations covered by the facility that will mature within the LCR period is included in the calculation. In other words, the calculation excludes any portion of the facility covering those obligations that will mature beyond the LCR period.

(4) If any remaining portion of the committed facility referred to in subclause (3) is granted for other purposes, that portion of the facility is treated as if it were a committed credit facility.

(5) Subject to subclause (6), a committed facility is treated as a committed credit facility if the facility is granted by a category 1 institution to a corporate for the purpose of financing the corporate's general working capital or import or export activities.

(6) Subject to subclause (7), an outflow rate of 100% is applied to the entire amount of the undrawn portion of any committed facility granted by a category 1 institution to a hedge fund, money market fund or special purpose entity (including any special purpose funding vehicle), as if the facility were a committed liquidity facility.

(7) If a category 1 institution has—

(a) entered into structured financing transactions that fall within clause 19 or 20; and

(b) granted committed liquidity facilities associated with such transactions,

those liquidity facilities are not included in the calculation under subclause (1) so long as the institution has calculated its expected cash outflow arising from those structured financing transactions in the manner set out in clause 19 or 20, as the case may be.

22. Calculation of total expected cash outflows—contractual lending obligations not otherwise covered in other clauses

(1) Subject to subclauses (2) and (3), the total expected cash outflows of a category 1 institution include—

(a) the expected cash outflow of the institution arising from contractual lending obligations to the Monetary Authority for the account of the Exchange Fund, central banks and financial institutions that will fall due within the LCR period and that are not otherwise included in the calculation of the institution's total expected cash outflows; and

(b) the expected cash outflow of the institution arising from contractual lending obligations to the institution's retail customers, small business customers, and other customers (not being customers that are the Monetary Authority for the account of the Exchange Fund, central banks or financial institutions)—

(i) that will fall due within the LCR period;

(ii) that are not otherwise included in the calculation of the institution's total expected cash outflows; and

(iii) the principal amount ***(first-mentioned principal amount)*** of which exceeds 50% of the principal amount ***(second-mentioned principal amount)*** of the contractual payment obligations from its retail customers, small business customers, and other customers (not being customers that are the Monetary Authority for the account of the Exchange Fund, central banks or financial institutions) corresponding with item 3(b) and (c) of Table 7 in clause 26 that will fall due within the LCR period.

(2) The expected cash outflow of a category 1 institution that falls within subclause (1)(a) is calculated by applying an outflow rate of 100% to the principal amount of those obligations.

(3) The expected cash outflow of a category 1 institution that falls within subclause (1)(b) is calculated by applying an outflow rate of 100% to the difference between the first-mentioned principal amount and 50% of the second-mentioned principal amount.

(4) In subclause (1)(b)—

other customers (其他客户) includes customers that are sovereigns, public sector entities, multilateral development banks and wholesale customers (other than small business customers).

23. Calculation of total expected cash outflows—other contingent funding obligations (whether contractual or non-contractual)

(1) Subject to subclause (2), the expected cash outflow of a category 1 institution within the LCR period arising from other contingent funding obligations is calculated by multiplying the applicable amount of the obligations by the outflow rate applicable to the amount concerned as shown in Table 4.

Table 4

Outflow rates for calculation of expected cash outflow arising from other contingent funding obligations

Item	Type of other contingent funding obligations	Applicable amount	Outflow rate
1.	Trade-related contingencies (other than funding obligations arising from potential drawdown of committed credit facilities	Contracted amount	3%

Item	Type of other contingent funding obligations	Applicable amount	Outflow rate
	granted to corporates for import or export financing purposes)		
2.	Guarantees and letters of credit unrelated to trade-related contingencies	Contracted amount	10%
3.	Uncommitted facilities	Undrawn portion	0%
4.	Non-contractual contingent funding obligations arising from—		
	(a) debt securities or structured financial instruments, in respect of which a category 1 institution (or its associated entity) is the issuer, a market maker or a dealer, or has been involved as an originator, sponsor, marketing agent or seller, where there is a reasonable expectation that the obligations will materialize within the LCR period	Book value	100%
	(b) money market funds or other types of collective investment funds marketed by a category 1 institution (or its associated entity), where there is a reasonable expectation that the obligations will materialize within the LCR period	Fair value	100%
	(c) situations in which customer short positions in relation to customers of a category 1 institution are covered by assets (that are not HQLA qualifying assets) received by the institution from its other customers as collateral, in respect of which the institution has the right of re-hypothecation, such that the institution may be obliged to provide funding within the LCR period to cover uncovered customer short positions in the event of	Fair value[1]	50%

[1] To avoid doubt, this refers to the fair value of assets received by the category 1 institution from its other customers as collateral and used by the institution to cover its customer short positions.

Item		Type of other contingent funding obligations	Applicable amount	Outflow rate
		withdrawal of the collateral by its other customers		
	(d)	potential liquidity drawn by either of the following that is not consolidated for the purpose of rule 11(1)— (i) a joint venture of the institution; or (ii) an entity in which the institution has a minority interest, and where there is a reasonable expectation that the institution will be the main liquidity provider when the joint venture or entity concerned is in need of liquidity	Subject to subclause (2)	Subject to subclause (2)
	(e)	circumstances not otherwise specified in sub-items (a) to (d), where there is a reasonable expectation that the obligations will materialize within the LCR period	Principal amount	100%

(2) A category 1 institution calculates its expected cash outflow arising from non-contractual contingent funding obligations that fall within item 4(d) of Table 4 by applying the methodology for determining such outflow agreed with the Monetary Authority, after the institution has notified the Monetary Authority of the existence of such contingent funding obligations and the circumstances giving rise to those obligations as required under rule 41(12).

(3) In item 4(c) of Table 4—

customer short position (客户短倉), in relation to a customer of a category 1 institution, means a short position created by the customer when he sells a security he does not own, which is subsequently covered when the institution delivers to the customer, under a securities lending transaction, an equivalent security, acquired from internal or external sources, on the settlement date of the sale.

24. Calculation of total expected cash outflows—other contractual cash outflows

The total expected cash outflows of a category 1 institution include the expected cash outflow of the institution within the LCR period arising from other contractual cash outflows, which is calculated by multiplying the principal amount of the outflows by an outflow rate of 100%.

25. Calculation of total expected cash inflows—secured lending transactions (including securities swap transactions)

(1) Subject to subclauses (2) and (6), the expected cash inflow of a category 1 institution arising from secured lending transactions (other than securities swap transactions), which are due for settlement within the LCR period, is calculated by multiplying the principal amount of the liability or obligation of the institution's counterparty (that is, the money to be repaid by the counterparty) under each of those transactions to the institution within that period by the inflow rate applicable to the transaction concerned as shown in Table 5.

Table 5

Inflow rates for calculation of expected cash inflow arising from secured lending transactions (other than securities swap transactions)

Item	Type of asset collateralizing secured lending transaction (other than securities swap transaction) entered into by category 1 institution	Inflow rate
1.	Level 1 assets	0%
2.	Level 2A assets	15%
3.	Approved RMBS	25%
4.	Level 2B assets that are not approved RMBS	50%
5.	Assets that do not fall within any of items 1 to 4 that are used as collateral for—	
	(a) margin lending transactions	50%
	(b) other secured lending transactions	100%

(2) For the purposes of Table 5, a secured lending transaction (other than a securities swap transaction) entered into by a category 1 institution is not regarded as being collateralized by an asset that falls within level 1 assets, level 2A assets, approved RMBS or level 2B assets that are not approved RMBS referred to in that Table unless that asset satisfies the requirements set out in rule 25(a) and (b) that are applicable to it.

(3) Subject to subclauses (4) to (6), if a category 1 institution has entered into a securities swap transaction with a counterparty which is due for settlement within the LCR period, the expected cash inflow of the institution arising from the transaction is calculated by multiplying the principal amount of the securities to be received by the institution from the counterparty within that period by the inflow rate applicable to the transaction concerned as shown in Table 6.

Table 6

Inflow rates for calculation of expected cash inflow arising from securities swap transactions

	Type of securities to be received by category 1 institution from counterparty within LCR period	Type of securities to be delivered by category 1 institution to counterparty within LCR period	Inflow rate
(a)	level 1 assets	level 1 assets	0%
(b)	level 1 assets	level 2A assets	15%
(c)	level 1 assets	approved RMBS	25%
(d)	level 1 assets	level 2B assets that are not approved RMBS	50%
(e)	level 1 assets	assets that are not level 1 assets, level 2A assets or level 2B assets	100%
(f)	level 2A assets	level 2A assets	0%
(g)	level 2A assets	approved RMBS	10%
(h)	level 2A assets	level 2B assets that are not approved RMBS	35%
(i)	level 2A assets	assets that are not level 1 assets, level 2A assets or level 2B assets	85%
(j)	approved RMBS	approved RMBS	0%
(k)	approved RMBS	level 2B assets that are not approved RMBS	25%
(l)	approved RMBS	assets that are not level 1 assets, level 2A assets or level 2B assets	75%
(m)	level 2B assets that are not approved RMBS	level 2B assets that are not approved RMBS	0%
(n)	level 2B assets that are not approved RMBS	assets that are not level 1 assets, level 2A assets or level 2B assets	50%
(o)	assets that are not level 1 assets, level 2A assets or level 2B assets	assets that are not level 1 asses, level 2A assets or level 2B assets	0%

(4) The principal amount of the securities referred to in subclause (3) is—

(a) if the securities are marketable, the fair value of the securities; and

(b) in any other case, the book value (including any accrued interest) of the securities.

(5) For the purposes of Table 6, a security to be received, or delivered, by a category 1 institution under a securities swap transaction is not regarded as a level 1 asset, level 2A asset, approved RMBS, or level 2B asset that is not approved RMBS referred to in

that Table unless the security satisfies the requirements set out in rule 25(a) and (b) that are applicable to it.

(6) An inflow rate of 0% is applied to a secured lending transaction maturing within the LCR period entered into by a category 1 institution with a counterparty in the calculation under subclause (1) or (3), as the case requires, if the institution has re-hypothecated the security obtained from that counterparty as collateral under that transaction to cover the institution's short position in that security that may be extended beyond the LCR period.

(7) In subclause (6)—

short position (短倉), in relation to a category 1 institution, means a short position created by the institution when it—

(a) sells a security it does not own for trading or hedging purposes; or

(b) borrows a security for a period of time and lends the security for a longer period of time.

26. Calculation of total expected cash inflows—secured or unsecured loans (other than those that fall within clause 25)

(1) The expected cash inflow of a category 1 institution arising from secured or unsecured loans granted by the institution (other than those that fall within clause 25(1) or (3)) is calculated by multiplying the principal amount of the loan repayments (including interest payments and instalments) that are contractually due within the LCR period by the inflow rate applicable to the loan repayment concerned as shown in Table 7.

Table 7

Inflow rates for calculation of expected cash inflow arising from secured or unsecured loans (other than those that fall within clause 25)

Item	**Type of loan repayment due within LCR period**	**Inflow rate**
1.	Contractual cash inflows from revolving loans	0%
2.	Contractual cash inflows from loans without a specific maturity date (excluding minimum payments of principal, fee or interest associated with the loans)	0%
3.	Contractual cash inflows from loans that do not fall within item 1 or 2 (including minimum payments of principal, fee or interest associated with loans without a specific maturity date) that are extended to—	
	(a) the Monetary Authority for the account of the Exchange Fund, central banks or financial institutions	100%
	(b) retail customers or small business customers	50%
	(c) sovereigns, public sector entities, multilateral development banks, wholesale customers (other than	50%

Item	Type of loan repayment due within LCR period	Inflow rate
	small business customers), or any other person who does not fall within paragraph (a) or (b)	

(2) In item 1 of Table 7—

revolving (循環), in relation to a credit facility granted by a category 1 institution to a borrower, means that the borrower's outstanding balance (a maximum of which is established by the institution) is permitted to fluctuate based on the borrower's decisions to borrow and repay.

27. Calculation of total expected cash inflows—release of balances maintained by category 1 institution in segregated accounts in accordance with requirements for protection of customer assets

(1) The total expected cash inflows of a category 1 institution may include any expected cash inflow of the institution within the LCR period arising from the release of balances that are held as assets that satisfy the requirements set out in rule 25(a) and (b) and are maintained by the institution in segregated accounts, in accordance with any requirements for the protection of customer assets.

(2) The expected cash inflow referred to in subclause (1) is calculated by multiplying the principal amount of those balances to be released to the institution within the LCR period by the inflow rate applicable to the type of customer as specified in item 3(a), (b) or (c) of Table 7 in clause 26.

28. Calculation of total expected cash inflows—maturing securities not included by category 1 institution in its HQLA

If a category 1 institution is holding a security that does not qualify for inclusion in its HQLA and is due for redemption within the LCR period, the expected cash inflow of the institution arising from the redemption of that security is calculated by multiplying the redeemable amount of the security by an inflow rate of 100%.

29. Calculation of total expected cash inflows—undrawn facilities granted to category 1 institution by, or operational deposits placed by the institution at, other financial institutions

An inflow rate of 0% is applied to—

(a) the undrawn portion of any credit facility, liquidity facility or other facility granted to a category 1 institution by another financial institution, irrespective of whether the facility is a committed facility; and

(b) the principal amount of operational deposits placed by the category 1 institution at other financial institutions,

in calculating the category 1 institution's total expected cash inflows.

30. Calculation of total expected cash inflows—contractual net cash inflows arising from derivative contracts

(1) Subject to subclauses (2) to (5), a category 1 institution, in calculating its contractual net cash inflows within the LCR period arising from derivative contracts entered into by the institution—

(a) determines the fair value of the contractual cash inflow to be received, and the fair value of the contractual cash outflow to be paid, by the institution under each of those contracts within the LCR period;

(b) subject to paragraph (c), derives the contractual cash inflow of those contracts on a gross rather than on a net basis (that is, the contractual cash outflow of those contracts within the LCR period is not to be offset against the contractual cash inflow of those contracts within the same period);

(c) in the case of derivative contracts to which subclause (3) or (4) applies, or both subclauses (3) and (4) apply, derives the contractual cash inflow of those contracts within the LCR period on a net basis (that is, by offsetting against such inflow the contractual cash outflow of the contracts within the same period); and

(d) aggregates the amounts derived under paragraphs (b) and (c) and applies an inflow rate of 100% to the aggregated amount.

(2) If a category 1 institution has received an asset from its counterparty as collateral to secure the counterparty's payment obligations under a derivative contract and—

(a) the asset satisfies all the requirements of rule 25(a) to (c) that are applicable to it; and

(b) the institution satisfies all the requirements referred to in rule 25(d) that are applicable to it insofar as those requirements relate to the asset,

the institution, for the purpose of calculating its contractual cash inflow arising from the contract, deducts from such inflow the fair value of the asset after applying the post-haircut factor specified in Table 1 in rule 35 that is applicable to the asset.

(3) If a category 1 institution has entered into an exchange rate contract which involves the exchange of cash flows in 2 currencies within the LCR period, the contractual cash inflow in one currency is offset by the contractual cash outflow in the other currency under the contract if the 2 amounts are fully exchanged on a simultaneous basis (or within the same day), irrespective of whether the contract is subject to a valid bilateral netting agreement.

(4) If a category 1 institution has entered into derivative contracts with a counterparty that are subject to a valid bilateral netting agreement, the contractual net cash inflows within the LCR period arising from those contracts are calculated by offsetting the contractual cash outflows against the contractual cash inflows under those contracts within the LCR period.

(5) If a category 1 institution holds an option under a derivative contract, and the option is in-the-money to, and exercisable by, the institution within the LCR period, the institution may assume that it will exercise the option and the contractual cash inflow

arising from the exercise of the option may be included in the institution's calculation under subclause (1).

31. Calculation of total expected cash inflows—other contractual cash inflows arising from assets, transactions or activities not otherwise covered in other clauses

The total expected cash inflows of a category 1 institution do not include any contractual cash inflow of the institution within the LCR period arising from assets, transactions or activities that do not fall within any of clauses 25 to 30 unless—

(a) the contractual cash inflow is generated from a financial activity conducted by the institution and does not relate to revenues sourced from non-financial activities;

(b) the contractual cash inflow is calculated by multiplying the principal amount of that inflow by the applicable inflow rate determined in accordance with item 3(a), (b) or (c) of Table 7 in clause 26; and

(c) the institution has in place and maintains adequate systems and processes to determine the principal amount of the contractual cash inflow to be received from those classes of counterparties specified in item 3(a), (b) or (c) of Table 7 within the LCR period in respect of the conduct of any financial activity.

Eddie W. M. YUE *Monetary Authority*

[Date]