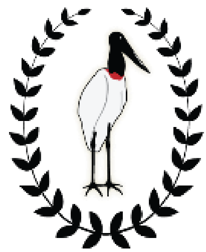

CENTRAL BANK
of BELIZE

Basel II/III Implementation

Net Stable Funding Ratio Guideline

July 2024

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LIST OF ABBREVIATIONS

ASF	Available Stable Funding
BCBS	Basel Committee on Banking Supervision
HQLA	High Quality Liquid Assets
LCR	Liquidity Coverage Ratio
NSFR	Net Stable Funding Ratio
MSME	Micro, Small, and Medium Enterprise
OBS	Off-balance Sheet
PSE	Public Sector Entity
RSF	Required Stable Funding

GLOSSARY

“Available Stable Funding” are the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year.

“Net Stable Funding Ratio” is the amount of available stable funding relative to the amount of required stable funding. This ratio should be equal to at least 100% on an ongoing basis.

“Off-balance Sheet Exposures” includes guarantees, commitments, and similar contracts whose full notional principal amount may not necessarily be reflected on the balance sheet.

“Required Stable Funding” is measured based on the broad characteristics of the liquidity risk profile of an institution’s assets and OBS exposures.

“Secured financing transactions” are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on the market valuations and the transactions are often subject to margin agreements.

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

"Unencumbered" means free of legal, regulatory, contractual, or other restrictions on the ability of the relevant financial institution to liquidate, sell, transfer, or assign the asset. These assets should not be pledged (either explicitly or implicitly) to secure, collateralize or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries).

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

1. INTRODUCTION

The Net Sable Funding Ratio (NSFR) presents one of the Basel Committee's key reforms to promote a more resilient banking sector. In strengthening the liquidity risk profiles of banks in Belize, the Central Bank of Belize (Central Bank) has adopted the NSFR as a minimum standard of liquidity for banks. The NSFR requires banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A stable funding profile is intended to reduce the likelihood that disruptions to a bank's regular sources of funding will erode its liquidity position in a way that would increase the risk of its failure and potentially lead to broader systemic stress. The NSFR limits overreliance on short-term wholesale funding, encourages better assessment of funding risk across all on- and off-balance sheet items, and promotes funding stability.

This Guideline aims at reducing funding risk over a longer time horizon by requiring banks to fund their activities with sufficiently stable sources of funding to mitigate the risk of future funding stress. The NSFR is comprised of specific parameters, which are based on international standards. Certain parameters, however, contain elements of national discretion, which have been adopted by Belize to reflect jurisdiction-specific conditions.

2. DEFINITION AND MINIMUM REQUIREMENTS

2.1 The NSFR is defined as the amount of available stable funding relative to the amount of required stable funding. This ratio should be equal to at least 100% on an ongoing basis. "Available stable funding" is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The amount of required stable funding of a specific institution is a function of the liquidity characteristics and residual maturities of the various assets held by that institution as well as those of its off-balance sheet (OBS) exposures.

$$\frac{\textbf{Available amount of stable funding}}{\textbf{Required amount of stable funding}} \geq \textbf{100\%}$$

2.2 The amounts of available and required stable funding specified in the Guideline are calibrated to reflect the presumed degree of stability of liabilities and liquidity of assets. The calibration reflects the stability of liabilities across two dimensions:

(a) *Funding tenor* – The NSFR is generally calibrated under the assumption that longer-term liabilities are more stable than shorter-term liabilities.

(b) *Funding type and counterparty* – The NSFR is calibrated under the assumption that short-term (maturing in less than one year) deposits provided by retail customers and funding provided by Micro, Small, and Medium Enterprises (MSME) are behaviorally more stable than wholesale funding of the same maturity from other counterparties.

2.3 In determining the appropriate amounts of required stable funding for various assets, the following criteria were taken into consideration, recognizing the potential trade-offs between these criteria:

(a) *Resilient credit creation* – The NSFR requires stable funding for some proportion of lending to the real economy to ensure the continuity of this type of intermediation.

(b) *Bank behaviour* – The NSFR is calibrated under the assumption that banks may seek to roll over a significant proportion of maturing loans to preserve customer relationships.

(c) *Asset tenor* – The NSFR assumes that some short-dated assets (maturing in less than one year) require a smaller proportion of stable funding because banks would be able to allow some proportion of those assets to mature instead of rolling them over.

(d) *Asset quality and liquidity value* – The NSFR assumes that unencumbered, high-quality assets that can be securitized or traded, and thus can be readily used as collateral to secure additional funding or sold in the market, do not need to be wholly financed with stable funding.

2.4 Additional stable funding sources are also required to support at least a small portion of the potential calls on liquidity arising from OBS commitments and contingent funding obligations.

2.5 NSFR definitions mirror those outlined in the LCR Guideline, unless otherwise specified. For the purposes of calculating the NSFR, high quality liquid assets (HQLA) are defined as all HQLA without regard to LCR operational requirements[1] and LCR caps on Level 2 and Level 2B assets[2] that may

[1] paragraph 3.5 to 3.13 of the LCR Guideline
[2] paragraph 3.21 of the LCR Guideline

otherwise limit the ability of some HQLA to be included as eligible HQLA in the calculation of LCR.

A. Definition of Available Stable Funding

2.6 The amount of available stable funding (ASF) is measured based on the broad characteristics of the relative stability of a bank'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. The amount of ASF is calculated by first assigning the carrying value of a bank's capital and liabilities to one of five categories as presented below. The amount assigned to each category is then multiplied by an ASF factor, and the total ASF is the sum of the weighted amounts. Carrying value represents the amount at which a liability or equity instrument is recorded before the application of any regulatory deductions, filters or other adjustments.

2.7 When determining the maturity of an equity or liability instrument, investors are assumed to redeem a call option at the earliest possible date. For funding with options exercisable at the bank's discretion, reputational factors should be taken into account that may limit a bank's ability not to exercise the option.[3] In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date, banks should assume such behaviour for the purpose of the NSFR and include these liabilities in the corresponding ASF category. For long-dated liabilities, only the portion of cash flows falling at or beyond the six-month and one-year time horizons should be treated as having an effective residual maturity of six months or more and one year or more, respectively.

Calculation of derivative liability amounts

2.8 Derivative liabilities are calculated first based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a negative value. In calculating NSFR derivative liabilities, collateral posted in the form of variation margin in connection with derivative contracts, regardless of the asset type, must be deducted from the negative replacement cost.[4,5]

Liabilities and capital receiving a 100% ASF factor

2.9 Liabilities and capital instruments receiving a 100% ASF factor comprise:

(a) the total Tier 1 and Tier 2 capital as per Pillar 1 Guideline, 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 (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; and

(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 greater than one year do not qualify for the 100% ASF factor).

[3] This could reflect a case where a bank may imply that it would be subject to funding risk if it did not exercise an option on its own funding.

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

[5] To the extent that the bank's accounting 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, that asset should not be included in the calculation of a bank's required stable funding (RSF) to avoid any double-counting.

Liabilities receiving an 88% ASF factor

2.10 Liabilities receiving an 88% ASF factor comprise non-maturity demand and savings deposits and/or term deposits with residual maturities of less than one year provided by retail and unsecured wholesale funding provided by MSME (as defined by the LCR Guidelines).

Liabilities receiving a 50% ASF factor

2.11 Liabilities receiving a 50% ASF factor comprise:

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

(b) operational deposits generated by clearing, custody, and cash management activities;

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

(d) other deposits and funding (secured and unsecured) not included in the categories above with residual maturity between six months to less than one year, including, but not limited to, funding from central banks and financial institutions.

Liabilities receiving a 0% ASF factor

2.12 Liabilities receiving a 0% ASF factor comprise:

(a) all other liabilities and equity categories not included in the above categories, including other borrowings and funding with residual maturity of less than six months from central banks and financial institutions;

(b) other liabilities without a stated maturity. This category may include short positions and open maturity positions. Two exceptions can be recognized for liabilities without a stated maturity:

i. deferred tax liabilities, which should be treated according to the nearest possible date on which such liabilities could be realized; and

ii. minority interest, which should be treated according to the term of the instrument, usually in perpetuity.

These liabilities would then be assigned either a 100% ASF factor if the effective maturity is one year or greater, or 50%, if the effective maturity is between six months and less than one year; and

(c) NSFR derivative liabilities net of NSFR derivative assets, if NSFR derivative liabilities are greater than NSFR derivative assets.

B. Definition of Required Stable Funding for Assets and Off-Balance Sheet Exposures

2.13 The amount of required stable funding (RSF) is measured based on the broad characteristics of the liquidity risk profile of a bank's assets and OBS exposures. The amount of RSF is calculated by first assigning the carrying value of a bank's assets to the categories listed. The amount assigned to each category is then multiplied by its associated RSF factor, and the total RSF is the sum of the weighted amounts added to the amount of OBS activity (or potential liquidity exposure) multiplied by its associated RSF factor.

2.14 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 monetized through sale or used as collateral in a secured borrowing transaction over the course of one year without significant expense. Such amounts are expected to be supported by stable funding.

2.15 Assets should be allocated to the appropriate RSF factor based on their residual maturity or liquidity value. When determining the maturity of an instrument, investors should be assumed to exercise any option to extend maturity. For assets with options exercisable at the bank's discretion, reputational factors should be taken into account that may limit a bank's ability not to exercise the option. In particular, where the market expects certain assets to be extended in their maturity, banks should assume such behaviour for the purpose of the NSFR and include these assets in the corresponding RSF category. For amortizing loans, the portion that comes due within the one-year horizon can be treated in the less-than-one-year residual maturity category.

2.16 For purposes of determining its RSF, a bank should (i) include financial instruments, foreign currencies and commodities for which a purchase order has been executed, and (ii) 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 (i) such transactions are not reflected as derivatives or secured financing transactions in the institution's balance sheet, and (ii) the effects of such transactions will be reflected in the bank's balance sheet when settled.

Encumbered assets

2.17 Assets on the balance sheet that are encumbered for one year or more receive a 100% RSF factor. Assets encumbered for a period of between six months and less than one year receive a 50% RSF factor, if that asset would have qualified for RSF factor of 50% or lower if unencumbered. Assets encumbered for between six months and less than one year that would, if unencumbered, receive an RSF factor higher than 50% retain that higher RSF factor. Where assets have less than six months remaining in the encumbrance period, those assets may receive the same RSF factor as an equivalent asset that is unencumbered. Where encumbered assets are subject to automatic renewal, such as deposits held as collateral for correspondent banking relationships, such assets should receive a 100% RSF factor.

Secured financing transactions

2.18 For secured funding arrangements, use of balance sheet and accounting treatments should generally result in banks excluding, from their assets, securities which they have borrowed in securities financing transactions (such as reverse repos) where they do not have beneficial ownership. In contrast, banks should include securities they have lent in securities financing transactions where they retain beneficial ownership. Where banks have encumbered securities in repos or other securities financing transactions but have retained beneficial ownership and those assets remain on the bank's balance sheet, the bank should allocate such securities to the appropriate RSF category.

2.19 Securities financing transactions with a single counterparty may be measured net when calculating the NSFR, provided that the netting conditions are met[6].

Calculation of derivative asset amounts

2.20 Derivative assets are calculated first based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a positive value.

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[6] See BCBS: p.33i of "Basel III leverage ratio framework and disclosure requirements", January 2014

2.21 In calculating NSFR derivative assets, collateral received in connection with derivative contracts may not offset the positive replacement cost amount, regardless of whether or not netting is permitted under the bank's operative accounting or risk-based framework, unless it is received in the form of cash variation margin. Any remaining balance sheet liability associated with (a) variation margin received that does not meet the criteria above or (b) initial margin received may not offset derivative assets and should be assigned a 0% ASF factor.

Assets assigned a 0% RSF factor

2.22 Assets assigned a 0% RSF factor comprise:

a) coins and banknotes;

b) balances with the Central Bank (including required reserves); and

c) all claims on central banks with residual maturities of less than six months.

Assets assigned a 5% RSF factor

2.23 Assets assigned a 5% RSF factor comprise unencumbered Level 1 assets as defined in the LCR Guideline, excluding assets receiving a 0% RSF as specified above, and including:

- marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs, the International Monetary Fund, the European Central Bank and the European Community, or multilateral development banks that are assigned a 0% risk weight under the Pillar 1 Guideline for credit risk; and
- certain non-0% risk-weighted sovereign or central bank debt securities as specified in the LCR Guideline.

Assets assigned a 10% RSF factor

2.24 Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 assets as defined in the LCR Guideline, and where the bank has the ability to freely rehypothecate the received collateral for the life of the loan.

Assets assigned a 15% RSF factor

2.25 Assets assigned a 15% RSF factor comprise:

(a) unencumbered Level 2A assets as defined in the LCR Guideline, including:

- marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs or multilateral development banks that are assigned a 20% risk weight under the Pillar 1 Guideline for credit risk; and
- corporate debt securities (including commercial paper) and covered bonds with a credit rating equal or equivalent to at least AA–.

(b) all other unencumbered loans to, and non-operational deposits held at, other financial institutions with residual maturities of less than six months not included in paragraph 2.24. including unencumbered balances held at correspondent banks.

Assets assigned a 50% RSF factor

2.26 Assets assigned a 50% RSF factor comprise:

a) unencumbered Level 2B assets as defined and subject to the conditions set forth in the LCR Guideline, including:
   - residential mortgage-backed securities with a credit rating of at least AA;
   - corporate debt securities (including commercial paper) with a credit rating of betweenA+ and BBB–; and
   - exchange-traded common equity shares not issued by financial institutions or their affiliates;

b) any HQLA as defined in the LCR Guideline that are encumbered for a period of between six months and less than one year;

c) all loans to, or non-operational deposits held at, other financial institutions and central banks with residual maturity of between six months and less than one year;

d) deposits held at other financial institutions for operational purposes, as outlined in the LCR Guideline, that are subject to the 50% ASF factor in paragraph 2.11; and

e) all other non-HQLA not included in the above categories that have a residual maturity of less than one year, including (but not limited to)loans to non-financial corporate clients, loans to retail customers and MSME, and loans to sovereigns and PSEs.

Assets assigned a 65% RSF factor

2.27 Assets assigned a 65% RSF factor comprise:

a) unencumbered residential mortgages with a residual maturity of one year or more that would qualify for a 50% or lower risk weight under the Pillar 1 Guideline; and

b) 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 50% or lower risk weight under the Pillar 1 Guideline.

Assets assigned an 85% RSF factor

2.28 Assets assigned an 85% RSF factor comprise:

a) cash, securities, or other assets posted as initial margin for derivative contracts. Where securities or other assets posted as initial margin for derivative contracts would otherwise receive a higher RSF factor, they should retain that higher factor;

b) other unencumbered performing loans that do not qualify for the 50% or lower risk weight under the Pillar 1 Guideline 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 equities, that are not in default and do not qualify as HQLA according to the LCR Guideline; and

d) traded physical commodities, including gold.

Assets assigned a 100% RSF factor

2.29 Assets assigned a 100% RSF factor comprise:

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

b) NSFR derivative assets net of NSFR derivative liabilities as calculated according to paragraph 2.8, if NSFR derivative assets are greater than NSFR derivative liabilities;

c) all other assets not included in the above categories, including non-performing loans, loans to financial institutions, and deposits held at financial institutions, with a residual maturity of one year or more, non-exchange-traded equities, fixed assets, items deducted from Tier 1 and Tier 2 capital, subsidiary interests and defaulted securities; and

d) 20% of derivative liabilities (i.e., negative replacement cost amounts) as calculated according to paragraph 2.8 (before deducting variation margin posted).

Off-balance sheet exposures

2.30 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 assigns an RSF factor to various OBS activities in order to ensure that banks hold stable funding for the portion of OBS exposures that may be expected to require funding within a one-year horizon.

2.31 Consistent with the LCR, the NSFR identifies OBS exposure categories based broadly on whether the commitment is a credit or liquidity facility or some other contingent funding obligation. **Annex I** identify the specific types of OBS exposures to be assigned to each OBS category and their associated RSF factor.

3. APPLICATION ISSUES FOR THE NSFR

A. Frequency of calculation and reporting

3.1 Banks are expected to meet the NSFR requirement on an ongoing basis. The NSFR should be reported within fourteen (14) calendar days after the end of each calendar quarter.

B. Scope of application

3.2 The scope of application of this Guideline includes, on a consolidated basis, domestic and international banks incorporated in Belize and regulated by the Central Bank under the Domestic Banks and Financial Institutions Act and International Banking Act.

3.3 A bank should actively monitor and control liquidity risk exposures and funding needs at the level of individual legal entities, foreign branches and subsidiaries, and the group as a whole, taking into account legal, regulatory, and operational limitations.

ANNEX I

Illustrative Summary of the NSFR

(Percentages are factors to be multiplied by the total amount of each item)

ASF factor	Components of ASF category
100%	• Total Tier 1 and Tier 2 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.
88%	• Non-maturity (demand) deposits, savings and/or term deposits with residual maturities of less than one year provided by retail and unsecured wholesale funding provided by small business customers.
50%	• Funding with residual maturity of less than one year provided by non-financial corporate customers. • 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 six 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 greaterthan NSFR derivative assets.

RSF factor	Components of RSF category
0%	• Coins and banknotes. • Balances due from Central Banks. • All claims on central banks with residual maturities of less than six months.
5%	• Unencumbered Level 1 assets, excluding coins, banknotes and central bank reserves.
10%	• Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 assets as defined in LCR Guideline, and where the bank has the ability to freely rehypothecate the received collateral for the life of the loan.
15%	• Unencumbered Level 2A assets. • All other unencumbered loans to and deposits at financial institutions with residual maturities of less than six months which are not included in the above categories.
50%	• Unencumbered Level 2B assets. • HQLA encumbered for a period of six months or more and less than one year.

	• Loans and deposits to financial institutions and central banks with residual maturities between six 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 corporate clients, 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 and with a risk weight of less than or equal to 50% under the Pillar 1 Guideline. • Other unencumbered loans not included in the above categories, excluding loans and deposits to financial institutions, with a residual maturity of one year or more and with a risk weight of less than or equal to 50% under the Pillar 1 Guideline.
85%	• Cash, securities or other assets posted as initial margin for derivative contracts. • Other unencumbered performing loans with risk weights greater than 50% under the Pillar 1 Guideline 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 remaining maturity of one year or more and exchange-traded equities. • Traded physical commodities, including gold.
100%	• All assets that are encumbered for a period of one year or more, including Encumbered assets subject to automatic renewal, such as deposits held as collateral for correspondent banking relationship. • NSFR derivative assets net of NSFR derivative liabilities if NSFR derivative assets are greater than NSFR derivative liabilities. • 20% of derivative liabilities as calculated according to 2.8. • 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 Tier 1 and Tier 2 capital, subsidiary interests and defaulted securities.

RSF factor	RSF category
5% of currently undrawn portion	Irrevocable and conditionally revocable credit and liquidity facilities to any client.
10% of currently undrawn portion	Other contingent funding obligations, including products and instruments such as: • Unconditionally revocable credit and liquidity facilities. • Trade finance-related obligations (including guarantees and letters of credit). • Guarantees and letters of credit unrelated to trade finance obligations • Other non-contractual obligations.