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The Net Stable Funding Ratio (NSFR)

What this means for you

NOMURA
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Background

The concept of liquidity supervision is the driving force behind Basel 3 introducing the following 2 key liquidity measures:

- The Liquidity Coverage Ratio (LCR) requires banks to hold sufficient high-quality liquid assets to cover its total net cash outflows over 30 days.
- The Net Stable Funding Ratio (NSFR) will require the available amount of stable funding to exceed the required amount of stable funding for a one-year period of extended stress.

The **LCR** has been adopted; the **NSFR** final standard has been published, it is now in its observation period.

Objective

To establish a minimum acceptable amount of stable funding based on the liquidity characteristics of an institution's assets and activities over a one year horizon.

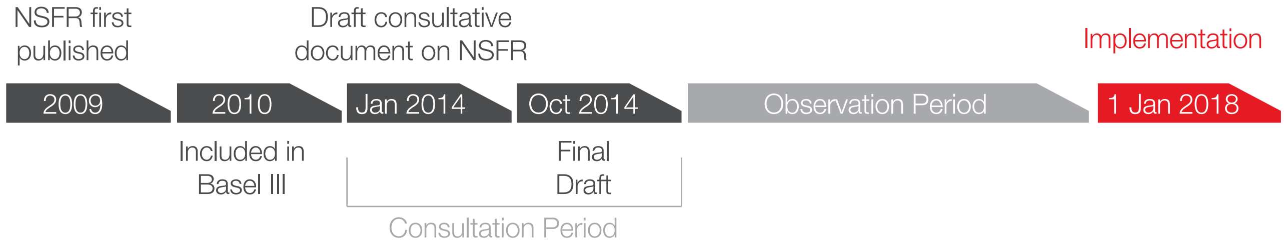
What is NSFR?

The NSFR is defined as the amount of available stable funding (ASF) relative to the amount of required stable funding (RSF). The ASF 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.

$$\textbf{NSFR} = \frac{\textbf{ASF (Available Stable Funding)}}{\textbf{RSF (Required Stable Funding)}} \geqq \textbf{100\%}$$

ASF amount (see Appendix 1): calculated by multiplying capital and liability category by ASF factor
RSF amount (see Appendix 2): calulated by multiplying eash asset category by RSF factor

Timeline for NSFR



- The **Basel Committee on Banking Supervision (BCBS)** published a consultative document on NFSR on 12 Jan 2014, as a revision to the draft published in 2010.
- A final version of the NSFR was released on 31 October 2014. BCBS intends to implement NSFR as a minimum standard by 1 Jan 2018.
- The Basel III liquidity measures look to address concerns raised during the the previous crisis, where financial institutions suffered from:
  - Relatively high reliance on wholesale funding.
  - Holding large amounts of short term Non HQLA assets (short term mismatched book, margin loans, derivative trading asset, etc.).

In this document, we look to explain the possible implications for capital markets.

High level impact

- Banks fuel economic growth by providing the majority of financing for businesses and consumers. Maturity transformation is one of the key ways in which this business is made viable. However to maintain this business going forward banks will need to:

1.	2.	3.
Concentrate more on retail deposits (an expensive solution).	Reduce activity that is high in RSF.	Issue debt or securely fund themselves with a maturity of 1 year or greater.

The revised NSFR treats **Equities** and **Securities Lending Transactions (SFTs)** in a conservative manner. It uses the same calibration as the Liquidity Coverage Ratio.
A few key RSF ratios are presented below:

5%	Unencumbered Level 1 assets
15%	Unencumbered Level 2A assets
50%	Unencumbered Level 2B assets including HQLA eligible activities
85%	Physical traded commodities including gold plus all other equities
100%	All Assets that are encumbered for a period > = 1year or more

** For all ratios please refer to appendix 2*

In assessing SFT with Equities, the NSFR seems to ignores the vital role secondary markets play in liquidity.

- **Assets:**
  - In the final draft, Basel will continue to apply a 50% RSF factor for level 2B eligible HQLA (85% for all other Equity) inventory positions. This RSF factor for Equity is higher than both the haircut in the secured funding market and most internal bank stress metrics.
  - Fundamentally, NSFR does not recognise any value of wholesale funding (such as Debt and Bank loans) maturing less than 1 year.
- **Liabilities:**
  - The finalised draft brings in to line the controversial RSF factors for reverse repos.
  - The asymmetrical treatment of short term (below 6 months) reverse repos with non-bank financials, is now lowered from 50% RSF to 10% for Level 1 collateral and 15% for other collateral.
  - However, the Basel Committee eliminates the carve-out for SFT with bank counterparties. As a result, the RSF of SFT to banks shifts from 0% RSF to 10% for Level 1 collateral and to 15% for other collateral.
- **Derivatives:**
  - The Asset side will be subject to 100% RSF minus the total collateral posted as variation margin, whereas a derivative liability side will be subject to 100% RSF for 20% of the liability.
  - Initial Margin Treatment is assigned 85% RSF, with an exemption when banks act as an agent on behalf of clients, which we perceive as an improvement over previous iterations.

Impact on costs	
Execution Costs	▲
Financing Depot positions	▲
Reverse Repo (all counterparties)	▲
Prime brokerage costs	▲
Primary and Secondary market	▲

Impact on Liquidity	
Wholesale funding	▼
Market making activities	▼
Securities transformation	▼
Primary and Secondary market	▼

Detailed Implications of NSFR

The cost of NSFR in its current form will impact banks that traditionally rely on wholesale banking for funding.	▪ This will lead to a challenge in the market for participants and present a headwind to funding at profitable levels. Consequently, impacting liquidity and potentially adding to further concentration risk, conflicting with other regulations.
The treatment of long portfolios is unchanged, which leaves the RSF at 50% for Level 2B assets and 85% for other exchange traded equities. Moreover, banking financials will have 85% RSF.	▪ Higher cost of execution for end clients. ▪ Possible retrenchment of banking organisations from the market with their reduced ability to use hedging strategies that have been commonplace for equities. ▪ All long level 2B HQLA inventory positions will be subject to 50% RSF (85% RSF for all other equities).
The asymmetrical treatment of short term (below 6 months) reverse repos with non-bank financials is now lowered from RSF 50% to 10% for Level 1 collateral and 15% for other collateral. The final NSFR standard acknowledges the interdependence of assets and liabilities. However, the treatment of this is left subject to National supervisors interpretation and therefore open to regional bias, whereby, the RSF and ASF may be adjusted to 0% for such transactions.	▪ Paragraph 45 of the final document contains stipulations of contractual linkage, equal maturity and the need to have separate counterparties on the asset and liability side. However, National supervisors will have ultimate control over the rule, thus giving the industry some hope for flexibility on the impact of business. ▪ The revision treatment of lending/reverse repos with non-banks is a positive step; however, the eliminated carve-out for SFT with bank counterparties was an unanticipated step backwards.
NSFR has a significant potential impact on the cost of doing business from Prime Brokers and consequently the hedge funds.	▪ Perversely, this could result in funding activities drifting away from traditional banking and towards the shadow banking sector.
The final standard has clarified the NSFR accounting conventions on both the asset and liability side. The convention includes asset purchases not yet settled while excluding asset sales.	▪ Therefore, both the asset sale and pending receivable are now included to give the highest possible asset total and by extension, the highest required funding number or RSF.
On a recent GFMA/IIF, it was agreed that a small group of firms would develop a draft outline that would serve as a starting point for developing a consensus industry view on para 45 (National Interdependence).	▪ The draft outline attempted to place transaction in an order of priority and Recommended standard for Paragraph 45 through an implementation rulemaking.

Examples of NSFR impact

- **Fixed Income Securities**: RSF does not reflect market haircuts. RSF for government bonds with a Basel II risk weight of zero is 5%, whereas the ECB window haircut ranges from 0.5% to 5.0% for AAA to A- bonds, depending on the remaining term to maturity.
- **Reverse/Stock Borrowing**: The asymmetrical treatment of short term (below 6 months) reverse repos with non-bank financials, that the associations previously argued against, is now lowered from 50% RSF to 10% for level 1 collateral and 15% for other collateral. This is independent of lending stock to cover shorts or borrowing secured cash vs equities. However, the Basel Committee eliminates the carve-out for SFT with banks. As a result, the RSF of SFT to banks shifts from 0% to 10% for Level 1 collateral and to 15% for other collateral.
- **Equity Swaps**: Under the Final NSFR, long hedges against equity swaps could attract RSF factors of 50% or 85% with no parallel recognition of the funding provided by the equity swap itself. Although interdependence was acknowledged in the new draft, its impact is yet to be determined.
- **Primary Issuance**: Underwriting primary issuance will require 50% capital to be allocated against short term holdings. This will increase cost and impact the primary market directly.
- **Index re-balances:** due to the treatment of equities, the availability of short term borrow availability over index rebalance events may dry up or become very costly under the NSFR.

Appendix 1

ASF sheet

Summary of liability categories and associated 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 non-maturity (demand) deposits and term deposits with residual maturity of less than one year provided by retail and small business customers.
90%	▪ Less stable non-maturity 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 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 greater than NSFR derivative assets. ▪ “Trade date” payables arising from purchases of financial instruments, foreign currencies and commodities.

Appendix 2

RSF sheet

Summary of asset categories and associated RSF factors:

RSF Factors	Components of RSF category
0%	▪ Coins and banknotes. ▪ All central bank reserves. ▪ All claims on central banks with residual maturities of less than six months. ▪ "Trade date" receivables arising from sales of financial instruments, foreign currencies and commodities.
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 paragraph 50, and where the bank 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 six months not included in the above categories. ▪ Unencumbered Level 2A assets.
50%	▪ Unencumbered Level 2B assets. ▪ HQLA encumbered for a period of six months or more and less than one year. ▪ Loans 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 35% under the standardised approach. ▪ 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.

RSF Factors	Components of RSF category
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 with risk weights greater than 35% under the standardised approach 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. ▪ 20% of derivative liabilities as calculated according to paragraph 19. ▪ 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.

Sources

- Basel III: International framework for liquidity risk measurement, standards and monitoring: http://www.bis.org/publ/bcbs188.htm
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- http://www.pwc.com/en_US/us/financial-services/regulatory-services/publications/assets/net-stable-funding-ratio-basel-iii.pdf

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