MAS NOTICE FHC-N652

29 June 2022

NOTICE TO DESIGNATED FINANCIAL HOLDING COMPANIES
FINANCIAL HOLDING COMPANIES ACT 2013

NET STABLE FUNDING RATIO ("NSFR")

Introduction

1 This Notice is issued pursuant to sections 38(2) and 60(1) of the Financial Holding Companies Act 2013 ("the Act") and applies to all financial holding companies that –

(a) have a subsidiary that is a bank incorporated in Singapore;

(b) are predominantly banking DFHC; and

(c) are internationally active designated financial holding companies or are entities within a group that is designated by the Authority as a domestic systemically important bank[1] ("D-SIB"),

(referred to in this Notice as "FHCs").

2 The minimum all currency Net Stable Funding Ratio ("NSFR") requirements that an FHC must maintain at all times is –

(a) in the case of an FHC that is an internationally active designated financial holding company, or is an entity within a group that is designated by the Authority as a D-SIB and whose ultimate financial holding company is incorporated in Singapore, an all currency NSFR of at least 100%; and

(b) in all other cases, an all currency NSFR of at least 50%.

3 Pursuant to section 38(2) of the Act, an FHC must comply with the NSFR requirements on a consolidated ("Group") level, which consolidates the assets and liabilities of all its FHC group entities, other than those of the following FHC group entities, if any:

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[1] More information on the D-SIB framework can be found at https://www.mas.gov.sg/-/media/MAS/News-and-Publications/Monographs-and-Information-Papers/Monograph--MAS-Framework-for-Impact-and-Risk-Assessment.pdf.

(a) an insurance subsidiary;

(b) any other entity, where such non-consolidation of assets and liabilities of the entity is expressly permitted under the Accounting Standards. To avoid doubt, the exemption for an entity that is a parent from presenting consolidated financial statements in paragraph 4(a) of Singapore Financial Reporting Standards 110 ("SFRS 110") Consolidated Financial Statements does not apply to the FHC for the purposes of complying with this paragraph.

4 Pursuant to paragraph 3, and for the purposes of this Notice (other than paragraph 3), an FHC must deem –

(a) all assets, liabilities, equity, transactions, exposures, operations or customers of an FHC group entity of the FHC to be that of the FHC (per the scope of consolidation in paragraph 3); and

(b) all collateral held by an FHC group entity of the FHC to be collateral held by the FHC (per the scope of consolidation in paragraph 3).

5 Any approval granted by the Authority to an FHC group entity of an FHC under paragraphs 17 and 34 of MAS Notice 652 is treated as an approval granted by the Authority to the FHC in respect of that FHC group entity for the purposes of paragraphs 20 and 37 of this Notice respectively, each approval being a "deemed approval".

6 A deemed approval –

(a) shall lapse if the approval granted by the Authority to that FHC group entity under MAS Notice 652 lapses, is revoked, or is otherwise withdrawn; and

(b) shall be suspended or otherwise does not apply for the duration that the approval granted by the Authority to that FHC group entity under MAS Notice 652 is suspended or otherwise does not apply.

Definitions

7 In this Notice –

"available stable funding" or "ASF" means the portion of capital and liabilities held by an FHC that is expected to be reliable over one year;

"bank" means –

(a) any company which holds a valid licence under section 7 or 79 of the Banking Act; or

(b) any entity established or incorporated in a foreign country or jurisdiction which is approved, licensed, registered or otherwise regulated by a bank regulatory agency of the foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction;

"Banking Act" means the Banking Act 1970;

"carrying value" means –

(a) in the case of a liability or equity instrument, the amount at which the liability or equity instrument is recorded before the application of any regulatory deductions, filters or other adjustments, as determined in accordance with the Accounting Standards; or

(b) in the case of an asset, the amount at which the asset is recorded, net of specific allowances, as determined in accordance with the Accounting Standards;

"FHC" has the same meaning as in paragraph 1;

"financial holding company" has the same meaning as in section 2(1) of the Act;

"high quality liquid assets" or "HQLA" means any liquid asset listed in paragraph (a) or (b) of the definition of "liquid assets" in section 34(11) of the Act or paragraph 51;

"Level 1 HQLA" means any HQLA listed in paragraph (a) or (b) of the definition of "liquid assets" in section 34(11) of the Act or paragraph 51(a), (b), (c), (f), (g) or (m);

"Level 2 HQLA" means any Level 2A HQLA or Level 2B HQLA;

"Level 2A HQLA" means any HQLA listed in paragraph 51(d), (h) or (n);

"Level 2B HQLA" means any HQLA listed in paragraph 51(e), (i), (j), (k), (l) or (n);

"net stable funding ratio" or "NSFR" means the amount of available stable funding relative to the amount of required stable funding in an FHC and is computed as follows:

$$\mathrm{NSFR} = \frac{\text{Available stable funding}}{\text{Required stable funding}};$$

"non-performing loans" means loans that are more than 90 days past due;

"performing loans" means loans that are not past due for more than 90 days;

"related corporation" has the same meaning as in section 2(1) of the Act;

"regulatory capital" means capital as set out in paragraphs 6.1.1 to 6.3.8 of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637[2];

"required stable funding" or "RSF" is a function of the liquidity characteristics and residual maturities of the various assets held by an FHC, including its off-balance sheet ("OBS") exposures;

"subsidiary" has the same meaning as in section 2(1) of the Act.

8 The expressions used in this Notice, except where defined in this Notice or where the context otherwise requires, have the same meanings as in the Banking Act and in paragraphs 2 and 25 of MAS Notice FHC-N649.

Calculation Methodology

(A) ASF Calculation Methodology

9 The amount of ASF is calculated based on the broad characteristics of the relative stability of an FHC's funding sources, including the contractual maturity of its liabilities and the differences in the propensity of different types of funding providers to withdraw their funding. An FHC must calculate its ASF by first assigning the carrying value of its capital and liabilities to one of the categories set out in paragraphs 10 to 22[3] and multiplying the carrying value with the assigned ASF factor. The total ASF is the sum of the weighted amounts.

[2] To avoid doubt, paragraphs 6.5.1 to 6.5.9 of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637 are not applicable.

[3] Table 1 in the Annex provides a summary of the categories and the assigned ASF factors.

10 An FHC must assign the following liabilities and capital instruments a 100% ASF factor:

(a) the total amount of regulatory capital, before the application of capital deductions, excluding the proportion of Tier 2 instruments with residual maturity of less than one year;

(b) the total amount of any capital instrument not included in sub-paragraph (a) that has an effective residual maturity of one year or more, but excluding any instruments with explicit or embedded options that, if exercised, would reduce the expected maturity to less than one year;

(c) the total amount of secured and unsecured borrowings and liabilities (including term deposits) with effective residual maturities of one year or more. Cash flows falling below the one-year horizon but arising from liabilities with a final maturity more than one year do not qualify for the 100% ASF factor;

(d) term deposits with residual maturities of more than one year that cannot be withdrawn early without paying a penalty that is materially greater than the loss of interest and are provided by retail and small business customers.

11 An FHC must assign the following liabilities a 95% ASF factor:

(a) stable deposits that are demand deposits provided by retail and small business customers;

(b) stable deposits that are term deposits with residual maturities of less than one year provided by retail and small business customers;

(c) stable deposits that are term deposits with residual maturities of more than one year, can be withdrawn early without having to pay a penalty that is materially greater than the loss of interest and are provided by retail and small business customers.

12 An FHC must assign the following liabilities a 90% ASF factor:

(a) less stable deposits that are demand deposits provided by retail and small business customers;

(b) less stable deposits that are term deposits with residual maturities of less than one year provided by retail and small business customers;

(c) less stable deposits that are term deposits with residual maturities of more than one year, can be withdrawn early without having to pay a penalty that is materially greater than the loss of interest and are provided by retail and small business customers.

13 An FHC must assign the following liabilities a 50% ASF factor:

(a) funding (secured and unsecured) with a residual maturity of less than one year provided by non-financial corporates;

(b) operational deposits as determined in accordance with paragraph 14, for which an FHC has obtained the approval of the Authority pursuant to paragraph 62 of MAS Notice FHC-N649;

(c) funding with residual maturity of less than one year from sovereigns, PSEs, and multilateral and national development banks;

(d) other funding (secured and unsecured) not included in paragraphs 10 to 12 with residual maturity between 6 months to less than one year, including funding from central banks and financial institutions.

14 For the purposes of paragraph 13(b), an FHC must determine operational deposits as follows:

(a) the FHC must ensure that operational deposits only include deposits from customers receiving qualifying clearing, custody and cash management services from the FHC ("qualifying operational deposits");

(b) the FHC must ensure that qualifying clearing, custody or cash management services meet the following criteria:

(i) the customer is reliant on the FHC to perform these services as an independent third party intermediary in order to fulfil its normal banking activities over the next 30 days[4];

(ii) the FHC is providing these services under a legally binding agreement to customers;

(iii) the customer may only terminate the agreement referred to in sub-paragraph (b)(ii) by giving prior notice of at least 30 days or paying

[4] For example, this condition would not be met if the FHC is aware that the customer has adequate back-up arrangements.

significant switching costs[5] if the operational deposits are withdrawn before 30 days;

(c) the FHC must ensure that qualifying operational deposits generated from the qualifying clearing, custody and cash management services meet the following criteria:

(i) the deposits are by-products of the underlying services provided by the FHC and not sought out in the wholesale market in the sole interest of offering interest income;

(ii) the deposits are held in specifically designated accounts and priced without giving an economic incentive to the customer[6] to leave any excess balances in these accounts. In the case that interest rates in a country or jurisdiction are close to zero, such accounts are likely to be non-interest bearing.[7] The FHC must not treat any excess balances that may be withdrawn while still leaving sufficient funds to fulfil the qualifying clearing, custody and cash management services as qualifying operational deposits;

(d) the FHC must determine the methodology for identifying excess balances that are excluded from this category. The FHC must conduct the assessment based on the methodology at a sufficiently granular level to adequately assess the risk of withdrawal in an idiosyncratic stress. The FHC must ensure that the methodology takes into account relevant factors[8], and considers appropriate indicators[9] to identify those customers that are not actively managing account balances efficiently;

(e) the FHC must not treat any deposit arising out of correspondent banking or from the provision of prime brokerage services as qualifying operational deposits.

[5] For example, those related to transaction, information technology, early termination or legal costs.

[6] To avoid doubt, paying market interest rates for the deposits is not sufficient for the FHC to determine that the deposits are priced without giving an economic incentive to the customer.

[7] The FHC should be particularly aware that during prolonged periods of low interest rates, excess balances could be significant.

[8] For example, the likelihood that wholesale customers have above average balances in advance of specific payment needs.

[9] For example, ratios of account balances to payment or settlement volumes or to assets under custody.

15 An FHC must assign the following liabilities a 0% ASF factor:

(a) all other liabilities and equities not included in paragraphs 10 to 13, including other funding with residual maturity of less than 6 months from central banks and financial institutions, including banks within the same institutional network of cooperative banks;

(b) other liabilities without a stated maturity[10]. The only exceptions for liabilities without a stated maturity are the following and the FHC must assign such liabilities either a 100% ASF factor if the effective maturity is one year or more, or a 50% ASF factor if the effective maturity is between 6 months and less than one year:

(i) first, deferred tax liabilities, which should be treated according to the nearest possible date on which such liabilities could be realised;

(ii) second, minority interest, which should be treated according to the term of the instrument, usually in perpetuity;

(c) NSFR derivative liabilities net of NSFR derivative assets, if NSFR derivative liabilities are greater than NSFR derivative assets[11], where NSFR derivative liabilities are calculated in accordance with paragraphs 21 and 22 and NSFR derivative assets are calculated in accordance with paragraphs 41 to 43; and

(d) trade date payables arising from purchases of financial instruments, foreign currencies and commodities that –

(i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction; or

(ii) have failed to, but are still expected to settle.

16 To determine the maturity of an equity or liability instrument, an FHC must assume that investors will redeem a call option at the earliest possible date.

17 For funding with options exercisable at an FHC's discretion, including options to extend the maturity date of its obligations, the FHC must take into account reputational factors that may limit its ability not to exercise the option.[12] In particular, where the market

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[10] This may include short positions and open maturity positions.

[11] ASF = 0% x MAX ((NSFR derivative liabilities – NSFR derivative assets), 0).

[12] This refers to a case where the FHC may be subject to funding risk if it did not exercise an option on its own funding.

expects certain liabilities to be redeemed before their legal final maturity date, the FHC must assume such behaviour for the purposes of the NSFR and include these liabilities in the corresponding ASF category.

18 For long-dated liabilities, an FHC must treat only the portion of cash flows falling at or beyond the 6-month and one-year time horizons as having an effective residual maturity of 6 months or more and one year or more, respectively.

19 An FHC must treat unsecured precious metals liabilities in the same way as retail deposits and unsecured wholesale funding, with the appropriate ASF factors assigned in accordance with paragraphs 10 to 15.

20 An FHC that is a central institution or a specialised service provider of an institutional network of cooperative banks, may, with the Authority's approval, assign an ASF factor of higher than 0% to the amount of deposits that members of the institutional network have placed with the FHC arising from statutory minimum deposit requirements or in the context of common task sharing and legal, statutory or contractual arrangements, so long as both the FHC that has received the deposits and the member of the institutional network that has placed the deposits participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members. Such deposits may be assigned an ASF factor up to the RSF factor assigned for the same deposits to the depositing bank, provided that such ASF factor does not exceed 85%.

21 An FHC must calculate derivative liabilities based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a negative value. When an eligible bilateral netting contract is in place that meets the conditions as set out in Annex 7N of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, the FHC must take the replacement cost for the set of derivative exposures covered by the contract as the net replacement cost. The FHC may exclude, from its calculation, derivative transactions[13] with central banks if such transactions –

(a) arise from the central bank's short-term monetary policy and liquidity operations; and

(b) have a maturity of 6 months or less at inception.

22 In calculating NSFR derivative liabilities[14], an FHC must deduct collateral posted in the form of variation margin in connection with derivative contracts (regardless of the asset type) from the negative replacement cost amount. To the extent that the FHC's accounting

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[13] Such transactions include foreign exchange derivatives such as foreign exchange swaps.

[14] NSFR derivative liabilities = (derivative liabilities) – (total collateral posted as variation margin on derivative liabilities).

framework reflects on balance sheet, in connection with a derivative contract, an asset associated with collateral posted as variation margin that is deducted from the replacement cost amount for purposes of the NSFR, the FHC must not include that asset in the calculation of the FHC's RSF to avoid any double-counting.

(B) RSF Calculation Methodology

23 An FHC must calculate the amount of RSF based on the broad characteristics of the liquidity risk profile of the FHC's assets and OBS exposures.

24 An FHC must calculate the amount of RSF by first assigning the carrying value of its assets to one of the categories set out in paragraphs 44 to 58[15] and multiplying the carrying value with the assigned RSF factor. The total RSF is the sum of the weighted amounts added to the amount of OBS exposures multiplied by its assigned RSF factor.

25 The RSF factors assigned to various types of assets are intended to approximate the amount of a particular asset that would have to be funded, either because it will be rolled over, or because it could not be monetised through sale or used as collateral in a secured borrowing transaction over the course of one year without significant expense.

26 An FHC must allocate assets to the appropriate RSF factor based on their residual maturity or liquidity value.

27 An FHC must assume that investors would exercise any option to extend maturity when determining the maturity of an instrument. For assets with options exercisable at the FHC's discretion, the FHC must take into account reputational factors that may limit the FHC's ability not to exercise the option.[16] In particular, where the market expects certain assets to be extended in their maturity, the FHC must assume such behaviour for the purposes of the NSFR and include these assets in the corresponding RSF category.

28 For amortising loans and other principal repayment claims, an FHC must treat the portion that comes due within the one-year horizon in the less-than-one-year residual maturity category.

29 An FHC must treat an unencumbered loan without a stated final maturity date, even where the borrower may repay the loan in full and without penalty charges at the next reset date, as having an effective residual maturity of more than one year and must assign either a 65%, 85% or 100% RSF factor to the unencumbered loan in accordance with paragraph 49, 50 or 54.

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[15] Table 2 in the Annex provides a summary of the categories and the assigned RSF factors.

[16] This refers to a case where the FHC may be subject to funding risk if it did not exercise an option on its own assets.

30 An FHC must treat unsecured precious metals assets that must be settled by cash settlement in the same way as loans to retail customers and wholesale customers with the appropriate RSF factors assigned in accordance with paragraphs 44 to 58.

31 An FHC must assign unsecured precious metals assets that must be settled by physical delivery or where contractual arrangements allow for both physical delivery and cash settlement, with an RSF factor in the following manner:

(a) in the case where the assets are –

(i) extended to, or placed with, a financial institution, and has a residual maturity of one year or more;

(ii) encumbered for a period of one year or more; or

(iii) non-performing,

assigned a 100% RSF factor;

(b) in all other cases, treated in the same way as physical traded commodities and assigned a 85% RSF factor in accordance with paragraph 50(d).

32 Despite paragraph 31, an FHC must treat an unsecured precious metals asset referred to in paragraph 31 in the same way as loans to retail customers and wholesale customers, with the appropriate RSF factors assigned in accordance with paragraphs 44 to 58, if the FHC has adopted the treatment set out in paragraph 138 of MAS Notice FHC-N649.

33 To determine its RSF, an FHC must –

(a) include financial instruments, foreign currencies and commodities for which a purchase order has been executed; and

(b) exclude financial instruments, foreign currencies and commodities for which a sales order has been executed,

even if such transactions have not been reflected in the balance sheet under a settlement-date accounting model, provided that –

(c) such transactions are not reflected as derivatives or secured financing transactions in the FHC’s balance sheet; and

(d) the effects of such transactions will be reflected in the FHC's balance sheet when settled.

34 An FHC must assign encumbered assets[17] on the balance sheet with an RSF factor in the following manner:

(a) assets that are encumbered for one year or more must be assigned a 100% RSF factor[18];

(b) assets that are encumbered for a period of between 6 months and less than one year that would, if unencumbered, receive an RSF factor lower than or equal to 50%, must be assigned a 50% RSF factor;

(c) assets that are encumbered for between 6 months and less than one year that would, if unencumbered, receive an RSF factor higher than 50% must be assigned that higher RSF factor;

(d) assets that have less than 6 months remaining in the encumbrance period must be assigned the same RSF factor as an equivalent asset that is unencumbered.

35 Subject to paragraph 37, an FHC may assign reduced RSF factors to the following assets in the case of exceptional central bank liquidity operations:

(a) assets that are posted as collateral for exceptional central bank liquidity providing operations may be assigned the same RSF factor assigned to the equivalent asset that is unencumbered;

(b) claims on central banks with a residual maturity of more than 6 months that arise from exceptional central bank liquidity absorbing operations may be assigned a 5% RSF factor.

36 For the purposes of paragraph 35, exceptional central bank liquidity operations are non-standard, temporary operations conducted by a central bank in order to achieve its mandate in a period of market-wide financial stress or exceptional macroeconomic challenges.

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[17] Examples of encumbered assets include assets backing securities or covered bonds and assets pledged in securities financing transactions or collateral swaps. An asset pledged in a repo or secured transaction is considered encumbered for the term of the repo or secured transaction, even if the actual maturity of the collateral is shorter.

[18] To avoid doubt, a 100% RSF factor applies to collateral pledged in a repo of secured transaction with a remaining maturity of one year or more, even if the collateral pledged matures in less than one year.

37 An FHC must obtain the Authority's approval before applying the treatment set out in paragraph 35 in the case of exceptional central bank liquidity operations conducted by a central bank other than the Authority.

38 For securities financing transactions, an FHC must in determining its assets –

(a) exclude securities which it has borrowed in securities financing transactions[19] where it does not have beneficial ownership;

(b) include securities it has lent in securities financing transactions where it retains beneficial ownership; and

(c) exclude securities it has received through collateral swaps if those securities do not appear on its balance sheets.

39 Where an FHC has encumbered securities in repos or other securities financing transactions, but has retained beneficial ownership, and those assets remain on the FHC's balance sheet, the FHC must allocate such securities to the appropriate RSF category in the manner set out in paragraphs 44 to 58.

40 An FHC must calculate the amounts receivable and payable under securities financing transactions on a gross basis, except that in the case of securities financing transactions with a single counterparty that meet the netting conditions set out in paragraph 2.18 in Annex 4A of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637, the FHC may calculate the amounts receivable and payable under such securities financing transactions on a net basis.

41 An FHC must calculate derivative assets based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a positive value. When an eligible bilateral netting contract is in place that meets the conditions as set out in Annex 7N of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, the FHC must take the replacement cost for the set of derivative exposures covered by the contract as the net replacement cost. The FHC may exclude, from its calculation, derivative transactions[20] with central banks if such transactions –

(a) arise from the central bank's short-term monetary policy and liquidity operations; and

(b) have a maturity of 6 months or less at inception.

[19] These include reverse repos and collateral swaps.
[20] Such transactions include foreign exchange derivatives such as foreign exchange swaps.

42 In calculating NSFR derivative assets[21], an FHC must not offset the positive replacement cost amount with the collateral received in connection with derivative contracts regardless of whether or not netting is permitted under the FHC's operative accounting or risk-based framework, unless the collateral is received in the form of cash variation margin and meets the conditions as set out in paragraph 2.11 in Annex 4A of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637.

43 An FHC must not offset derivative assets with any remaining balance sheet liability associated with (a) variation margin received that does not meet the criteria as set out in paragraph 42 or (b) initial margin received, and must assign such balance sheet liabilities a 0% ASF factor.

44 An FHC must assign the following assets a 0% RSF factor:

(a) coins and banknotes immediately available to meet obligations;

(b) all central bank reserves (including required reserves and excess reserves), unless relevant supervisors or central bank have assigned RSF factors to these reserves;

(c) all claims on central banks with residual maturities of less than 6 months;

(d) trade date receivables arising from sales of financial instruments, foreign currencies and commodities that –

(i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction; or

(ii) have failed to, but are still expected to, settle.

45 An FHC must assign a 5% RSF factor to unencumbered Level 1 HQLA, excluding assets receiving a 0% RSF factor as specified in paragraph 44.

46 An FHC must assign a 10% RSF factor to unencumbered loans to financial institutions with residual maturities of less than 6 months, where the loan is secured against Level 1 HQLA and where the FHC has the ability to freely rehypothecate the collateral received for the life of the loan.

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[21] NSFR derivative assets = (derivative assets) – (cash collateral received as variation margin on derivative assets).

47 An FHC must assign the following assets a 15% RSF factor:

(a) unencumbered Level 2A HQLA;

(b) all other unencumbered loans to financial institutions with residual maturities of less than 6 months not included in paragraph 46.

48 An FHC must assign the following assets a 50% RSF factor:

(a) unencumbered Level 2B HQLA;

(b) any HQLA that are encumbered for a period of between 6 months and less than one year;

(c) all loans to financial institutions and central banks with residual maturity of between 6 months and less than one year;

(d) deposits held at other financial institutions for operational purposes, as outlined in paragraph 14, that are subject to the 50% ASF factor in paragraph 13(b);

(e) all other assets that are not HQLA and not included in paragraphs 44 to 47 that have a residual maturity of less than one year, including loans to non-financial corporates, loans to retail customers and small business customers, and loans to sovereigns and PSEs.

49 An FHC must assign the following assets a 65% RSF factor:

(a) unencumbered residential mortgages with a residual maturity of one year or more that would qualify for a 35% or lower risk weight under paragraph 7.3.29 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637;

(b) other unencumbered loans not included in paragraphs 44 to 48, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for a 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.26 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637.

50 An FHC must assign the following assets an 85% RSF factor:

(a) cash, securities or other assets posted as initial margin for derivative contracts[22], and cash or other assets provided to contribute to the default fund of a central counterparty ("CCP"), regardless of whether those assets are on- or off-balance sheet. Where securities or other assets posted as initial margin for derivative contracts would otherwise receive a higher RSF factor, the FHC must assign that higher factor for such securities or assets;

(b) other unencumbered performing loans that do not qualify for the 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.30 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637 and have residual maturities of one year or more, excluding loans to financial institutions;

(c) unencumbered securities with a remaining maturity of one year or more and exchange-traded ordinary shares, that are not in default and do not qualify as HQLA;

(d) physical traded commodities, including gold.

51 For the purposes of the definition of "HQLA" in paragraph 7, the following are listed as liquid assets:

(a) reserves held with the Authority and other central banks, which include –

(i) the FHC's overnight deposits with a central bank; and

(ii) the FHC's term deposits with a central bank where –

(A) the FHC has a contractual agreement with the central bank to repay such deposits on notice from the FHC; or

(B) the deposits constitute a loan against which the FHC may borrow on a term basis or on an overnight but automatically renewable basis[23],

22 This excludes initial margin posted on behalf of a customer, where –
(a) the FHC provided a customer access to a third party for the purposes of clearing derivatives;
(b) the transactions are executed in the name of the customer; and
(c) the FHC does not guarantee performance of the third party.

23 To avoid doubt, other term deposits with central banks are not liquid assets.

to the extent that the Authority's and the central banks' policies allow them to be drawn down in times of stress;

(b) any sukuk issued by Singapore Sukuk Pte Ltd;

(c) any marketable security representing a claim on, or that is guaranteed by, a sovereign, a central bank, a PSE, the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism, the European Financial Stability Facility or a multilateral development bank, which satisfies the following conditions:

  (i) it is assigned a 0% risk-weight under Table 7-1 or paragraphs 7.3.17 to 7.3.20 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637;

  (ii) it is traded in large, deep and active repurchase agreement ("repo") or cash markets characterised by a low level of concentration;

  (iii) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions;

  (iv) it is not an obligation of a financial institution or any of its related corporations;

(d) any marketable security representing a claim on, or that is guaranteed by, a sovereign, a central bank, a PSE or a multilateral development bank, which satisfies the following conditions:

  (i) it is assigned a 20% risk weight under paragraphs 7.3.13 to 7.3.20 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637;

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

  (iii) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 10 percentage points over a 30-day period of significant liquidity stress;

  (iv) it is not an obligation of a financial institution or any of its related corporations;

(e) any marketable security representing a claim on, or that is guaranteed by, a sovereign, a central bank or a PSE, which satisfies the following conditions:

(i) it –

(A) 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

(B) does not have a credit assessment by a recognised ECAI and is internally rated as having a probability of default (“PD”) corresponding to a credit rating of at least BBB-;

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

(iii) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress;

(iv) it is not an obligation of a financial institution or any of its related corporations;

(f) where a sovereign has a non-0% risk weight as determined in accordance with Table 7-1 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, any sovereign or central bank debt security issued in domestic currencies by the sovereign or its central bank –

(i) if the sovereign is the Singapore Government or the central bank is the Authority; or

(ii) if the sovereign or central bank is from a foreign country or jurisdiction where the FHC has a subsidiary[24] which is approved, licensed, registered or otherwise regulated by a bank regulatory agency in the foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction and the FHC or its subsidiary takes liquidity risk in that country or jurisdiction;

(g) where the sovereign has a non-0% risk weight as determined in accordance with Table 7-1 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice

[24] To avoid doubt, this includes a branch of the subsidiary.

FHC-N637, any sovereign or central bank debt security issued in foreign currencies by the sovereign or its central bank –

(i) if the sovereign is the Singapore Government or the central bank is the Authority; or

(ii) if the sovereign or central bank is from a foreign country or jurisdiction where the FHC has a subsidiary[25] which is approved, licensed, registered or otherwise regulated by a bank regulatory agency in the foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction and the FHC or its subsidiary takes liquidity risk in that country or jurisdiction;

(h) any corporate debt security, covered bond or sukuk, which satisfies the following conditions:

(i) in the case of a corporate debt security or sukuk, it is not a complex structured product or a subordinated debt security, and it is not issued by a financial institution or any of its related corporations;

(ii) in the case of a covered bond, it is not issued by the FHC or any of its related corporations;

(iii) it –

(A) has a long-term credit rating from a recognised 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; or

(B) does not have a credit assessment by a recognised ECAI but is internally rated as having a PD corresponding to a credit rating of at least AA-;

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

(v) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 10 percentage points over a 30-day period of significant liquidity stress;

[25] To avoid doubt, this includes a branch of the subsidiary.

(i) any corporate debt security or sukuk, which satisfies the following conditions:

(i) it is not a complex structured product or a subordinated debt security;

(ii) it is not issued by a financial institution or any of its related corporations;

(iii) it –

(A) has a long-term credit rating from a recognised ECAI of at least A- or, in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or

(B) does not have a credit assessment by a recognised ECAI and is internally rated as having a PD corresponding to a credit rating of at least A-;

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

(v) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress;

(j) any corporate debt security or sukuk, which satisfies the following conditions:

(i) it is not a complex structured product or a subordinated debt security;

(ii) it is not issued by a financial institution or any of its related corporations;

(iii) it –

(A) has a long-term credit rating from a recognised ECAI between BBB+ and BBB- or, in the absence of a long-term rating, a short-term rating equivalent in quality to the long-term rating; or

(B) does not have a credit assessment by a recognised ECAI and is internally rated as having a PD corresponding to a credit rating of between BBB+ and BBB-;

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

(v) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress;

(k) any residential mortgage-backed security ("RMBS"), which satisfies the following requirements:

(i) it is not issued by, and the underlying assets have not been originated by, the FHC or any of its related corporations;

(ii) it has 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) it is traded in large, deep and active repo or cash markets characterised by a low level of concentration;

(iv) it has a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions, with a maximum price decline or increase in haircut not exceeding 20 percentage points over a 30-day period of significant liquidity stress;

(v) the underlying asset pool is restricted to residential mortgages and does not contain structured products;

(vi) the underlying residential mortgages are "full recourse" loans (i.e. in the case of foreclosure the mortgage owner remains liable for any shortfall in sales proceeds from the property) and have a maximum weighted average[26] loan-to-value ratio ("LTV") of 80% at the time of issuance of the RMBS;

(vii) the securitisations are subject to risk retention laws and regulations which require issuers to retain an interest in the assets they securitise;

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[26] Weighted average LTV is computed as follows:

$$weighted\ average\ LTV = \frac{mortgage\ amount_1 \times\ LTV_1 + mortgage\ amount_2 \times\ LTV_2 + \cdots +\ mortgage\ amount_n \times\ LTV_n}{mortgage\ amount_1 +\ mortgage\ amount_2 + \cdots +\ mortgage\ amount_n},$$

where n is the number of residential mortgages in the RMBS.

(l) any ordinary shares, excluding preference shares and treasury shares, which satisfy the following requirements:

(i) the shares are not issued by a financial institution or any of its related corporations;

(ii) the shares are exchange traded and centrally cleared;

(iii) the shares are a constituent of –

(A) the FTSE Straits Times Index ("STI") or the MSCI Singapore Free Index;

(B) where the FHC has a subsidiary[27] that is approved, licensed, registered or otherwise regulated by a bank regulatory agency in a foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction and the FHC or its subsidiary takes liquidity risk in that country or jurisdiction, an index in the foreign country or jurisdiction that the bank regulatory agency of that country or jurisdiction recognises for the purposes of including the equities as Level 2B HQLA under the applicable regulatory policy; or

(C) any other index in Singapore for which the FHC can demonstrate to the satisfaction of the Authority that the stock is as liquid and readily marketable as equities traded on the indices in sub-paragraph (l)(iii)(A);

(iv) denominated in Singapore dollars or in the domestic currency of the foreign country or jurisdiction referred to in sub-paragraph (l)(iii)(B);

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

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

[27] To avoid doubt, this includes a branch of the subsidiary.

(m) where the FHC has a subsidiary[28] that is approved, licensed, registered or otherwise regulated by a bank regulatory agency in a foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction and the foreign country or jurisdiction adopts the Alternative Liquidity Approaches, any liquid assets recognised as alternative liquid assets in the foreign country or jurisdiction and which the bank regulatory agency of that country or jurisdiction recognises for the purposes of including the liquid assets as Level 1 HQLA;

(n) where the FHC has a subsidiary[29] that is approved, licensed, registered or otherwise regulated by a bank regulatory agency in a foreign country or jurisdiction to carry on banking business under the laws of the foreign country or jurisdiction and the foreign country or jurisdiction adopts the Alternative Liquidity Approaches, any liquid assets recognised as alternative liquid assets in the foreign country or jurisdiction and which the bank regulatory agency of that country or jurisdiction recognises for the purposes of including the liquid assets as Level 2 HQLA.

52 For the purposes of paragraph 51(e)(i)(A), (h)(iii)(A), (i)(iii)(A), (j)(iii)(A) and (k)(ii), in the event of split ratings, an FHC must determine the applicable rating in accordance with the method used in paragraph 7.3.4 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637.

53 Despite paragraph 51(e)(i)(A), (h)(iii)(A), (i)(iii)(A), (j)(iii)(A) and (k)(ii), an FHC may recognise local rating scales (rather than international ratings) of a recognised ECAI if the corporate debt securities or covered bonds are held by the FHC for local currency liquidity needs arising from its operations in that local country or jurisdiction.

54 An FHC must assign the following assets a 100% RSF factor:

(a) all assets that are encumbered for a period of one year or more;

(b) NSFR derivative assets net of NSFR derivative liabilities, if NSFR derivative assets are greater than NSFR derivative liabilities[30], where NSFR derivative assets are calculated in accordance with paragraphs 41 to 43 and NSFR derivative liabilities are calculated in accordance with paragraphs 21 and 22;

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[28] To avoid doubt, this includes a branch of the subsidiary.

[29] To avoid doubt, this includes a branch of the subsidiary.

[30] RSF = 100% x MAX ((NSFR derivative assets – NSFR derivative liabilities), 0).

(c) non-maturity reverse repos, unless the FHC can demonstrate to the Authority that the non-maturity reverse repo would effectively mature in less than one year;

(d) all other assets not included in paragraphs 44 to 50, including non-performing loans, loans to financial institutions with a residual maturity of one year or more, non-exchange-traded shares, fixed assets, items deducted from regulatory capital, retained interest, insurance assets, subsidiary interests and defaulted securities;

(e) 5% of derivative liabilities (that is negative replacement cost amounts) as calculated according to paragraph 21 before deducting variation margin posted. For the purposes of this sub-paragraph, for a derivative structured as "settled-to-market", the FHC must calculate the replacement cost amount as if no settlement payments and receipts had been made to account for the changes in the value of a derivative transaction or a portfolio of derivative transactions.

55 For loans that are partially secured, an FHC must treat each of the secured and unsecured portions of a loan according to its characteristics and assign the corresponding RSF factor. If the FHC is unable to draw the distinction between the secured and unsecured part of the loan, the FHC must assign the higher RSF factor that is applicable to the whole loan.

(C) Interdependent Assets and Liabilities

56 An FHC may assign interdependent assets and liabilities[31] a 0% RSF or ASF factor if they meet the following criteria:

(a) the individual interdependent asset and liability items must be clearly identifiable;

(b) the maturity and principal amount of both the liability and its interdependent asset are the same;

(c) the FHC is acting solely as a pass-through unit to channel the funding provided by the interdependent liability into the corresponding interdependent asset;

(d) the counterparties for each pair of interdependent liabilities and assets are not the same.

[31] To avoid doubt, derivative transactions do not qualify for the treatment in paragraph 56.

(D) OBS Exposures

57 Many potential OBS liquidity exposures require little direct or immediate funding but can lead to significant liquidity drains over a longer time horizon. The NSFR framework assigns an RSF factor to various OBS activities in order to ensure that institutions hold stable funding for the portion of OBS exposures that may be expected to require funding within a one-year horizon.

58 Consistent with the liquidity coverage ratio framework, the NSFR framework identifies OBS exposure categories based broadly on whether the commitment is a credit or liquidity facility or some other contingent funding obligation. An FHC must assign to each OBS category, an OBS exposure in accordance with Table 3 in the Annex, and multiply the OBS exposure by its RSF factor.

Frequency of Calculation and Reporting

59 An FHC must prepare the FHC Group level NSFR returns set out in Table 4 in the Annex as at the last day of each quarter, in accordance with the notes for completion.

60 An FHC must submit to the Authority the NSFR returns not later than 30 days after the last day of each quarter.

61 Despite paragraph 60, if the day on which an FHC has to submit any return is not a business day, the FHC may submit the return on the next business day.

Effective Date

62 This Notice takes effect on 1 July 2022.

Annex

Table 1

Summary of liability categories and assigned ASF factors

ASF factor	Components of ASF category
100%	• Total regulatory capital (excluding Tier 2 instruments with residual maturity of less than one year) • Other capital instruments and liabilities with effective residual maturity of one year or more
95%	• Stable deposits that are demand deposits and term deposits with residual maturity of less than one year provided by retail and small business customers
90%	• Less stable deposits that are demand deposits and term deposits with residual maturity of less than one year provided by retail and small business customers
50%	• Funding with residual maturity of less than one year provided by non-financial corporates • Operational deposits • Funding with residual maturity of less than one year from sovereigns, PSEs, and multilateral and national development banks • Other funding with residual maturity between 6 months and less than one year not included in the above categories, including funding provided by central banks and financial institutions
0%	• All other liabilities and equity not included in the above categories, including liabilities without a stated maturity (with a specific treatment for deferred tax liabilities and minority interests) • NSFR derivative liabilities net of NSFR derivative assets if NSFR derivative liabilities are greater than NSFR derivative assets • Trade date payables arising from purchases of financial instruments, foreign currencies and commodities

Table 2

Summary of asset categories and assigned RSF factors

RSF factor	Components of RSF category
0%	• Coins and banknotes • All central bank reserves • All claims on central banks with residual maturities of less than 6 months • Trade date receivables arising from sales of financial instruments, foreign currencies and commodities
5%	• Unencumbered Level 1 HQLA, excluding coins, banknotes and central bank reserves • Claims on central banks with a residual maturity equal to or more than 6 months due to exceptional central bank liquidity absorbing operations
10%	• Unencumbered loans to financial institutions with residual maturities of less than 6 months, where the loan is secured against Level 1 HQLA and where the FHC has the ability to freely rehypothecate the received collateral for the life of the loan
15%	• All other unencumbered loans to financial institutions with residual maturities of less than 6 months not included in the above categories • Unencumbered Level 2A HQLA
50%	• Unencumbered Level 2B HQLA • HQLA encumbered for a period of 6 months or more and less than one year • Loans to financial institutions and central banks with residual maturities between 6 months and less than one year • Deposits held at other financial institutions for operational purposes • All other assets not included in the above categories with residual maturity of less than one year, including loans to non-financial corporates, loans to retail and small business customers, and loans to sovereigns and PSEs
65%	• Unencumbered residential mortgages with a residual maturity of one year or more that would qualify for a 35% or lower risk weight under paragraph 7.3.29 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637 • Other unencumbered loans not included in the above categories, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for a 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.26 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637

85%	• Cash, securities or other assets posted as initial margin for derivative contracts and cash or other assets provided to contribute to the default fund of a CCP • Other unencumbered performing loans that do not qualify for the 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.30 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637 and residual maturities of one year or more, excluding loans to financial institutions • Unencumbered securities that are not in default and do not qualify as HQLA with a remaining maturity of one year or more and exchange-traded equities • Physical traded commodities, including gold
100%	• All assets that are encumbered for a period of one year or more • NSFR derivative assets net of NSFR derivative liabilities if NSFR derivative assets are greater than NSFR derivative liabilities • 5% of derivative liabilities as calculated according to paragraph 21 • All other assets not included in the above categories, including non-performing loans, loans to financial institutions with a residual maturity of one year or more, non-exchange-traded equities, fixed assets, items deducted from regulatory capital, retained interest, insurance assets, subsidiary interests and defaulted securities

Table 3

Summary of OBS categories and assigned RSF factors

RSF factor	RSF category
5% of undrawn portion	Irrevocable and conditionally revocable credit and liquidity facilities
0% of undrawn portion	Unconditionally revocable credit and liquidity facilities
0% of undrawn portion	Trade finance-related obligations (including guarantees and letters of credit)
0% of undrawn portion	Guarantees and letters of credit unrelated to trade finance obligations
0% of undrawn portion	Non-contractual obligations such as – • potential requests for debt repurchases of the FHC's own debt or that of related conduits, securities investment vehicles and other such financing facilities • structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes • managed funds that are marketed with the objective of maintaining a stable value

Table 4

NSFR Reporting Template

NET STABLE FUNDING RATIO ("NSFR")

Cover page

Institution code		
Institution Name		
Reporting Cycle		(MM/YYYY)
Business Unit		
Currency	All currency	
Consolidated submission?	Yes	
Group details:		
Group name		
Group ID		
Institution codes of entities in group:		
1.		
2.		
3.		
4.		
5.		
6.		
Approved by:		
(a) Name		
(b) Designation		
(c) Date (dd/mm/yyyy)		
(d) Person to contact for queries		
(e) Telephone number		
(f) Email address		

Computation of Net Stable Funding Ratio ("NSFR")
(Name of FHC)
As at close of business on (day/month/year)

A) Available Stable Funding ("ASF")

	Paragraph Number in MAS Notice FHC-N652	**Amount (S$'000)**			**ASF factor**			**Calculated ASF (S$'000)**			
		< 6 months	≥ 6 months to < 1 year	≥1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	Total ASF
Tier 1 and Tier 2 capital, as set out in paragraphs 6.1.1 to 6.3.8 of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637, before the application of capital deductions and excluding the proportion of Tier 2 instruments with residual maturity of less than one year	10(a)						1.00				
Capital instruments not included above with an effective residual maturity of one year or more	10(b)						1.00				
Stable deposits that are demand and term deposits from retail and small business customers	10(c), 10(d), 11(a), 11(b), 11(c), 19				0.95	0.95	1.00				
Less stable deposits that are demand and term deposits from retail and small business customers	10(c), 10(d), 12(a), 12(b), 12(c), 19				0.90	0.90	1.00				
Unsecured funding from non-financial corporates, of which:	10(c), 13(a), 13(b), 19										
Operational deposit (as set out in paragraph 14)					0.50	0.50	1.00				
Non-operational deposit					0.50	0.50	1.00				
Non-deposit unsecured funding					0.50	0.50	1.00				
Unsecured funding from central banks, of which:	10(c), 13(b), 13(d), 15(a), 19										
Operational deposit (as set out in paragraph 14)					0.50	0.50	1.00				
Non-operational deposit					0.00	0.50	1.00				
Non-deposit unsecured funding					0.00	0.50	1.00				
Unsecured funding from sovereigns/PSEs/MDBs/NDBs, of which:	10(c), 13(b), 13(c), 19										
Operational deposit (as set out in paragraph 14)					0.50	0.50	1.00				
Non-operational deposit					0.50	0.50	1.00				
Non-deposit unsecured funding					0.50	0.50	1.00				
Unsecured funding from other legal entities (including financial corporates and financial institutions), of which:	10(c), 13(b), 13(d), 15(a), 19										
Operational deposit (as set out in paragraph 14)					0.50	0.50	1.00				
Non-operational deposit					0.00	0.50	1.00				
Non-deposit unsecured funding					0.00	0.50	1.00				
Deposits from members of an institutional network of cooperative banks which satisfy the criteria as set out in paragraph 20	10(c), 13(d), 15(a), 19, 20				0.00	0.50	1.00				
Other deposits from members of an institutional network of cooperative banks					0.00	0.50	1.00				
Secured borrowings and liabilities (including secured term deposits), of which are from:	10(c), 10(d), 13(a), 13(c), 13(d), 15(a)										
Retail and small business customers					0.00	0.50	1.00				
Non-financial corporates					0.50	0.50	1.00				
Central banks					0.00	0.50	1.00				
Sovereigns/PSEs/MDBs/NDBs					0.50	0.50	1.00				
Other legal entities (including financial corporates and financial institutions)					0.00	0.50	1.00				
Derivatives:											

Derivative liabilities, gross of variation margin posted	21										
Of which are derivative liabilities where the counterparty is exempt from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
Total variation margin posted											
Of which is posted to counterparties exempted from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
NSFR derivative liabilities (derivative liabilities less total collateral posted as variation margin on derivative liabilities)	15(c), 21, 22, FN 14						0.00				
Total initial margin received, of which:											
Initial margin received in the form of cash											
Initial margin received in the form of securities that are Level 1 HQLA											
Initial margin received in the form of all other collateral											
Total initial margin received, in the form of any collateral type, according to residual maturity of associated derivative contract(s)											
Initial margin received, in the form of any collateral type, from counterparties exempt from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
Other liability and equity categories											
Deferred tax liabilities (DTLs)	15(b)				0.00	0.50	1.00				
Minority interest	15(b)				0.00	0.50	1.00				
Trade date payables	15(d)				0.00						
Interdependent liabilities	56				0.00	0.00	0.00				
All other liabilities and equity categories not included above	10(c), 13(d), 15(a), 15(b)				0.00	0.50	1.00				
Total ASF											

B) Required Stable Funding ("RSF")

1) On balance-sheet items

	Paragraph Number in MAS Notice FHC-N652	Amount (S$'000)			RSF factor			Calculated RSF (S$'000)			
		< 6 months	≥ 6 months to < 1 year	≥1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	Total RSF
Coins and banknotes	44(a)				0.00						
Total central bank reserves	44(b)				0.00	0.00	0.00				
Of which are required central bank reserves					0.00	0.00	0.00				
Securities held where the institution has an offsetting reverse repurchase transaction when the security on each transaction has the same unique identifier (e.g. ISIN number or CUSIP) and such securities are reported on the balance sheet of the reporting institutions, of which:											
Unencumbered					0.00	0.00	0.00				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.00	0.00	0.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.00	0.00	0.00				
Remaining period of encumbrance ≥ 1 year					0.00	0.00	0.00				
Deposits held at other banks which are members of an institutional network of cooperative banks which satisfy the criteria as set out in paragraph 20	20, 30, 32, 34, 47(b), 48(c), 54(a), 54(d)				0.15	0.50	1.00				

Other deposits at other banks which are members of an institutional network of cooperative banks, of which:											
Unencumbered					0.15	0.50	1.00				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.15	0.50	1.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Loans to financial institutions, of which:											
Loans to financial institutions secured by Level 1 HQLA collateral and where the FHC has the ability to freely rehypothecate the received collateral for the life of the loan, of which:	34, 46, 48(c), 54(a), 54(d)										
Unencumbered					0.10	0.50	1.00				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.10	0.50	1.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
All other secured loans to financial institutions, of which:	34, 47(b), 48(c), 54(a), 54(d)										
Unencumbered					0.15	0.50	1.00				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.15	0.50	1.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Unsecured loans to financial institutions, of which:	30, 32, 34, 47(b), 48(c), 54(a), 54(d)										
Unencumbered					0.15	0.50	1.00				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.15	0.50	1.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Securities eligible as Level 1 HQLA as set out in paragraph 7, of which:	34, 45, 48(b), 54(a)										
Unencumbered					0.05	0.05	0.05				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.05	0.05	0.05				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.50				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Securities eligible for Level 2A HQLA as set out in paragraph 7, of which:	34, 47(a), 48(b), 54(a)										
Unencumbered					0.15	0.15	0.15				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.15	0.15	0.15				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.50				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Securities eligible for Level 2B HQLA as set out in paragraph 7, of which:	34, 48(a), 48(b), 54(a)										
Unencumbered					0.50	0.50	0.50				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50	0.50				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.50				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Deposits held at financial institutions for operational purposes, of which:	30, 32, 34, 48(d), 54(a)										
Unencumbered					0.50	0.50	1.00				

Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Loans to non-financial corporates with a residual maturity of less than one year, of which:	30, 32, 34, 48(e), 54(a)										
Unencumbered					0.50	0.50					
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50					
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					1.00	1.00					
Claims on central banks with a residual maturity of less than one year, of which:	30, 32, 34, 44(c), 48(c), 54(a)										
Unencumbered					0.00	0.50					
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.00	0.50					
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					1.00	1.00					
Claims on central banks with a residual maturity equal to or more than 6 months due to exceptional central bank liquidity absorbing operations	30, 32, 35(b), 36					0.05	0.05				
Loans to sovereigns, PSEs, MDBs and NDBs with a residual maturity of less than one year, of which:	30, 32, 34, 48(e), 54(a)										
Unencumbered					0.50	0.50					
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50					
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					1.00	1.00					
Residential mortgages of any maturity that would qualify for the 35% or lower risk weight under paragraph 7.3.29 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, of which:	34, 48(e), 49(a), 54(a)										
Unencumbered					0.50	0.50	0.65				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50	0.65				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.65				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Other loans, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for the 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.26 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, of which:	30, 32, 34, 49(b), 54(a)										
Unencumbered							0.65				
Encumbered, of which:											
Remaining period of encumbrance < 6 months							0.65				
Remaining period of encumbrance ≥ 6 months to < 1 year							0.65				
Remaining period of encumbrance ≥ 1 year							1.00				
Loans to retail and small business customers (excluding residential mortgages) with a residual maturity of less than one year, of which:	30, 32, 34, 48(e), 54(a)										
Unencumbered					0.50	0.50					
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50					
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					

Remaining period of encumbrance ≥ 1 year					1.00	1.00					
Performing loans (except loans to financial institutions and loans reported in above categories) with risk weights greater than 35% under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.30 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637, of which:	30, 32, 34, 48(e), 50(b), 54(a)										
Unencumbered					0.50	0.50	0.85				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Exchange traded equities that are not HQLA, of which:	34, 50(c), 54(a)										
Unencumbered							0.85				
Encumbered, of which:											
Remaining period of encumbrance < 6 months							0.85				
Remaining period of encumbrance ≥ 6 months to < 1 year							0.85				
Remaining period of encumbrance ≥ 1 year							1.00				
Securities that are not HQLA and not in default, of which:	34, 48(e), 50(c), 54(a)										
Unencumbered					0.50	0.50	0.85				
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 1 year					1.00	1.00	1.00				
Physical traded commodities including gold, of which:	31(b), 34, 50(d), 54(a)										
Unencumbered							0.85				
Encumbered, of which:											
Remaining period of encumbrance < 6 months							0.85				
Remaining period of encumbrance ≥ 6 months to < 1 year							0.85				
Remaining period of encumbrance ≥ 1 year							1.00				
Other short-term unsecured instruments and transactions with a residual maturity of less than one year, of which:	34, 48(e), 54(a)										
Unencumbered					0.50	0.50					
Encumbered, of which:											
Remaining period of encumbrance < 6 months					0.50	0.50					
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					1.00	1.00					
Defaulted securities and non-performing loans	54(d)				1.00	1.00	1.00				
Derivatives:											
Derivative assets, gross of variation margin received											
Of which are derivative assets where the counterparty is exempt from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
Variation margin received, of which:											
Cash variation margin received, meeting conditions as specified in paragraph 2.11 in Annex 4A of MAS Notice 637 as applied by paragraph 6.1 of MAS Notice FHC-N637											
Of which is received from counterparties exempted from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											

Other variation margin received											
Of which is received from counterparties exempted from BCBS-IOSCO margin requirements											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
NSFR derivative assets (derivative assets less cash collateral received as variation margin on derivative assets)	41, 42, 43, FN 21, 54(b)						1.00				
Required stable funding associated with derivative liabilities	54(e)						1.00				
Total initial margin posted, of which:											
Initial margin posted on FHC's own positions, of which:	50(a)										
Initial margin posted in the form of cash											
Initial margin posted in the form of securities that are Level 1 HQLA											
Initial margin posted in the form of all other collateral											
Initial margin posted on behalf of a customer											
Initial margin posted on FHC's own positions, in the form of any collateral type, according to residual maturity of associated derivative contract(s)											
Initial margin posted on FHC’s own positions, in the form of any collateral type, to counterparties exempt from BCBS-IOSCO margin requirements, of which:											
Non-financial entities that are not systemically important											
Sovereigns/central banks/MDBs/BIS											
Cash or other assets provided to contribute to the default fund of a CCP	50(a)										
Required stable funding associated with initial margin posted and cash or other assets provided to contribute to the default fund of a CCP	50(a)						0.85				
Items deducted from regulatory capital	54(d)				1.00	1.00	1.00				
Trade date receivables	44(d)				0.00						
Interdependent assets	56				0.00	0.00	0.00				
All other assets not included in above categories that qualify for 100% treatment	31(a), 54(d)				1.00	1.00	1.00				
On balance-sheet RSF (Section B)											
On balance-sheet RSF (Section B and Section D)											

2) Off balance-sheet items

	Paragraph Number in MAS Notice FHC-N652	Amount (S$'000)	RSF factor	Calculated RSF (S$'000)
Irrevocable or conditionally revocable liquidity facilities	58		0.05	
Irrevocable or conditionally revocable credit facilities	58		0.05	
Unconditionally revocable liquidity facilities	58		0.00	
Unconditionally revocable credit facilities	58		0.00	
Trade finance-related obligations (including guarantees and letters of credit)	58		0.00	
Guarantees and letters of credit unrelated to trade finance obligations	58		0.00	
Non-contractual obligations, of which:	58			
Debt-buy back requests (incl related conduits)	58		0.00	
Structured products	58		0.00	
Managed funds	58		0.00	
Other non-contractual obligations	58		0.00	
All other off balance-sheet obligations not included in the above categories	58		0.00	
Off balance-sheet RSF				

Total RSF (Section B and Section D)	

C) NSFR for each month-end

Reporting Month	NSFR	Total ASF (S$'000)	Total RSF (S$'000)
1			
2			
3			

D) For completion only by FHCs with assets encumbered for exceptional central bank liquidity operations
Note: Values reported in this section should not be reported in Section B above.

	Paragraph Number in MAS Notice FHC-N652	Amount (S$'000)			RSF factor			Calculated RSF (S$'000)			
		< 6 months	≥ 6 months to < 1 year	≥1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	< 6 months	≥ 6 months to < 1 year	≥ 1 year	Total RSF
Securities held where the institution has an offsetting reverse repurchase transaction when the security on each transaction has the same unique identifier (e.g. ISIN number or CUSIP) and such securities are reported on the balance sheet of the reporting institutions	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.00	0.00	0.00				
Remaining period of encumbrance ≥ 1 year					0.00	0.00	0.00				
Loans to financial institutions, of which:	35(a), 36										
Secured by Level 1 HQLA collateral and where the FHC has the ability to freely rehypothecate the received collateral for the life of the loan											
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.10	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					0.10	0.50	1.00				
All other secured loans to financial institutions											
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.15	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					0.15	0.50	1.00				
Unsecured											
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.15	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					0.15	0.50	1.00				
Securities eligible as Level 1 HQLA as set out in paragraph 7	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.05	0.05	0.05				
Remaining period of encumbrance ≥ 1 year					0.05	0.05	0.05				
Securities eligible for Level 2A HQLA as set out in paragraph 7	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.15	0.15	0.15				

Remaining period of encumbrance ≥ 1 year					0.15	0.15	0.15				
Securities eligible for Level 2B HQLA as set out in paragraph 7	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.50				
Remaining period of encumbrance ≥ 1 year					0.50	0.50	0.50				
Deposits held at financial institutions for operational purposes	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	1.00				
Remaining period of encumbrance ≥ 1 year					0.50	0.50	1.00				
Loans to non-financial corporates with a residual maturity of less than one year	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					0.50	0.50					
Claims on central banks with a residual maturity of less than one year	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.00	0.50					
Remaining period of encumbrance ≥ 1 year					0.00	0.50					
Loans to sovereigns, PSEs, MDBs and NDBs with a residual maturity of less than one year	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					0.50	0.50					
Residential mortgages of any maturity that would qualify for the 35% or lower risk weight under paragraph 7.3.29 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.65				
Remaining period of encumbrance ≥ 1 year					0.50	0.50	0.65				
Other loans, excluding loans to financial institutions, with a residual maturity of one year or more that would qualify for the 35% or lower risk weight under paragraphs 7.3.13 to 7.3.20 and paragraphs 7.3.24 to 7.3.26 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year							0.65				
Remaining period of encumbrance ≥ 1 year							0.65				
Loans to retail and small business customers (excluding residential mortgages) with a residual maturity of less than one year	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					0.50	0.50					
Performing loans (except loans to financial institutions and loans reported in above categories) with risk weights greater than 35% under paragraphs 7.3.13 to 7.3.20 and	35(a), 36										

paragraphs 7.3.24 to 7.3.30 of MAS Notice 637 as applied by paragraph 7.1 of MAS Notice FHC-N637											
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 1 year					0.50	0.50	0.85				
Exchange traded equities that are not HQLA	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year							0.85				
Remaining period of encumbrance ≥ 1 year							0.85				
Securities that are not HQLA and not in default	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50	0.85				
Remaining period of encumbrance ≥ 1 year					0.50	0.50	0.85				
Physical traded commodities including gold	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year							0.85				
Remaining period of encumbrance ≥ 1 year							0.85				
Other short-term unsecured instruments and transactions with a residual maturity of less than one year	35(a), 36										
Of which are encumbered for exceptional central bank liquidity operations, of which:											
Remaining period of encumbrance ≥ 6 months to < 1 year					0.50	0.50					
Remaining period of encumbrance ≥ 1 year					0.50	0.50					
Total RSF (Section D)											

Notes for completion

1. An FHC must fill in the form in thousands of Singapore dollars (S$'000). Where amounts are in foreign currency, the FHC must report the Singapore Dollar equivalent. Internal FX rates may be used.

2. For Sections A, B and D, an FHC must report the figures as of the last day of the reporting quarter. For Section C, the FHC must report the figures as of the last day of each month within the reporting quarter.

3. An FHC must fill in all blank cells in the form. If the FHC does not have exposures in a particular category, please enter '0'.