BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Date: October 20, 2020

To: Board of Governors

From: Staff[1]

Subject: Final rule to implement a net stable funding ratio requirement for large banking organizations

ACTIONS REQUESTED: Approval of the attached draft final rule that would implement a minimum net stable funding ratio (NSFR) requirement for large banking organizations. The draft final rule would be issued jointly by the Board, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Comptroller of the Currency (OCC) after each agency has completed its review process. Staff also requests authority to make technical or minor changes to the attached draft final rule prior to publication in the Federal Register.

EXECUTIVE SUMMARY:

- The NSFR was developed after the 2007-2009 financial crisis revealed that an overreliance by large banking organizations on short-term, less-stable funding made them vulnerable to funding shocks. The draft final rule to implement the NSFR would address this vulnerability and promote effective liquidity risk management. By requiring a minimum level of stable funding, the draft final rule would support the ability of banking organizations to continue to lend to households and businesses in both normal and adverse economic conditions.

- The draft final rule would require a banking organization to maintain a minimum level of stable funding based on the liquidity characteristics of the banking organization's assets, commitments, and derivative exposures over a one-year time horizon. The requirement would be expressed as a ratio of a banking organization's available stable funding to its required stable funding. Banking organizations subject to the rule would be required to keep their ratio of available stable funding to required stable funding equal to at least 1.0 on an ongoing basis.

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- By mandating that banking organizations maintain sufficient stable funding over a one-year time horizon, the NSFR would complement the agencies' liquidity coverage ratio (LCR) rule, which focuses on short-term liquidity risk.[2]

- The draft final rule is generally similar to the NSFR proposal from June 2016,[3] with certain changes, including a modification to the scope of application that mirrors the LCR rule's scope. The draft final rule is based on the general framework of the Basel standard developed by the Basel Committee on Banking Supervision (BCBS) with some differences based on an analysis of U.S.-market specific factors.

- In a change from the proposal, the draft final rule reduces the stable funding requirements for certain high quality liquid assets (HQLA) and short-term lending transactions secured by those HQLA. These changes are motivated, in part, by the agencies' interest in not introducing additional costs for banking organizations to participate in certain key asset and funding markets, such as the U.S. Treasury and U.S. Treasury repurchase markets.

- The application of the NSFR would be tailored in a manner consistent with the LCR.[4] The scope of application for the NSFR would be as follows:
  - The largest and most complex banking organizations — banking organizations subject to Category I and II standards, as well as those subject to Category III standards with $75 billion or more in average weighted short-term wholesale funding — would need to comply with the full NSFR requirement.
  - Banking organizations subject to Category III standards with less than $75 billion in average weighted short-term wholesale funding would need to meet a reduced NSFR requirement equal to 85 percent of the full requirement. Certain banking organizations subject to Category IV standards with more than $50 billion in average weighted short-term wholesale funding would need to meet a reduced NSFR requirement equal to 70 percent of the full requirement. These reduced calibrations reflect the difference in risk profiles of these banking organizations as compared to firms subject to the full NSFR requirement.[5]

- Domestic holding companies and U.S. intermediate holding companies would be required to publicly disclose their NSFRs and other qualitative components of their liquidity profiles for each quarter, reported every six months.

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[2] 79 FR 61440 (October 10, 2014), codified at 12 CFR part 249.

[3] See "Net Stable Funding Ratio: Liquidity Risk Measurement Standards and Disclosure Requirements," 81 FR 35124 (June 1, 2016).

[4] See "Changes to Applicability Thresholds for Regulatory Capital and Liquidity Requirements," 84 FR 59230 (November 1, 2019).

[5] Depository institution subsidiaries with less than $10 billion in total consolidated assets and depository institutions subject to Category IV standards would not be subject to an NSFR requirement.

- Based on data from the second quarter of 2020, almost all of the banking organizations subject to the draft final rule would have sufficient stable funding to meet their NSFR requirements. In aggregate, banking organizations would hold a surplus of about $1.3 trillion over their total required stable funding under the NSFR.

- The draft final rule would take effect on July 1, 2021.

DISCUSSION:

A. Background on the Proposed Rule

The 2007-2009 financial crisis revealed significant weaknesses in banking organizations' liquidity risk management and liquidity positions.[6] These weaknesses included, among other things, an overreliance on short-term, less-stable funding, which made large and internationally active banking organizations vulnerable to funding shocks.[7]

The Board took several actions to respond to these liquidity vulnerabilities. The Board, in consultation with the FDIC and OCC, adopted liquidity risk management and liquidity stress testing requirements for certain large banking organizations.[8] The Board also adopted, with the FDIC and OCC, the LCR rule, which requires large banking organizations to hold a minimum amount of HQLA that can be readily converted into cash to meet net cash outflows over a 30-day time horizon. In June 2016, the agencies invited comment on a proposed rule to implement NSFR requirements for large U.S. banking organizations. The proposed rule would have introduced a quantitative metric to measure a banking organization's funding stability over a one-year time horizon. Using this metric, the proposed rule would have required a banking

[6] See Senior Supervisors Group, Risk Management Lessons from the Global Banking Crisis of 2008, (October 21, 2009), available at https://www.newyorkfed.org/medialibrary/media/newsevents/news/banking/2009/SSG_report.pdf.

[7] Following the 2007-2009 financial crisis, the BCBS established two international liquidity standards as a part of the Basel III reform package: a short-term liquidity metric, the Basel LCR standard, to address the risk that banking organizations may face significantly increased net cash outflows in a short-term period of stress, and the Basel NSFR standard, to address structural funding risks at banking organizations over a longer-term horizon. See "Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools" available at https://www.bis.org/publ/bcbs238.htm; Basel III: the net stable funding ratio" available at https://www.bis.org/bcbs/publ/d295.htm.

[8] See ''Enhanced Prudential Standards for Bank Holding Companies and Foreign Banking Organizations,'' 79 FR 17240 (March 27, 2014)

organization to maintain a minimum amount of stable funding to support its balance sheet assets, commitments, and derivatives exposures. As originally proposed, the scope of the NSFR rule would have been the same as the scope of application of the LCR rule in 2016. The agencies subsequently issued proposals to tailor the criteria for determining the scope of application of the LCR rule and proposed NSFR rule.[9]

The agencies received approximately 30 comments on the proposed rule, as well as approximately 20 comments in response to the proposed revised scope of application of the NSFR rule included in the tailoring proposals. Commenters included U.S. and foreign banking organizations, industry trade groups, public interest groups, and other interested parties. Some commenters supported the purpose of the proposed rule to implement a requirement that would improve banking organizations' stable funding. Many commenters challenged the need for and overall design of an NSFR requirement and criticized the calibration of specific components most relevant for investment banking and custody banking.

B. Draft Final Rule

The draft final rule would establish the NSFR as a liquidity risk management standard to help ensure that a banking organization maintains a stable funding profile and is not overly reliant on short-term, unstable funding. The draft final rule would require a banking organization to calculate a weighted measure of the stability of its equity and liabilities over a one-year time horizon, known as its available stable funding amount. A banking organization also would be required to calculate a minimum level of required stable funding, known as its required stable funding amount, based on the liquidity characteristics of its assets, derivative exposures, and commitments over the same one-year time horizon.

The draft final rule would require a banking organization to maintain an NSFR, which is calculated as the ratio of its available stable funding amount over its required stable funding

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[9] Proposed Changes to Applicability Thresholds for Regulatory Capital and Liquidity Requirements, 83 FR 66024 (December 21, 2018); Changes to Applicability Thresholds for Regulatory Capital Requirements for Certain U.S. Subsidiaries of Foreign Banking Organizations and Application of Liquidity Requirements to Foreign Banking Organizations, Certain U.S. Depository Institution Holding Companies, and Certain Depository Institution Subsidiaries, 84 FR 24296 (May 24, 2019). In October 2019, the agencies adopted a final rule that amended the scope of application of the LCR rule. 84 FR 59230 (November 1, 2019).

amount, of at least 1.0 (100 percent) on an ongoing basis.[10] The large and complex banking organizations subject to the draft final rule face a higher likelihood that disruptions to their regular sources of funding could compromise their liquidity positions and contribute to financial instability in the broader economy. Therefore, by requiring these banking organizations to maintain a minimum amount of stable funding, the draft final rule would reduce the likelihood that funding disruptions in the banking system could lead to stresses that compromise financial stability. The draft final rule makes key changes from the proposed rule and BCBS standard, most notably in its treatment of level 1 liquid assets, short term secured lending transactions backed by level 1 liquid assets, variation margin in derivatives transactions, and non-deposit retail funding, based on an analysis of U.S. markets and practices of U.S. banking organizations. These differences would lead to lower stable funding requirements for these assets or greater recognition of the stability of non-deposit retail liabilities, as described below.

The draft final rule's effective date of July 1, 2021, will provide banking organizations with sufficient time to adjust to the draft final rule's requirements. Banking organizations generally would be able to utilize current financial reporting systems to ensure compliance with the requirement. The Board will issue a separate proposal to amend its information collection under its Complex Institution Liquidity Monitoring Report (FR 2052a) to collect information and data related to the requirements of the draft final rule.

i. NSFR Numerator - Available Stable Funding Amount

Under the draft final rule, a banking organization's available stable funding amount, the numerator of the NSFR, would measure the stability of its regulatory capital elements and liabilities. Regulatory capital elements and liabilities would each be assigned an available stable funding factor, which represents the extent to which the capital element or liability is considered available for use by the banking organization over a one-year time horizon. The available stable funding factors are scaled from zero (least stable) to 100 percent (most stable) and were determined by taking into account the tenor of the funding, type of funding, and type of counterparty. (See Appendix for a summary of available stable funding factor assignments.)

In response to the proposal, the agencies received comments and analysis noting the historical stability of many types of non-deposit retail liabilities. As compared with the proposal,

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[10] As described above, the draft final rule would adopt a reduced NSFR requirement for certain banking organizations in Categories III and IV. However, no bank or savings association in Category IV would be subject to an NSFR requirement.

the draft final rule would increase the available stable funding factor from zero to 50 percent for retail funding that is not in the form of a deposit or a security issued by the banking organization, such as retail brokerage payables. The higher available stable funding factor recognizes that these types of funding have demonstrated a relative degree of stability in normal and adverse economic periods, similar to other types of funding that receive a 50 percent available stable funding factor in the draft final rule. The draft final rule also would expand the types of affiliate sweep deposits that are assigned a 90 percent available stable funding factor to include affiliate sweep deposits that are not fully insured. Additionally, certain fully insured affiliate sweep deposits with demonstrated stability would be assigned a 95 percent available stable funding factor. This change recognizes the enhanced stability of sweep deposits placed by affiliates across a range of market conditions.

ii. NSFR Denominator - Required Stable Funding Amount

Under the draft final rule, a banking organization's required stable funding amount, the denominator of the NSFR, would be based on the liquidity characteristics of the banking organization's assets, commitments, and derivative exposures. The required stable funding amount is the sum of the required stable funding amount for non-derivative assets and commitments and the required stable funding amount for derivative transactions.[11]

a) Required Stable Funding Amount for Non-Derivative Assets and Commitments

A banking organization would determine its required stable funding amount for non-derivative assets and commitments by: first, multiplying the carrying value[12] of each asset and commitment by a required stable funding factor, and, second, summing these amounts. The required stable funding factors are scaled from zero (most liquid and least likely to need ongoing funding during the one year time horizon) to 100 percent (least liquid and most likely to need ongoing funding during the one year time horizon). The agencies determined the required stable funding factors by taking into account the non-derivative assets' and commitments' tenor, credit

[11] The draft final rule establishes a separate framework for derivative transactions in recognition of the unique risks presented by derivative transactions due to their variable nature and generally more complex features relative to other assets and liabilities of banking organizations.

[12] The draft final rule defines "carrying value" as the value of an asset, liability, or regulatory capital element on a banking organization's balance sheet as determined in accordance with U.S. Generally Accepted Accounting Principles.

quality, type of counterparty, market liquidity, and encumbrances. (See Appendix for a summary of required stable funding factor assignments.)

In a change from the proposal, the draft final rule would include adjustments to several required stable funding factors for non-derivative assets and commitments. Significant changes include reducing the required stable funding factor for direct holdings of level 1 liquid asset securities from five percent to zero percent, and reducing the required stable funding factor for short-term lending transactions with financial sector counterparties secured by level 1 liquid assets from 10 percent to zero percent.[13] These changes reflect Board staff analysis of the costs and benefits of a small required stable funding factor on these assets, considering potential implications on intermediation of financial markets, monetary policy implementation, and prudential risks. Specifically, theses change are motivated, in part, by the agencies' interest in not introducing additional costs for banking organizations to participate in key asset and funding markets, such as the U.S. Treasury and U.S. Treasury repurchase markets.

b) Required Stable Funding Amount for Derivatives

A banking organization would calculate the required stable funding amount relating to its derivative transactions separately from its other assets and commitments. The required stable funding amount for a banking organization's derivatives would reflect three components: (1) the current net value of the banking organization's derivatives assets and liabilities, taking into account variation margin provided and received (current net value component); (2) contributions by the banking organization to a central counterparty's default fund in connection with cleared derivative transactions and initial margin provided by the banking organization pursuant to the derivative transactions (initial margin component); and (3) potential changes in the value of the banking organization's derivative transactions (future value component).

[13] Level 1 liquid assets are the most liquid HQLA. Level 1 liquid asset securities include: (1) securities issued or unconditionally guaranteed as to the timely payment of principal and interest by the U.S. Department of the Treasury; (2) liquid and readily-marketable securities, as defined in § __.3 of the LCR rule, issued or unconditionally guaranteed as to the timely payment of principal and interest by any other U.S. government agency (provided that its obligations are fully and explicitly guaranteed by the full faith and credit of the U.S. government); (3) certain liquid and readily-marketable securities that are claims on, or claims guaranteed by, a sovereign entity, a central bank, the Bank for International Settlements, the International Monetary Fund, the European Central Bank and European Community, or a multilateral development bank; and (4) certain liquid and readily-marketable debt securities issued by foreign sovereign entities.

The draft final rule would include certain adjustments, relative to the proposed rule, to the treatment of derivative transactions. These adjustments would include changes to the calculation of the current net value component by expanding the types of variation margin eligible for netting, and reducing the required stable funding amount related to the future value component. These adjustments would better reflect the funding risks associated with a banking organization's derivatives portfolio.

C. NSFR Shortfall Remediation

If a banking organization has an NSFR shortfall, the draft final rule would require that the appropriate federal banking agency be notified of the shortfall within 10 business days. In addition, the draft final rule would require a banking organization to develop a remediation plan that would be submitted to the appropriate federal banking agency. The draft final rule would not prescribe a particular supervisory response to address an NSFR shortfall and would allow the response to be based on the circumstances of a particular case. In addition, the preamble to the draft final rule would explain that the agencies would generally support a banking organization that chooses to reduce its NSFR during a liquidity stress period in order to continue to lend and undertake other actions to support the broader economy in a safe and sound manner.

D. Disclosure Requirement

To enable the public to compare the funding stability across large banking organizations operating in the United States and in other jurisdictions, the proposed rule would have required top-tier U.S. depository institution holding companies to publicly disclose on a quarterly basis their NSFRs in a standardized format using quarter end data. In a change from the proposal, the draft final rule would require top-tier U.S. depository institution holding companies and U.S. intermediate holding companies to publicly disclose on a semiannual basis their NSFRs in a standardized format, using simple daily averages, for each calendar quarter.[14] Requiring NSFR disclosures on a semiannual basis is consistent with the Basel standard and the European Union's NSFR. Under the final rule, initial disclosures for the first and second quarters of 2023 would be required to be published approximately 45 days after the end of the second quarter of 2023.

[14] Consistent with the proposal, the final rule would require holding companies to provide qualitative discussions to facilitate the public's understanding of their NSFR calculations and results at the same time as their quantitative disclosures. Separately, the Board plans to propose changes to the FR 2052a to include reporting of NSFR data elements.

E. Impact Analysis

Staff analyzed data from the second quarter of 2020 to estimate the impact of the draft final rule. Staff approximated available stable funding and required stable funding amounts for banking organizations that would be subject to the full or reduced NSFR requirement to estimate stable funding shortfall amounts. The scope of application for the draft final rule would include 20 banking organizations, 11 of which would be subject to a reduced NSFR requirement.[15]

Using the approach described above, staff estimated that almost all of the banking organizations would be able to meet the applicable full or reduced NSFR requirement if those requirements were in effect today. Staff analysis found that, among all banking organizations with a shortfall, the aggregate shortfall would be in the range of $10 to $30 billion of stable funding. The largest stable funding shortfall for an individual banking organization would be 7.5 percent of the firm's existing stable funding. Staff assumed that banking organizations would meet the available stable funding shortfall by shifting funding from thirty-day commercial paper to one-year term funding. Using this approach, the estimated annual funding costs of raising additional stable funding ranges from $80 to $250 million in total, and amount to no more than 3 percent of the annual net income of any banking organization with a shortfall. Considering all banking organizations that would be subject to the draft final rule, the agencies estimate that there is a total available stable funding of $8.5 trillion, a $1.3 trillion surplus over the total required stable funding.

Broad measures of funding stability show clear improvement since the financial crisis. Much of this improvement appeared soon after the 2007-2009 financial crisis, potentially reflecting the combined effects of the post-crisis regulatory reforms as well as the release of the BCBS's draft NSFR standard in 2010. These broader improvements in funding stability suggest that the total adjustments that banking organizations have made in response to the NSFR standard and proposal are greater than the stable funding shortfalls suggested by the most recent

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[15] Nine banking organizations would be subject to the full NSFR requirement: Bank of America, Bank of NY Mellon, Citigroup, Goldman Sachs, JP Morgan Chase, Morgan Stanley, Northern Trust, State Street, and Wells Fargo. Eleven additional banking organizations would be subject to a reduced NSFR requirement calibrated at 85 percent: Barclays USA, Capital One, Charles Schwab, Credit Suisse USA, DB USA, HSBC North America, PNC, TD Group USA, Truist, UBS America, and US Bancorp.

data. The draft final rule helps lock in the gains in funding stability made since the financial crisis.

As part of considering comments received, staff also analyzed specifically the costs and benefits of the proposal's required non-zero stable funding factor for level 1 liquid asset securities and reverse repos secured by level 1 liquid assets. On the cost side, a non-zero required stable funding requirement for these asset classes would reduce the incentives for banking organizations to participate in U.S. Treasury and Treasury repurchase markets, a key component of the financial system. Furthermore, a non-zero required stable funding factor for level 1 liquid asset securities would increase the incentives for banking organizations to hold central bank reserves instead of level 1 liquid asset securities, which may affect the implementation of monetary policy. In contrast to these costs, staff considered the following benefits of the proposal: mitigating the risk of sharp price declines of level 1 liquid asset securities and mitigating the fire sale risk arising from interconnectedness among banking organizations that engage in reverse repos secured by level 1 liquid assets. Weighing the above costs and benefits, staff determined to modify the proposal so that the draft final rule would establish a zero percent required stable funding factor for these asset classes.

RECOMMENDATIONS:

For the reasons discussed above, staff recommends that the Board (1) approve the attached draft final rule; (2) authorize staff to make technical or minor changes to the attached materials prior to publication in the Federal Register.

Attachment

APPENDIX

AVAILABLE STABLE FUNDING AND REQUIRED STABLE FUNDING FACTOR SUMMARIES

Table 1: Summary of Available Stable Funding Factors

Available Stable Funding Factor	**Equity and Liabilities Assigned the Available Stable Funding Factor**
100%	• Regulatory capital elements and liabilities with a remaining maturity of one year or more.
95%	• Fully insured stable retail deposits. • Certain fully insured affiliate sweep deposits.
90%	• Retail deposits that are neither fully insured stable retail deposits nor retail brokered deposits. • Certain more stable retail brokered deposits. • Non fully insured affiliate sweep deposits.
50%	• Unsecured wholesale funding and secured funding transactions with a remaining maturity of less than one year that are provided by wholesale customers that are not financial sector entities or central banks.[16] • Unsecured wholesale funding and secured funding transactions with a remaining maturity of six months or more, but less than one year and that are provided by financial sector entities or central banks. • Securities issued by a banking organization with a remaining maturity of six months or more but less than one year. • Operational deposits received by a banking organization. • Certain retail brokered deposits with intermediate stability. • Retail funding that is not a deposit or security.
0%	All other funding not described above, including: • Funding (other than operational deposits) where the counterparty is a financial sector entity or a central bank, and the transaction matures within six months. • Retail brokered deposits that are not stable. • Derivatives liabilities. • Trade date payables.

[16] Wholesale customers or counterparties that are not financial sector entities or central banks include sovereigns, certain multilateral development banks, public sector entities, and U.S. government-sponsored entities.

Table 2: Summary of Required Stable Funding Factors[17]

Required Stable Funding Factor	Assets and Commitments Assigned the Required Stable Funding Factor
0%	• Reserve Bank balances or other claims on a Reserve Bank that mature within six months. • Claims on a foreign central bank that mature within six months. • Currency, coin, and items in the process of collection. • Trade date receivables. • Level 1 liquid asset securities, including U.S. Treasury securities. • Secured lending transactions (e.g., reverse repurchase transactions) where the counterparty is a financial sector entity that mature within six months and are secured by level 1 liquid assets.
5%	• The undrawn amount of committed credit and liquidity facilities.
15%	• Level 2A liquid assets, including certain obligations issued or guaranteed by a U.S. government sponsored enterprise. • Secured lending transactions where the counterparty is a financial sector entity that mature within six months and are secured by assets other than level 1 liquid assets. • Unsecured wholesale lending that matures within six months and the counterparty is a financial sector entity.
50%	• Level 2B liquid assets, including certain publicly traded corporate equity and debt securities and U.S. general obligation municipal securities. • Secured lending transactions and unsecured wholesale lending that mature in six months or more, but less than one year, where the counterparty is a financial sector entity or central bank. • Secured lending transactions and unsecured wholesale lending that mature in less than one year, where the counterparty is not a financial sector entity or central bank. • Lending to retail customers or counterparties that matures in less than one year. • Operational deposits placed by a banking organization at financial sector entities. • All other assets that mature in less than one year.
65%	• Retail mortgages with a remaining maturity of one year or more that are assigned a risk weight of no greater than 50 percent under the Board's capital regulations. • Other lending that has a remaining maturity of one year or more, is assigned a risk weight of no greater than 20 percent under the Board's capital regulations, and where the borrower is not a financial sector entity.
85%	• Retail mortgages with a remaining maturity of one year or more that are assigned a risk weight of greater than 50 percent under the Board's capital regulations.

[17] Table 2 does not include calculation of the derivatives required stable funding amount.

Required Stable Funding Factor	Assets and Commitments Assigned the Required Stable Funding Factor
	• Other lending that has a remaining maturity of one year or more and is assigned a risk weight greater than 20 percent under the Board's capital regulations, where the borrower is not a financial sector entity. • Publicly traded common equity shares that are not HQLA. • Other securities that are not HQLA and have a remaining maturity of one year or more. • Commodities for which derivative transactions are traded on a U.S. designated contract market, U.S. swap execution facility, or an exchange located outside the United States.
100%	All other assets not described above, including: • Lending that has a remaining maturity of one year or more, where the borrower is a financial sector entity. • Nonperforming assets. • Equity securities that are not publicly traded. • Commodities that do not qualify to be assigned an 85% required stable funding factor.