



August 3, 2016

The Honorable Thomas Curry
Comptroller of the Currency

The Honorable Martin J. Gruenberg
Chairman, Federal Deposit Insurance Corporation

The Honorable Janet L. Yellen
Chair, Federal Reserve Board

RE: Docket ID: OCC-2014-0029: Net Stable Funding Ratio

Dear Comptroller Curry, Chairman Gruenberg, and Chair Yellen,

Treasury Strategies, a division of Novantas, Inc. is pleased to share our concerns with respect to the implementation of the Net Stable Funding Ratio (NSFR). Treasury Strategies is the acknowledged leader in treasury, liquidity and payments issues. We have testified before congressional committees and special agency hearings regarding the impact of post-crisis regulations. For 34 years, we have consulted with corporations, municipalities, and institutional investors in the United States and around the world on these topics. Our clients, corporate treasurers and institutional investors play an important role in providing stable funding to banks via their deposit and investment activities.

Our parent, Novantas, Inc. is the industry leader in analytic advisory services and technology solutions for financial institutions, including most of the banks that will be subject to NSFR. Novantas analytic and advisory solutions help many large and globally-active banks manage their treasury risk and comply with Basel III and other financial regulations. Together, our practices afford a unique 360° view of the pertinent issues.

We applaud the rule's objective - to ensure that large and globally-active U.S. banks have sufficient liquidity to withstand a one-year period of extended stress. We especially are pleased with the creation of a one-year liquidity metric. While these objectives are important, the implementation as proposed creates a number of issues which we believe can be easily addressed by policy makers.

In this letter, we raise seven concerns about the NSFR proposal. They include

1. Impaired maturity transformation
2. Negative procyclical distortions
3. Reduced market access to capital
4. Uncertainty due to Fed balance sheet overhang
5. Systemic risk dispersion
6. Premature timing
7. Excessive costs and complexity due to redundancy

We conclude with a suggested path for moving forward which addresses these concerns.

Treasury Strategies
a division of Novantas, Inc.

309 W. Washington
11th Floor
Chicago, Illinois 60606

t +1 312-443-0840
f +1 312-443-0847

www.TreasuryStrategies.com

Impaired Maturity Transformation

Maturity transformation is a basic principal of banking. One of the foundational roles of a bank is to aggregate deposits from numerous depositors and sources in order to make loans to worthy borrowers. The "transformation" occurs when loans are larger and for terms that extend beyond the size and term of the discreet deposits. Banks aggregate customer deposits with varying maturity demands and, through pricing, liquidity management and targeted market risk insurance (derivatives) provide businesses, consumers and others with the borrowing maturity dimensions they demand. Overly prescriptive methodologies like NSFR constrain the ability to do this, and thus reduce economic efficiency.

Maturity transformation is essential for economic growth. It increases the supply of longer-term funding beyond what would otherwise be available, to a variety of markets. Among others, maturity transformation expands the supply of credit for:

- Bank loans that support the plant, equipment purchase, and expansion needs of small businesses and larger commercial entities
- Consumer credit that supports purchasers of appliances, cars and homes
- Bank funding for municipal development and infrastructure projects

All represent borrowing needs with longer terms than the deposits that are transformed to fund them.

Inherently, the NSFR proposal detracts from this maturity transformation function of banks. It does so by creating a disincentive for longer-term (greater than one year) loans. It also establishes a strong incentive for match funding, where there is no transformation; the assets and the liabilities that fund them are of identical term. Without transformation, the supply of credit contracts.

The NSFR proposal also detracts from maturity transformation by making it costlier to make longer-term loans. NSFR requirements will create more bank demand for retail and small business deposits, increasing their value and potentially setting off bidding wars. The increased cost of attracting "stable" deposits will be passed on to borrowers. At the margin, those higher costs will deter otherwise worthy borrowers and slow economic growth.

Finally, the proposal also raises the possibility of *negative* maturity transformation. Consider the case of short-term loans (6-12 months) that require a portion of *greater* than one-year funding. Short-term loans that require 15% or 50% of one-year+ funding are onerous; bank support for these customers will be hampered by such rules.



Negative Proccyclical Distortions

The ratios and weights, as currently designed, have the potential to exacerbate and prolong market stress events, making a bad situation worse. As a general rule, when markets are stressed, market participants that are able will raise their available stable funding above the minimum requirements. They may hold more collateral or keep excess cash reserves. Specifically relating to NSFR, a bank that was satisfied in normal times with a ratio equal to a precautionary 110% of its minimum NSFR requirement will now seek to hold 120% or 130%, rather than having to scramble at the last minute and possibly be shut out, should the stress worsen.

An NSFR bank could undertake any number of procyclical activities to build its buffer - and in the process, add to the market's stress. Examples of such behaviors include:

- Shedding loan assets by not renewing loans, slowing loan originations or even selling off mortgages - doing this contracts the supply of available credit. A sudden contraction of credit in the economy is recessionary at precisely the time that policymakers would normally attempt to increase the supply of credit.
- Selling non-HQLA securities, even taking losses in a flight to quality, since non-HQLA securities have a 65%-85% requirement while HQLAs have 0%-50% - this flight to quality would come at a time in the cycle where there is likely to be a shortage of HQLA, magnifying the stress in a vicious cycle.¹
- Unwinding derivatives contracts, possibly taking losses, but definitely taking on more risk, in an effort to shed scarce collateral, which carries a 65-85% requirement - this can lead to contagion which transmits the stress more widely into the market.²

Reduced Market Access to Capital

It is impossible to interfere with the composition of banks' lending portfolios without creating winners and losers. The winners are industries or types of financing with the least pronounced impact on NSFR. The big losers are those who no longer get financing, because they have the most NSFR impact. The moderate losers are those whose financing is more costly, on worse terms (intended to reclassify a loan from a bad category to a better one), and much less certain from year to year.

Under the NSFR proposal, banks will move away from assets with the highest weights (translation: quit making or cut back on such loans). They will not wait until a time of market stress to do so. Businesses, financial entities and

¹ "Are There Enough T-Bills to Meet New Regulatory Requirements?"

<https://www.youtube.com/watch?v=48Sz5GbcFPs>

² "Collateral Scarcity: An Approach to Preventing Market Stress From Becoming Contagion" illustrates the potential stress.

http://www.treasurystrategies.com/sites/default/files/TSI_CollateralScarcityJuly2015.pdf

consumers borrowing for more than a year, municipal borrowers, and home buyers could all see diminished, more costly, or more difficult access to capital. That will slow the economy.

There is a tradeoff between prescriptive regulation (which is clear and consistent) and framework-based regulation that allows individual judgment. NSFR necessarily will reduce market demand by putting all business into a "good" or "bad" bucket. This will decrease competitiveness and also cause banks to lose market share to participants who are unconstrained and can properly value risk/return dynamics.

In times of stress, there will be even greater restrictions as banks reposition their balance sheets and make fewer loans of this type. That will dampen business growth and consumer demand precisely at the point when it is needed the most.

Business and consumer borrowers that are shut out of the bank market may turn to the shadow banking markets - online loans, non-bank capital companies, less regulated lenders, etc. Unfortunately, these markets are generally characterized by less transparency, less regulatory oversight, higher cost and fewer consumer/borrower protections.

Consider three examples:

Interbank Funding. The Liquidity Coverage Ratio (LCR) has already impacted short-term interbank funding by giving no value to these funds when under 30 days maturity in a bank's funding hierarchy. This has contributed to a severe decrease in the liquidity in these markets. NSFR combined with Total Loss Absorbing Capacity (TLAC) has potentially deleterious effects on term funding markets. Banks will be more significant players in these markets, which may crowd out other term borrowers including those relying on the securitization market for their support. It may also put a cap on bank balance sheets, by limiting how much term funding they can actually attract.

Capital Markets. Capital markets securities inventories require 50% greater than one-year funding (HQLA Level 2B assets), which has the effect of making funding this business more costly. This will decrease banks' willingness to hold inventories, negatively impact corporate funding alternatives, and unnecessarily tie up term funding which could be better applied elsewhere.

Money Market Funds. In this case, capital access in certain market segments may be hit from more than one direction, by unrelated regulatory changes.

The SEC's new Money Market Mutual Fund (MMF) regulations effective October, 2016 are forcing MMF investments out of prime and tax-exempt funds and into government funds.³ Corporations and municipalities that have relied on prime MMFs as a market for their debt may be in a real bind if their banks also become subject to NSFR.

³ Over \$400 billion (\$190 billion in just the past two months) has already left prime money market funds, much of that moving into government and treasury funds. By statute, these funds must invest in treasury and government securities, aka HQLA. This creates further competition for increasingly scarce HQLA. Again this exacerbates the negative impacts of a stress event.

As MMF assets drop and placing their debt with MMFs becomes more difficult, the entities will logically turn to their banks as a source of funding. But if NSFR requirements cause their banks to be less inclined to lend, or only willing to lend at much higher prices or less favorable terms - they will suffer a second negative impact.

This illustrates the importance of assessing rulemaking consequences across rulemaking silos. Neither the MMF reforms nor rules like NSFR are intended to impact municipal finance, and yet both will constrict capital access for municipalities. Municipal infrastructure projects, higher ed building and expansion, and healthcare projects may all be negatively affected by these rules. Borrowing costs will rise, and projects may be shelved or postponed.

Uncertainty Resulting From Fed Balance Sheet Overhang

In earlier whitepapers and our regular quarterly cash briefings,⁴ we repeatedly identify the size of the Federal Reserve balance sheet as a wild card in the back of every financial executive's mind. No one knows how it will be unwound or what will happen in the money markets as it unwinds. However, we can make some before-and-after observations as related to NSFR.

We know there are currently \$2.5 trillion in excess bank reserves at the Fed, up from less than \$100 billion prior to 2008. Banks take in customer deposits and put them on reserve at the Fed, earning interest at zero risk. These reserves count as HQLA for LCR purposes and carry a zero stable funding requirement for NSFR purposes, under the current NSFR proposal.

As the Fed starts to ratchet down reserves, and banks are no longer able to leave as much on reserve at the Fed, they will face a dilemma in terms of meeting the LCR and NSFR requirements. They must replace reserves with HQLA by purchasing scarce government instruments or they must shrink their balance sheet. One response will raise costs, and the other will shrink the bank balance sheet, reduce lending and lower revenue:

- Deploy deposits into other types of assets. Most will carry much higher stable funding requirements than reserves at the Fed, which will drive up their costs.
- Reduce deposit gathering, shrinking the liability side of the balance sheet and making proportionate reductions in assets (lending) as well.

Neither option is productive. In the first case, banks which today have what appears to be a robust NSFR, could actually have a shortfall if they reinvest their Fed reserves into the real economy. In the second case, in order to avoid an NSFR shortfall, banks would restrict corporate, consumer, and/or municipal lending, a negative outcome described earlier.

⁴ <http://www.treasurystrategies.com/sites/default/files/TSICorpCashJuly2016.pdf>

Much has been written about the caution the Fed is exercising as it ultimately shrinks the size of its balance sheet. It is ironic that the NSFR proposal will make that process more difficult for the Federal Reserve and more treacherous for large and globally-engaged banks. This introduces a level of volatility and risk which will compound the other negative NSFR effects we cite in this letter.

Systemic Risk Dispersion

With regulatory change, risk is neither created nor destroyed. It is only shifted. This applies to the relocation of risk that would result from NSFR.

In implementing the NSFR proposal, banks with more than \$50 billion of assets would make balance sheet adjustments to attain target coverage ratios. Doing this would require them to shed less-NSFR-desirable assets and liabilities (those that provide the lowest coverage or require the highest coverage).

To the extent they remain within the banking system, these least-desirable liabilities and most encumbered assets will end up on the books of banks with less than \$50 billion of assets. Because most NSFR banks will be eliminating these liabilities and assets, the market for them will have contracted, lowering the price or raising the haircuts at which they can be sold. This would create something of a buyer's market, essentially incenting the non-NSFR bank sector to acquire them. Although well-managed, most banks are not equipped or resourced to properly assess and absorb these risks. Thus, these problematic assets and liabilities that remain in the banking system will be dispersed across non-NSFR banks.

NSFR-disadvantaged activities are higher velocity and pose greater challenges in managing liquidity and operational risk. This proposal risks driving these activities into banks that lack the organizational capacity and resources to manage these risks, endangering the economy.

To the extent there is a prolonged period of market stress, the NSFR policy will have served to spread the problem and make it less transparent (i.e., more dangerous), to the detriment of non-NSFR banks.

Premature Timing

Markets are grappling with the effects of multiple regulations, low and negative interest rates, divergent central bank policies and substantially larger than normal central bank balance sheets. This creates uncertainty and potential for volatility. Most new financial regulations are still working their way through the banking system, and some are still pending. Dodd-Frank rules are still being written and the SEC's money fund regulations are not effective until October. All of this makes now an inopportune time to introduce yet more regulation.



Indeed, the first of the new regs has only begun touching bank customers and in any meaningful way:

- LCR is impacting the value of customer deposits. While some banks have introduced new customer pricing schemes (with currently unknown effect on customer behavior), most banks are only beginning this process.
- The Volcker Rule is affecting corporate treasury use of derivatives to manage their myriad risks. Most companies are only now feeling the impact and altering their behavior, as older hedges roll off and are replaced under the new rules.
- Money Fund regulations going into effect in October have already caused more than one-half trillion dollars to flow out of prime funds, which invest in private sector securities, and into government funds. Outflows are ongoing; no one knows the ultimate impact on corporate finance or the capital markets.
- HQLA and derivative collateral requirements continue to drive up demand for government securities, with potential dislocation in the government and repo markets.
- Federal Reserve balance sheet unwinding represents a multi-trillion-dollar overhang that lurks in the real economy in the back of market participants' minds. The nature and pace of the unwind could have major effects on markets.
- Diverging central bank policies, with the ECB and BOJ accelerating their stimulus, is creating uncertainty and volatility in the foreign exchange markets.

Introducing more change now, before seeing how these others affect the real economy, is not productive. A better path would be to see how these changes play out over the next few years, then reconsider NSFR in light of those impacts.

Treasury Strategies has consistently raised this point in our congressional testimony. We liken this situation to a well-intentioned high school chemistry experiment in which students pour all the chemicals into the beaker simultaneously.⁵ A more effective approach is to add the chemicals in stages, assess the effects, and only then add additional chemicals.

Excessive Costs and Complexity Due to Redundancy

Since the financial crisis, several regulations have been implemented that set requirements or ratios around bank balance sheet composition, liquidity, and capital. Basel III already has three planks in play: capital requirements, leverage requirements and liquidity coverage requirements. The Fed requires Comprehensive Capital Analysis and Review (CCAR) stress tests. The Fed recently instituted Total Loss Absorbing Capacity (TLAC) requirements and testing.



⁵ The Impact of the Dodd-Frank Act and Basel III on the Fixed Income Markets.
<https://youtu.be/WXlx5YXCxss>

Each regulation restricts banking practices in some way in the name of safety and soundness; at multiple levels they overlap. As they are aggregated and laid one on top of another, they combine to homogenize banking such that all banks will tend to make (and avoid) the same types of loans, invest in (and avoid) the same asset classes, and solicit (and avoid) the same types of deposits. The cumulative effect of all these regulations is to make banks look alike, rather than identifying those engaged in more risky practices.

Each additional regulation requires a separate set of processes and expenses for a bank. There is the (hopefully) one-time process of deciding how to interpret the regulation, what needs to be tracked and captured, and what will be reported. There will probably be outside consultants involved to help establish modeling and other repetitive processes for each reporting iteration. A team of internal people will be dedicated to support this specific reporting. There will be first-round calculations, analysis of the bank's performance, and discussion/execution of altering the performance if it is outside acceptable parameters. Finally, the assessment and reporting will move into production mode, with a new and permanent expense stream.

Adding yet another regulation (NSFR) to the same general financial arena addressed by existing regulations, increases the overlap and adds to the regulatory expense burden. To the extent this new proposal stipulates tight boundary conditions, it will further restrict banking practices and result in even more homogenization of key banking activities. It is not clear, however, that it will add meaningfully to the increase in safety and soundness already propagated by other similar regulations.

A Path Forward

We conclude from the above arguments that there are undesirable consequences associated with across-the-board implementation of the NSFR proposal as it now stands.

- It interferes with the foundational banking activity of maturity transformation.
- It will have procyclical consequences should a prolonged period of stress occur, making matters worse, not better.
- It will restrict access to longer-term capital for important market segments, forcing them to use shadow banking capital sources or limiting growth.
- It will redistribute risk in the banking system to below-\$50 billion asset banks.
- It may cause NSFR banks to shrink their balance sheets and lending as the Fed tries to exit its post-crisis liquidity provider role.
- It adds to significant regulatory redundancies to which large banks are now subject, specifically concerning issues of liquidity, balance sheet risk coverage, and capital.

We suggest an alternative three-pronged approach for NSFR implementation:

- The **first prong is a two-year postponement** of the proposed NSFR regime. During the postponement, we encourage you to study and test the cumulative impacts of existing post-crisis financial regulations (Basel III, Dodd-Frank, Money Fund regulations and others) on the real economy under current conditions and simulated stress scenarios.
- If the analysis above suggests NSFR would be effective, with minimal negative economic consequences, then the **second prong is to implement NSFR at the 70% level** for banks subject to either the modified or full LCR (>\$50B) for a two-year period, and to study the economic consequences.
- If this analysis suggests NSFR at the 100% level for LISCC banks would be effective, with minimal negative economic consequences, then the **third prong is to implement NSFR at the 100% level** for LISCC banks.

This approach addresses the issues identified in this letter without giving up the oversight value of NSFR. A gradual approach allows for measured assessment of NSFR's positive and negative impacts, in the context of other regulations settling in and demonstrating their effects.

Thank you very much for your consideration of these points. Novantas would be pleased to discuss these and other related issues at your convenience.

Respectfully submitted,

Anthony J. Carfang and Cathryn R. Gregg
Managing Directors, Treasury Strategies

Peter Gilchrist, David Robertson, and Steve Turner
Managing Directors, Novantas, Inc.

