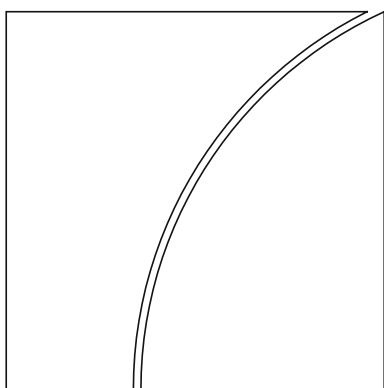


# Basel Committee on Banking Supervision



## Basel III: the net stable funding ratio

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## I. Introduction

1. This document presents the net stable funding ratio (NSFR), one of the Basel Committee's key reforms to promote a more resilient banking sector. The NSFR will require banks to maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. A sustainable funding structure 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 document sets out the NSFR standard and timeline for its implementation.

2. Maturity transformation performed by banks is a crucial part of financial intermediation that contributes to efficient resource allocation and credit creation. However, private incentives to limit excessive reliance on unstable funding of core (often illiquid) assets are weak. Just as banks may have private incentives to increase leverage, incentives arise for banks to expand their balance sheets, often very quickly, relying on relatively cheap and abundant short-term wholesale funding. Rapid balance sheet growth can weaken the ability of individual banks to respond to liquidity (and solvency) shocks when they occur, and can have systemic implications when banks fail to internalise the costs associated with large funding gaps. A highly interconnected financial system tends to exacerbate these spillovers.

3. During the early liquidity phase of the financial crisis starting in 2007, many banks – despite meeting the existing capital requirements – experienced difficulties because they did not prudently manage their liquidity. The crisis drove home the importance of liquidity to the proper functioning of financial markets and the banking sector. Prior to the crisis, asset markets were buoyant and funding was readily and cheaply available. The rapid reversal in market conditions showed how quickly liquidity can dry up and also how long it can take to come back. The banking system came under severe stress, which forced central banks to take action in support of both the functioning of money markets and, in some cases, individual institutions.

4. The difficulties experienced by some banks arose from failures to observe the basic principles of liquidity risk management. In response, the Committee in 2008 published *Principles for Sound Liquidity Risk Management and Supervision* ("*Sound Principles*") as the foundation of its liquidity framework.<sup>1</sup> The *Sound Principles* offer detailed guidance on the risk management and supervision of funding liquidity risk and should help promote better risk management in this critical area, provided that they are fully implemented by banks and supervisors. The Committee will accordingly continue to monitor the implementation of these fundamental principles by supervisors to ensure that banks in their jurisdictions adhere to them.

5. The Committee has further strengthened its liquidity framework by developing two *minimum* standards for funding and liquidity. These standards are designed to achieve two separate but complementary objectives. The first is to promote the short-term resilience of a bank's liquidity risk profile by ensuring that it has sufficient high-quality liquid assets (HQLA) to survive a significant stress scenario lasting for 30 days. To that end, the Committee has developed the liquidity coverage ratio (LCR).<sup>2</sup> The second objective is to reduce funding risk over a longer time horizon by requiring banks to

<sup>1</sup> The *Sound Principles* are available at [www.bis.org/publ/bcbs144.htm](http://www.bis.org/publ/bcbs144.htm).

<sup>2</sup> See *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.htm](http://www.bis.org/publ/bcbs238.htm).

fund their activities with sufficiently stable sources of funding in order to mitigate the risk of future funding stress. To meet this second objective, the Committee has developed the NSFR.

6. In addition to the LCR and NSFR standards, the minimum quantitative standards that banks must comply with, the Committee has developed a set of liquidity risk monitoring tools to measure other dimensions of a bank's liquidity and funding risk profile. These tools promote global consistency in supervising ongoing liquidity and funding risk exposures of banks, and in communicating these exposures to home and host supervisors. Although currently defined in the January 2013 document, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, these tools are supplementary to both the LCR and the NSFR. In this regard, the contractual maturity mismatch metric, particularly the elements that take into account assets and liabilities with residual maturity of more than one year, should be considered as a valuable monitoring tool to complement the NSFR.

7. In 2010, the Committee agreed to review the development of the NSFR over an observation period. The focus of this review was on addressing any unintended consequences for financial market functioning and the economy, and on improving its design with respect to several key issues, notably: (i) the impact on retail business activities; (ii) the treatment of short-term matched funding of assets and liabilities; and (iii) analysis of sub-one year buckets for both assets and liabilities.

8. In line with the timeline specified in the 2010 publication of the liquidity risk framework,<sup>3</sup> the NSFR will become a minimum standard by 1 January 2018.

## II. Definition and minimum requirements

9. 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 such stable funding *required* ("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.

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

10. The NSFR consists primarily of internationally agreed-upon definitions and calibrations. Some elements, however, remain subject to national discretion to reflect jurisdiction-specific conditions. In these cases, national discretion should be explicit and clearly outlined in the regulations of each jurisdiction.

11. As a key component of the supervisory approach to funding risk, the NSFR must be supplemented by supervisory assessment work. Supervisors may require an individual bank to adopt more stringent standards to reflect its funding risk profile and the supervisor's assessment of its compliance with the *Sound Principles*.

<sup>3</sup> See *Basel III: International framework for liquidity risk measurement, standards and monitoring*, December 2010, [www.bis.org/publ/bcbs188.pdf](http://www.bis.org/publ/bcbs188.pdf).

12. The amounts of available and required stable funding specified in the standard are calibrated to reflect the presumed degree of stability of liabilities and liquidity of assets.
13. The calibration reflects the stability of liabilities across two dimensions:
- (a) *Funding tenor* – The NSFR is generally calibrated such that longer-term liabilities are assumed to be more stable than short-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 small business customers are behaviourally more stable than wholesale funding of the same maturity from other counterparties.
14. In determining the appropriate amounts of required stable funding for various assets, the following criteria were taken into consideration, recognising 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 in order 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 securitised 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.
15. 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.
16. NSFR definitions mirror those outlined in the LCR, unless otherwise specified. All references to LCR definitions in the NSFR refer to the definitions in the LCR standard published by the Basel Committee. Supervisors who have chosen to implement a more stringent definition in their domestic LCR rules than those set out in the Basel Committee LCR standard have discretion over whether to apply this stricter definition for the purposes of implementing the NSFR requirements in their jurisdiction.

## A. Definition of available stable funding

17. The amount of available stable funding (ASF) is measured based on the broad characteristics of the relative stability of an institution'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 an institution'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.

18. 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, supervisors should take into account reputational factors that may limit a bank's ability not to exercise the option.<sup>4</sup> In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date, banks and supervisors 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

19. 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. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of *Basel III leverage ratio framework and disclosure requirements*,<sup>5</sup> the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost.

20. 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 amount.<sup>6, 7</sup>

#### Liabilities and capital receiving a 100% ASF factor

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

- (a) the total amount of regulatory capital, before the application of capital deductions, as defined in paragraph 49 of the Basel III text,<sup>8</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> *Basel III leverage ratio framework and disclosure requirements*, January 2014, [www.bis.org/publ/bcbs270.pdf](http://www.bis.org/publ/bcbs270.pdf).

<sup>6</sup> NSFR derivative liabilities = (derivative liabilities) – (total collateral posted as variation margin on derivative liabilities).

<sup>7</sup> 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.

<sup>8</sup> Capital instruments reported here should meet all requirements outlined in *Basel III: A global regulatory framework for more resilient banks and banking systems*, June 2011, [www.bis.org/publ/bcbs189.pdf](http://www.bis.org/publ/bcbs189.pdf), and should only include amounts after transitional arrangements have expired under fully implemented Basel III standards (ie as in 2022).



#### Liabilities receiving a 95% ASF factor

22. Liabilities receiving a 95% ASF factor comprise “stable” (as defined in the LCR in paragraphs 75–78) non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail and small business customers.<sup>9</sup>

#### Liabilities receiving a 90% ASF factor

23. Liabilities receiving a 90% ASF factor comprise “less stable” (as defined in the LCR in paragraphs 79–81) non-maturity (demand) deposits and/or term deposits with residual maturities of less than one year provided by retail and small business customers.

#### Liabilities receiving a 50% ASF factor

24. Liabilities receiving a 50% ASF factor comprise:

- (a) funding (secured and unsecured) with a residual maturity of less than one year provided by non-financial corporate customers;
- (b) operational deposits (as defined in LCR paragraphs 93–104);
- (c) funding with residual maturity of less than one year from sovereigns, public sector entities (PSEs), and multilateral and national development banks; and
- (d) other funding (secured and unsecured) not included in the categories above with residual maturity between six months to less than one year, including funding from central banks and financial institutions.

#### Liabilities receiving a 0% ASF factor

25. Liabilities receiving a 0% ASF factor comprise:

- (a) all other liabilities and equity categories not included in the above categories, including other funding with residual maturity of less than six months from central banks and financial institutions;<sup>10</sup>
- (b) other liabilities without a stated maturity. This category may include short positions and open maturity positions. Two exceptions can be recognised for liabilities without a stated maturity:
  - first, deferred tax liabilities, which should be treated according to the nearest possible date on which such liabilities could be realised; and
  - second, minority interest, which should be treated according to the term of the instrument, usually in perpetuity.

<sup>9</sup> Retail deposits are defined in LCR paragraph 73. Small business customers are defined in LCR paragraph 90 and 91.

<sup>10</sup> At the discretion of national supervisors, deposits between banks within the same cooperative network can be excluded from liabilities receiving a 0% ASF provided they are either (a) required by law in some jurisdictions to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements, or (b) in the context of common task sharing and legal, statutory or contractual arrangements, so long as the bank that has received the monies and the bank that has deposited participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members. Such deposits can be assigned an ASF up to the RSF factor assigned by regulation for the same deposits to the depositing bank, not to exceed 85%.

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;

- (c) NSFR derivative liabilities as calculated according to paragraphs 19 and 20 net of NSFR derivative assets as calculated according to paragraphs 34 and 35, if NSFR derivative liabilities are greater than NSFR derivative assets;<sup>11</sup> 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.

26. Table 1 below summarises the components of each of the ASF categories and the associated maximum ASF factor to be applied in calculating an institution’s total amount of available stable funding under the standard.

Summary of liability categories and associated ASF factors		Table 1
ASF factor	Components of ASF category	
100%	<ul style="list-style-type: none"> <li>Total regulatory capital (excluding Tier 2 instruments with residual maturity of less than one year)</li> <li>Other capital instruments and liabilities with effective residual maturity of one year or more</li> </ul>	
95%	<ul style="list-style-type: none"> <li>Stable non-maturity (demand) deposits and term deposits with residual maturity of less than one year provided by retail and small business customers</li> </ul>	
90%	<ul style="list-style-type: none"> <li>Less stable non-maturity deposits and term deposits with residual maturity of less than one year provided by retail and small business customers</li> </ul>	
50%	<ul style="list-style-type: none"> <li>Funding with residual maturity of less than one year provided by non-financial corporate customers</li> <li>Operational deposits</li> <li>Funding with residual maturity of less than one year from sovereigns, PSEs, and multilateral and national development banks</li> <li>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</li> </ul>	
0%	<ul style="list-style-type: none"> <li>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)</li> <li>NSFR derivative liabilities net of NSFR derivative assets if NSFR derivative liabilities are greater than NSFR derivative assets</li> <li>“Trade date” payables arising from purchases of financial instruments, foreign currencies and commodities</li> </ul>	

## B. Definition of required stable funding for assets and off-balance sheet exposures

27. The amount of required stable funding is measured based on the broad characteristics of the liquidity risk profile of an institution’s assets and OBS exposures. The amount of required stable funding is calculated by first assigning the carrying value of an institution’s assets to the categories listed. The amount assigned to each category is then multiplied by its associated required stable

<sup>11</sup> ASF = 0% x MAX ((NSFR derivative liabilities – NSFR derivative assets), 0).

funding (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. Definitions mirror those outlined in the LCR, unless otherwise specified.<sup>12</sup>

28. 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. Under the standard, such amounts are expected to be supported by stable funding.

29. 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, supervisors should take into account reputational factors that may limit a bank's ability not to exercise the option.<sup>13</sup> In particular, where the market expects certain assets to be extended in their maturity, banks and supervisors should assume such behaviour for the purpose of the NSFR and include these assets in the corresponding RSF category. For amortising loans, the portion that comes due within the one-year horizon can be treated in the less-than-one-year residual maturity category.

30. For purposes of determining its required stable funding, an institution 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 institution's balance sheet when settled.

#### Encumbered assets

31. Assets on the balance sheet that are encumbered<sup>14</sup> for one year or more receive a 100% RSF factor. Assets encumbered for a period of between six months and less than one year that would, if unencumbered, receive an RSF factor lower than or equal to 50% receive a 50% RSF factor. 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. In addition, for the purposes of calculating the NSFR, assets that are encumbered for exceptional<sup>15</sup> central bank liquidity operations may receive a reduced RSF factor. Supervisors should discuss and agree on the appropriate RSF factor with the relevant central bank, which must not be lower than the RSF factor applied to the equivalent asset that is unencumbered.

<sup>12</sup> For the purposes of calculating the NSFR, HQLA are defined as all HQLA without regard to LCR operational requirements and LCR caps on Level 2 and Level 2B assets that may otherwise limit the ability of some HQLA to be included as eligible HQLA in calculation of the LCR. HQLA are defined in LCR paragraphs 24–68. Operational requirements are specified in LCR paragraphs 28–43.

<sup>13</sup> 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 assets.

<sup>14</sup> Encumbered assets include but are not limited to assets backing securities or covered bonds and assets pledged in securities financing transactions or collateral swaps. "Unencumbered" is defined in LCR paragraph 31.

<sup>15</sup> In general, exceptional central bank liquidity operations are considered to be non-standard, temporary operations conducted by the central bank in order to achieve its mandate in a period of market-wide financial stress and/or exceptional macroeconomic challenges.

## Secured financing transactions

32. 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 and collateral swaps) 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. Banks should also not include any securities they have received through collateral swaps if those securities do not appear on their balance sheets. 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.

33. Securities financing transactions with a single counterparty may be measured net when calculating the NSFR, provided that the netting conditions set out in Paragraph 33(i) of the *Basel III leverage ratio framework and disclosure requirements* document are met.

## Calculation of derivative asset amounts

34. 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. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of *Basel III leverage ratio framework and disclosure requirements*, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost.

35. 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 and meets the conditions as specified in paragraph 25 of the *Basel III leverage ratio framework and disclosure requirements*.<sup>16</sup> 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

36. Assets assigned a 0% RSF factor comprise:

- (a) coins and banknotes immediately available to meet obligations;
- (b) all central bank reserves (including required reserves and excess reserves);<sup>17</sup>
- (c) all claims on central banks with residual maturities of less than six months; and
- (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.

<sup>16</sup> NSFR derivative assets = (derivative assets) – (cash collateral received as variation margin on derivative assets).

<sup>17</sup> Supervisors may discuss and agree with the relevant central bank on the RSF factor to be assigned to required reserves, based in particular on consideration of whether or not the reserve requirement must be satisfied at all times and thus the extent to which reserve requirements in that jurisdiction exist on a longer-term horizon and therefore require associated stable funding.

#### Assets assigned a 5% RSF factor

37. Assets assigned a 5% RSF factor comprise unencumbered Level 1 assets as defined in LCR paragraph 50, excluding assets receiving a 0% RSF as specified above, and including:

- marketable securities representing claims on or guaranteed by sovereigns, central banks, PSEs, the Bank for International Settlements, 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 Basel II standardised approach for credit risk; and
- certain non-0% risk-weighted sovereign or central bank debt securities as specified in the LCR.

#### Assets assigned a 10% RSF factor

38. 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 paragraph 50, 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

39. Assets assigned a 15% RSF factor comprise:

- (a) unencumbered Level 2A assets as defined in LCR paragraph 52, 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 Basel II standardised approach 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 financial institutions with residual maturities of less than six months not included in paragraph 38.

#### Assets assigned a 50% RSF factor

40. Assets assigned a 50% RSF factor comprise:

- (a) unencumbered Level 2B assets as defined and subject to the conditions set forth in LCR paragraph 54, including:
  - residential mortgage-backed securities (RMBS) with a credit rating of at least AA;
  - corporate debt securities (including commercial paper) with a credit rating of between A+ and BBB-; and
  - exchange-traded common equity shares not issued by financial institutions or their affiliates;
- (b) any HQLA as defined in the LCR that are encumbered for a period of between six months and less than one year;
- (c) all loans to financial institutions and central banks with residual maturity of between six months and less than one year; and
- (d) deposits held at other financial institutions for operational purposes, as outlined in LCR paragraphs 93–104, that are subject to the 50% ASF factor in paragraph 24 (b); and
- (e) all other non-HQLA not included in the above categories that have a residual maturity of less than one year, including loans to non-financial corporate clients, loans to retail customers (ie natural persons) and small business customers, and loans to sovereigns and PSEs.

#### Assets assigned a 65% RSF factor

41. 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 35% or lower risk weight under the Basel II standardised approach for credit risk; 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 35% or lower risk weight under the Basel II standardised approach for credit risk.

#### Assets assigned an 85% RSF factor

42. Assets assigned an 85% RSF factor comprise:
- (a) cash, securities or other assets posted as initial margin for derivative contracts<sup>18</sup> and cash or other assets provided to contribute to the default fund of a central counterparty (CCP). 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. In light of the on-going implementation of regulatory requirements related to the margining and settlement of derivatives, the Basel Committee will continue to evaluate the treatment of margining in the NSFR. During this period, the Basel Committee will conduct quantitative analysis and consider alternative approaches, if necessary and appropriate.
  - (b) other unencumbered performing loans<sup>19</sup> that do not qualify for the 35% or lower risk weight under the Basel II standardised approach for credit risk 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; and
  - (d) physical traded commodities, including gold.

#### Assets assigned a 100% RSF factor

43. 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 as calculated according to paragraphs 34 and 35 net of NSFR derivative liabilities as calculated according to paragraphs 19 and 20, if NSFR derivative assets are greater than NSFR derivative liabilities;<sup>20</sup>
  - (c) 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; and

<sup>18</sup> Initial margin posted on behalf of a customer, where the bank does not guarantee performance of the third party, would be exempt from this requirement.

<sup>19</sup> Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.

<sup>20</sup>  $RSF = 100\% \times \text{MAX} ((\text{NSFR derivative assets} - \text{NSFR derivative liabilities}), 0)$ .

- (d) 20% of derivative liabilities (ie negative replacement cost amounts) as calculated according to paragraph 19 (before deducting variation margin posted).

44. Table 2 summarises the specific types of assets to be assigned to each asset category and their associated RSF factor.

Summary of asset categories and associated RSF factors		Table 2
RSF factor	Components of RSF category	
0%	<ul style="list-style-type: none"> <li>• Coins and banknotes</li> <li>• All central bank reserves</li> <li>• All claims on central banks with residual maturities of less than six months</li> <li>• "Trade date" receivables arising from sales of financial instruments, foreign currencies and commodities.</li> </ul>	
5%	<ul style="list-style-type: none"> <li>• Unencumbered Level 1 assets, excluding coins, banknotes and central bank reserves</li> </ul>	
10%	<ul style="list-style-type: none"> <li>• 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 paragraph 50, and where the bank has the ability to freely rehypothecate the received collateral for the life of the loan</li> </ul>	
15%	<ul style="list-style-type: none"> <li>• All other unencumbered loans to financial institutions with residual maturities of less than six months not included in the above categories</li> <li>• Unencumbered Level 2A assets</li> </ul>	
50%	<ul style="list-style-type: none"> <li>• Unencumbered Level 2B assets</li> <li>• HQLA encumbered for a period of six months or more and less than one year</li> <li>• Loans to financial institutions and central banks with residual maturities between six months and less than one year</li> <li>• Deposits held at other financial institutions for operational purposes</li> <li>• 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</li> </ul>	
65%	<ul style="list-style-type: none"> <li>• Unencumbered residential mortgages with a residual maturity of one year or more and with a risk weight of less than or equal to 35% under the Standardised Approach</li> <li>• Other unencumbered loans not included in the above categories, excluding loans to financial institutions, with a residual maturity of one year or more and with a risk weight of less than or equal to 35% under the standardised approach</li> </ul>	
85%	<ul style="list-style-type: none"> <li>• 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</li> <li>• Other unencumbered performing loans with risk weights greater than 35% under the standardised approach and residual maturities of one year or more, excluding loans to financial institutions</li> <li>• 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</li> <li>• Physical traded commodities, including gold</li> </ul>	
100%	<ul style="list-style-type: none"> <li>• All assets that are encumbered for a period of one year or more</li> <li>• NSFR derivative assets net of NSFR derivative liabilities if NSFR derivative assets are greater than NSFR derivative liabilities</li> <li>• 20% of derivative liabilities as calculated according to paragraph 19</li> <li>• 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</li> </ul>	

## Interdependent assets and liabilities

45. National supervisors have discretion in limited circumstances to determine whether certain asset and liability items, on the basis of contractual arrangements, are interdependent such that the liability cannot fall due while the asset remains on the balance sheet, the principal payment flows from the asset cannot be used for something other than repaying the liability, and the liability cannot be used to fund other assets. For interdependent items, supervisors may adjust RSF and ASF factors so that they are both 0%, subject to the following criteria:

- The individual interdependent asset and liability items must be clearly identifiable.
- The maturity and principal amount of both the liability and its interdependent asset should be the same.
- The bank is acting solely as a pass-through unit to channel the funding received (the interdependent liability) into the corresponding interdependent asset.
- The counterparties for each pair of interdependent liabilities and assets should not be the same.

Before exercising this discretion, supervisors should consider whether perverse incentives or unintended consequences are being created.

The instances where supervisors will exercise the discretion to apply this exceptional treatment should be transparent, explicit and clearly outlined in the regulations of each jurisdiction, to provide clarity both within the jurisdiction and internationally.

## Off-balance sheet exposures

46. 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 institutions hold stable funding for the portion of OBS exposures that may be expected to require funding within a one-year horizon.

47. 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. Table 3 identifies the specific types of OBS exposures to be assigned to each OBS category and their associated RSF factor.

Summary of off-balance sheet categories and associated RSF factors		Table 3
RSF factor	RSF category	
5% of the currently undrawn portion	Irrevocable and conditionally revocable credit and liquidity facilities to any client	
National supervisors can specify the RSF factors based on their national circumstances	Other contingent funding obligations, including products and instruments such as: <ul style="list-style-type: none"> <li>• Unconditionally revocable credit and liquidity facilities</li> <li>• Trade finance-related obligations (including guarantees and letters of credit)</li> <li>• Guarantees and letters of credit unrelated to trade finance obligations</li> <li>• Non-contractual obligations such as:               <ul style="list-style-type: none"> <li>– potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities</li> <li>– structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes (VRDNs)</li> <li>– managed funds that are marketed with the objective of maintaining a stable value</li> </ul> </li> </ul>	



### III. Application issues for the NSFR

48. This section outlines two issues related to the application of the NSFR: the frequency with which banks calculate and report the NSFR, and the scope of application of the NSFR.

#### A. Frequency of calculation and reporting

49. Banks are expected to meet the NSFR requirement on an ongoing basis. The NSFR should be reported at least quarterly. The time lag in reporting should not surpass the allowable time lag under the Basel capital standards.

#### B. Scope of application

50. The application of the NSFR requirement in this document follows the scope of application set out in Part I (Scope of Application) of the Basel II framework.<sup>21</sup> The NSFR should be applied to all internationally active banks on a consolidated basis, but may be used for other banks and on any subset of entities of internationally active banks as well to ensure greater consistency and a level playing field between domestic and cross-border banks.

51. Regardless of the scope of application of the NSFR, in line with Principle 6 as outlined in the *Sound Principles*, 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 to the transferability of liquidity.

<sup>21</sup> See *International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version*, June 2006, [www.bis.org/publ/bcbs128.htm](http://www.bis.org/publ/bcbs128.htm).