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Bank for International Settlements  
CH-4002 Basel  
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Zurich, April 10<sup>th</sup> 2014

## **Credit Suisse response to the Consultative Paper titled 'Basel III: The Net Stable Funding Ratio'**

Dear members of the Basel Committee,

Credit Suisse AG ('CS') appreciates the opportunity to comment on the Consultative Paper ('CP') titled 'Basel III: The Net Stable Funding Ratio' published by the Basel Committee on Banking Supervision ('Committee') in January 2014. CS agrees with the objective of the Net Stable Funding Ratio ('NSFR') to require banks to maintain a sustainable funding structure and to reduce funding risk over an extended time horizon. In the aftermath of the financial crisis most banks have significantly improved the sustainable funding structure of their balance sheet. Internal and external measures have improved the funding and liquidity profile of the industry. It should therefore be noted that the current use of multiple regulatory and supervisory tools to address liquidity concerns means that the NSFR need not and should not, by itself, be calibrated to unrealistic and artificially high levels.

CS supports the focus on the fundamental dimensions of residual maturity and liquidity value in defining the basis for an appropriate structural funding ratio as highlighted in paragraphs 12 and 13 of the proposed rules. Whilst we support revisions to the previous rules to better differentiate residual maturity and liquidity value across asset and liability categories, CS supports the broader industry response that further enhancements to the rules are required to appropriately reflect the degree of stable funding of an institution's balance sheet. Priority areas for enhancement in CS's view include:

- *Secured funding transactions:* The NSFR draft rules propose to apply the same RSF to a Secured Funding Transaction (SFT) as would be applied to an unsecured funding transaction. This approach fails to recognize the value of the secured nature of the lending and that a firm has two sources of liquidity: (i) repayment of the cash by the counterparty or (ii) use of the collateral to obtain financing or collateral liquidation. We concur with the industry recommendation that the Required Stable Funding (RSF) factor for SFTs should reflect three key principles: i) collateral quality; ii) counterparty identity and iii) linked transactions (per next paragraph). Specifically, with regard to nonbank financial counterparties with maturities of six months or less, it is our recommendation that the RSF factor should be 0% where secured by Level 1 assets and, in the case of SFTs secured by non-Level 1 assets, 50% of the RSF factor that would apply to the asset if it were held by the bank as an unencumbered asset, but only if the bank has the legal right to use the pledged asset. As an example, an SFT lending transaction secured by Level 2B collateral would receive an RSF factor of 25% (= 50% x 50%).



- *Linked transactions:* The NSFR draft rule set focuses on the categorization of individual categories of assets and liabilities based on the expected liquidity value and residual maturity. Although this supports the BCBS objective of simplicity, there is a lack of consideration for the funding and liquidity profile of certain “linked” transactions under the NSFR rules. Banks commonly act as market intermediaries to facilitate client trading strategies. There are derivative linked strategies where banks carry cash security inventory to facilitate these strategies but where the bank does not face any material market or funding risk, and where symmetrical unwind of the ‘package’ is assured through credit, liquidity, market, and operational risk safeguards. It is CS’s recommendation that the NSFR rules should appropriately recognize certain circumstances where the existence of safeguards supports recognition of specific “linked transactions” that otherwise would be penalized under the NSFR.
- *Asset quality and liquidity value of equities:* The NSFR draft rules outline revised RSF factors for equities (50% RSF applied to LCR High Quality Liquid Assets (HQLA) eligible equities, 85% to exchange traded LCR HQLA ineligible equities and 100% to all other equities). We believe that the current haircuts do not account for the demonstrated performance of equities, even under stressed conditions whereby most major market exchange traded equities can be easily traded and hence can be readily used as collateral to secure funding or sold in the market. Major market equities possess the most critical of the liquid asset attributes specified for many of the Level 1 and Level 2A assets for which the proposed rules require either an RSF factor of 5% or 15%. Equity secured funding markets performed as well as secured funding markets for Level 1 assets during the 2008 dislocation and they continue to demonstrate funding resiliency, diversity and growth. It is therefore our recommendation that major market, main index equities and associated ETF should receive an RSF factor of 15%. All other major market equities traded on an exchange, but not included in the main index, should receive an RSF factor of 50%. All other equity should receive an RSF factor of 85%.
- *Asset quality and liquidity value of Level 1 assets:* In the case of unencumbered Level 1 assets, we believe reducing the RSF factor to 0% would be appropriate in recognition of the breadth and depth of the markets for these securities and as a means of being consistent with the treatment of these securities under the LCR. The LCR framework is based on a stress scenario whereas the NSFR market scenario is less severe. Thus the RSF factors should not be more stringent in NSFR in comparison to LCR. The RSF factor for Level 1 assets should be founded on their market liquidity, not their projected holding period. It is CS’s recommendation that the RSF factor be 0% for unencumbered Level 1 assets.
- *Funding with options exercisable at the bank’s discretion (early termination rights):* Paragraph 17 of the January 2014 proposal sets out the requirements for determining maturity on equity and liability instruments. The proposed wording with respect to options exercisable at the bank’s discretion, namely “banks should assume that they will be exercised at the earliest possible date unless the bank can demonstrate to its supervisor’s satisfaction that the bank would not exercise this option under any circumstances” is at odds with the generally accepted practices. Thereby, the exercise of a call option on funding is largely dependent on the market environment at the time of the call and the impact this has on multiple factors including the value of the call, reputational considerations and the ability to raise new funding in a stable versus stressed environment. We recommend that this language be amended in the final rule and that the maturity of these instruments be based on the expected probability of exercise considering the current market environment, an analysis of the historical volatility of the instrument and assumption of changes in risk factors.

In the following sections we offer our detailed comments and recommendations in response to the consultative paper. We would be happy to discuss these in more detail with members of the Committee, and hope our feedback is helpful.

Yours sincerely,  
Credit Suisse AG



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## Detailed CS comments

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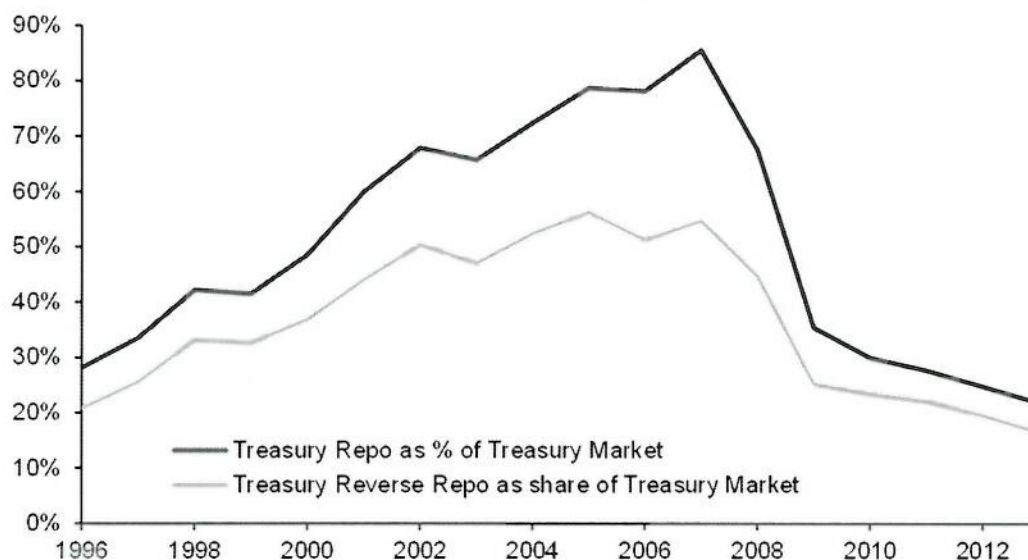
## Part A: General Considerations

### 1. Evaluate impact on fixed income markets

We support the goal of ensuring that financial institutions are not overly reliant on short-term wholesale funding. However the NSFR, as proposed, does not appropriately differentiate between secured and unsecured loans, and the failure to recognize the liquidity benefits of secured financings, particularly SFTs, could lead to unintended and adverse consequences.

The global repo market exceeded USD 10 trillion dollars in outstandings as of the end of 2013 and a significant portion of the collateral financed in the repo market is HQLA, such as US Treasury securities, Bunds, Japanese Government Bonds and Gilts. In our view, as an active repo market participant, we believe the rules as proposed could, for example, impact the repo market's ability to support liquidity in government securities markets. Since the financial crisis, US Dealers have reduced their reliance on and provision of Treasury repo as a means of funding relative to the size of the overall market. The NSFR requirements risk causing this to slip further, which could damage US Treasury market liquidity, particularly for off-the-run securities (see Figure 1). In our view, the ability for dealers' balance sheets to expand in times of market illiquidity is critical to the efficient functioning of the market, simultaneously enhancing financial stability and reducing systemic risk. As written, the NSFR would impede this market-calming function by reducing the elasticity of dealers to absorb inventory.

**Figure 1** US Dealer Treasury Repo and Reverse Repo as a percentage of the Treasury market (source: SIFMA and US Treasury)



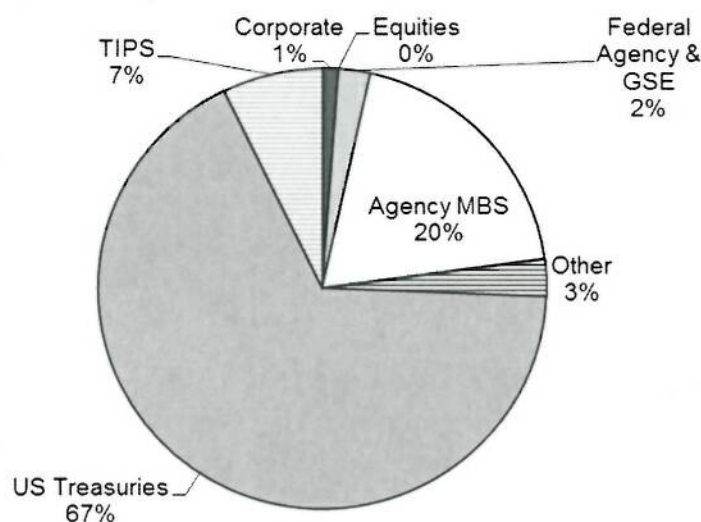
The repo market fulfills a number of key functions that are essential for global fixed income market functioning.

- **Crucial utility role:** the repo market allows cash and securities to readily move around the market from those who have them to those who need them;
- **Bond market functioning:** a liquid and efficient repo market is a necessary precondition for an efficiently functioning bond market. For example, if an investor wishes to purchase a security from a dealer who does not own that specific security, the repo market allows the dealer to sell the bond to the inves-

tor and find the bond in the repo market to deliver. Without this function, the investor would need to contact multiple dealers to find the bond in question, and with dealer balance sheet capacity already diminished, this would become an increasingly onerous process;

- **Lowens government and corporate issuer cost:** by allowing a deeper, more liquid market where many dealers and investors can transact easily without the need for any individual participant to maintain large inventories of bonds and allowing for inexpensive, timely and secure funding of balance sheets (as noted below) at times when investors are unwilling to purchase securities;
- **Collateral management:** the repo market promotes efficient use of tradable collateral by increasing the speed and efficiency of the settlement process. The repo market allows dealers to offer securities they do not own and the ability to quickly finance positions, allowing them to bid on securities and perform an important market making function;
- **Cash management:** the repo market allows banks to lend secured against collateral allowing non-bank financial institutions to meet redemptions without selling assets. In a scenario where an investor (for example a mutual fund) needs to raise cash to meet a redemption but expects a cash flow the next day, the repo market provides funding for such an action.
- **Monetary policy:** historically the repo market has been the primary method by which many central banks have conducted monetary policy. Although there have been changes in the recent past with some central banks testing alternative means of conducting policy, dealers are likely to remain an important counterparty for policy related operations.

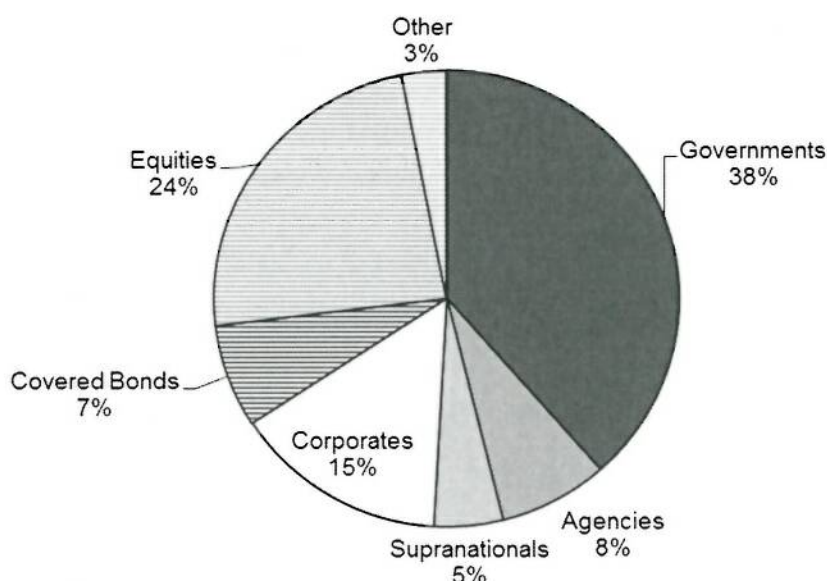
**Figure 2** US Reverse Repurchase Agreement Dealer Composition (total size USD 1.818 trillion, source SIFMA)



Funding investor ownership of government securities comprises two thirds of reverse repos in the US held by dealers (see Figure 2). In Europe, about 40% of all repo transactions are collateralized by government securities (see Figure 3). These transactions tend to be low margin, low risk transactions in which securities are taken in and cash lent out to fund the transaction. Although wholesale funding, the risks to these transactions are limited as they are easily funded via offsetting repo transactions with government collateral. Historically, high quality government securities tend to be in demand during times of market stress and are welcome collateral for counterparties. We do not know of an instance where wholesale funding in government securities was unavailable even during the highest stress periods.



**Figure 3** About 40% of the European Repo market is government securities. Total size EUR 2.793 trillion for reverse repo, chart shows total repo market (source: ICMA Group)



We believe the NSFR as currently proposed could:

- increase the cost to customers for funding their government and agency positions creating higher borrowing costs for the issuing governments and agencies;
- lead to the funding market shifting away from banks to shadow banks;
- reduce liquidity in government and agency bond markets;
- increase the cost of hedging interest rate exposure in other fixed income products; and
- potentially impact central bank monetary policy operations.

### *Higher customer costs*

The need to increase longer-term funding would likely lead to a significantly higher cost of funding for counterparties dealing with banks. In order to comply with the required stable funding factors, a financial institution that provides a client with funding via overnight Treasury reverse repo will need to have "stable funding" against 50% of that loan. The subsequent longer-term issuance (assuming an issuance of 3-year debt on average to meet the RSF factor) will necessarily increase the financial institution's cost of providing that funding, resulting in a large degree of pass-through to the client.

As an illustrative example, recent overnight Treasury reverse repo costs were quoted at 7 basis points (bp). Typically, the dealer would be able to fund this via overnight repo at 10bp<sup>1</sup>. Applying 50% RSF, then the current contribution to funding amounts to 5bp (= 10bp \* 0.5). In contrast, the required average 3-year debt issuance, reasonably estimated with an average cost of around 120bp and applying an RSF factor of 50% would mean that 50% of the loan to the customer would be funded at 120bp, pushing the contribution to funding up from 5bp to 60bp. Thus, the contribution to funding increased by 55bp, as shown in Table 1. This cost would subsequently be passed along to the customer, increasing their overnight collateralized borrowing rate up from 7bp to about 62bp.

<sup>1</sup> The cost of overnight reverse repos and repos financing Treasury collateral was as quoted on Bloomberg money market screens (BTMM).

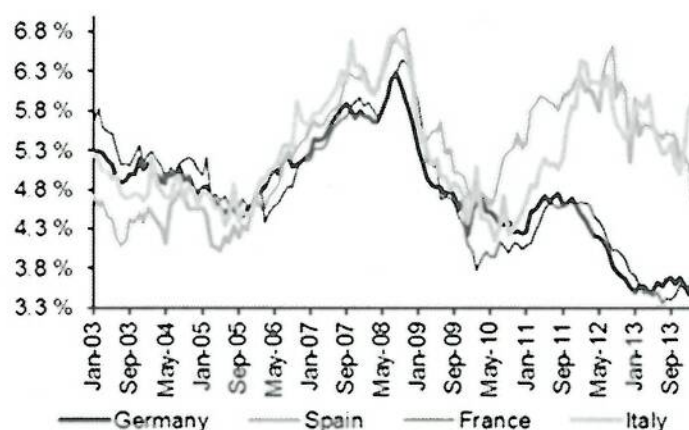
**Table 1** Overview of increase of the contribution to funding by NSFR

Funding Source	RSF	Cost of funding	Contribution to funding (applying 50% RSF)
As it is now: overnight repo	50%	10 basis points	5 basis points
As it would be with the proposed NSFR: 3-year note	50%	120 basis points	60 basis points
<b>Difference:</b> increase in contribution to funding			<b>55 basis points</b>

It is important to note that this would not only impact the financial institutions and their customers to whom they provide funding, but also have knock-on impact for governments. To extend our example, 2-year US Treasury notes currently trade at 45bp. An increase of 55bp from the contribution to funding to the cost of borrowing against this instrument as collateral typically increases yields commensurately, resulting in a 2-year note yield of 100bp.

Higher repo rates are similar to central banks increasing interest rates with an increase resulting in lower economic activity as increasing consumer and business borrowing costs impact the wider economy.

**Figure 4:** Lending rates to non-financial corporates, 1-5y maturity, loans < EUR 1 million; latest data Feb-14 (source: ECB)



Moreover, in Europe, the pass-through into higher real economic funding costs is exacerbated by already high market fragmentation where borrowing rates for the private sector in Italy and Spain, for example, are much higher than for Germany. The chart above shows lending rates to non-financial corporates in Germany, France, Italy and Spain and shows that despite record low rates of borrowing in Germany, borrowing costs remain persistently high in Italy and Spain. Higher borrowing rates for governments due to rising repo rates will further exacerbate this issue of market fragmentation in Europe, which as discussed above, will have negative knock-on effects on consumption and investment.

#### *Funding market shift away from banks to shadow banks*

A further impact may be that bank SFT customers seek out alternative funding sources in the unregulated shadow banking industry as they move away from banks that are subject to the NSFR rules. Based on the size



of the reverse repo market at year end 2013, if there was a 20% reduction in banks' SFT financing this could mean that \$1 trillion of financing would be sourced away from banks or otherwise reduce the entire market.

## *Reduce liquidity in government bond markets*

The elasticity of dealer balance sheets is important for market liquidity, particularly in times when there is a lack of other buyers. Dealers' ability to expand balance sheets helps to reduce price volatility when two-way markets are limited, if they exist at all. For liquid government securities, this is important as investors believe there will always be a bid for assets close to the previous price. We believe the rule as proposed would reduce the ability of dealers to quickly finance large amounts of government securities they might purchase from a client. The result would be negative price movements and more volatility than has traditionally been the case in many government bond markets.

## *Increase Hedging Costs*

Those investing in bonds with interest rate risk often use the repo market to hedge their interest rate exposure. The higher repo costs described above would increase hedging expenses requiring investors to demand higher yields on assets they purchase. The result of such moves is higher interest rates for corporations issuing bonds, for households obtaining mortgages, and others purchasing goods on credit.

As central banks begin to normalize policy it is likely that investors will want to add to their interest rate hedges. Higher costs would likely cause them to hedge less or reduce the size of their fixed income holdings, increasing the spread of the products they sell, again causing higher borrowing costs for consumers and businesses.

## *Risks to Monetary Policy Operations*

Historically, central banks have used banks and dealers to conduct monetary policy operations. Currently enacted capital standards have reduced the elasticity of dealer balance sheets, and the proposed NSFR will likely cause significantly less elasticity, challenging monetary policy.

For example, in a situation in which a central bank wants to inject liquidity into the system via banks and dealers, they could perform large scale repo operations by which they buy government collateral from a bank in exchange for cash. The bank traditionally would be able to source such collateral by entering into a reverse repo transaction with a market participant. However, under the NSFR, dealers and banks would have to prepare for such a possibility by issuing longer term debt liabilities (whether term deposits or unsecured debt) in advance of monetary policy actions.

Another implication for monetary policy is that the NSFR may result in central banks lengthening the term of monetary operations for liquidity support to over one year. In the case of Europe, the ECB currently conducts regular 1-week, 1 month, and 3 month operations but longer term operations are possible at irregular intervals such as the 3year Long-term Refinancing Operations (LTRO). A research article published by the Central Bank of Ireland suggests that such longer term operations may need to become regular once the NSFR is implemented.

## **2. Evaluate impact on global equities markets**

In CS's view as a leading equities broker the NSFR, as proposed, would trigger a substantial change in the stable funding requirement for equities market makers, impacting not only the cash equities market but related derivatives of the market, including futures, forwards and options. The impact to the equities markets is made



significant through the cumulative effect of several differences between the proposed rule and the industries' current assessment of the liquidity/funding risks inherent in equity products and equity business.

These differences are laid out in the following paragraphs to demonstrate the cumulative effect of the proposed rule on the equities market. While some impact is clearly intended, the cumulative effect of the proposed rules would result in a material increase in stable funding required to support the market and as a result potential undesired and unintended consequences.

Banks facilitate client activity in their role as intermediaries. Increased funding costs will impact the industry's ability to make markets, trade and hedge risk, support new issuance, and provide structured solutions to client needs. Firstly, higher funding costs may increase transaction costs through wider bid/offers, which will in turn reduce transaction volumes and ultimately liquidity. Second, there is risk of diminished diversity in market making participants as increased funding costs will create a new barrier to participation, resulting in an uneven impact across banks and effecting smaller institutions disproportionately. Lastly, higher transaction costs in cash equities will affect related derivative markets including futures, forward, and options which may adversely impact market efficiency, price parity, and introduce additional basis risk.

By way of illustration, one such example is the futures market making activity of banks. Futures are traded primarily by pension funds for managing their exposures. Banks which make markets in futures use the underlying cash equity to hedge their exposure to remain delta risk neutral. Under the current NSFR proposal, these hedges would require 50-85% stable funding, substantially increasing the cost of holding the hedge. These costs will be built into wider bid/offers in the futures product, ultimately impacting portfolio returns of pension funds and consequently borne by the ordinary citizen. The market place has built-in operational mechanisms which mitigate funding risk and which may have been overlooked when calibrating the NSFR for equities. Futures are settled at Special Opening Quotations (SOQ) which is based on the opening price at which banks liquidate their hedge portfolio's using Market on Open (MOO) orders.

Accordingly, to the extent that the NSFR is intended to capture a business-as-usual funding environment, we are recommending a limited number of modifications to the NSFR that we believe would more accurately capture bank funding risks. The specific recommendations and associated detailed feedback are set out in the subsequent section "Part B: Specific Comments".

### **3. Calibration of RSFs for HQLAs**

CS understands the current calibration of HQLAs is determined to be a "compromise" between BCBS members advocating a 100% RSF for all HQLAs and BCBS members willing to consider less stringent RSFs than the LCR scenario due to the longer scenario period and reduced severity of NSFR.

We concur with the industry view that a 100% RSF for all HQLAs would not represent a reasonable alternative as it would create serious and counterproductive liquidity management challenges for some key banking products and cause inconsistencies in the concurrent management of NSFR and LCR, with LCR and NSFR being at odds with each other rather than complementary.

Banks buy HQLAs for different reasons depending on types of products. These differences should be determinative of views on their minimum funding tenors (or RSFs) and how these minimum funding tenors should be achieved through RSFs for banking products or HQLAs. HQLA purchased or reversed in to meet LCR and NSFR requirements are themselves an operational variable and should not be the determinant of RSF requirements based on their intended holding period.

In conclusion, RSFs of HQLAs should be calibrated based on their market liquidity, type and length of the scenario and availability, not their projected holding periods. The NSFR rules as proposed do not reflect an appro-



priate balance between these considerations. RSFs should instead be lowered to reflect the market liquidity of assets over 12 months in a non-stress environment, bearing in mind the differing characteristics of products that cause banks to have to hold HQLAs. Hence, we propose that RSF for non-Level 1 HQLAs be reduced by 50%. For Level 1 HQLA, we recommend a 0% RSF factor be applied as a recognition of the breadth and depth of the government securities markets and to resolve a contradiction in the treatment of such assets between the LCR and the NSFR. We further propose that the Committee undertake a calibration exercise with the industry to confirm any reductions in RSF based on a transparent market environment (normal versus mild stress scenario).

## Part B: Specific Comments

### 4. Modification of RSF factors applicable to SFT transactions

CS agrees with the Committee that the NSFR should be designed as a simple, easy-to-implement funding and liquidity metric and that the Basel Committee's approach, set out in paragraph 13, to determining the appropriate amounts of required stable funding for various assets by taking into consideration four (4) criteria<sup>2</sup>, as well as recognizing the potential trade-offs between them, is very sensible and helps identify where liquidity risk could arise.

However, there are provisions in the proposed rules where the application of these principles could be refined to more accurately reflect the true liquidity risks associated with certain assets and liabilities. For instance, the failure to distinguish the liquidity risks between secured and unsecured lending is an area where a more refined approach should be applied to better reflect the true liquidity risks embodied in the instrument. Without certain logical refinements that we propose herein, as stated above, we believe that the proposal could have substantial negative effects on beneficial products and transactions and the overall liquidity of the market.

We recommend modifications to the NSFR framework related to secured lending transactions, specifically security borrowing/lending and repurchase agreement transactions (collectively, "SFTs") to better reflect the four guiding criteria of the framework as set out in paragraph 13.

In addition to being consistent with the four criteria set forth in paragraph 13, we believe the modifications we recommend do not create significant complexity to the NSFR framework and aid in avoiding potential market disruptions that could arise if a more blunt approach were taken.

#### *Differences between SFTs and Unsecured Lending*

There are significant differences between SFTs and unsecured lending that should be considered when determining the appropriate amount of required stable funding. Because of these differences, the application of the four criteria set forth in paragraph 13 should yield a lower stable funding requirement for SFTs than other forms of lending.

SFTs have a different funding profile than other categories of lending transactions. When a bank, like CS, lends money against an asset in a SFT, CS has two sources of funding: the repayment of the money by the counterparty at the maturity of the SFT as well as the use of the collateral during the term of the SFT. Furthermore, banks ensure that the value of the collateral supporting the repayment of the SFT is sufficient with an initial margin amount provided by the counterparty. The market value of the collateral is calculated on a daily basis and additional collateral can be required. However, the quality and quantity of collateral is currently not reflected in the proposed NSFR rules.

**Recommendation:** We concur with the industry recommendation that the Required Stable Funding (RSF) factor for SFTs should reflect three key principles: i) collateral quality; ii) counterparty identity and iii) linked

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<sup>2</sup> The four criteria considered are: (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 behavior* – 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, and (d) *Asset quality and liquidity value* – The NSFR assumes that unencumbered, high-quality assets that can be securitized or traded, and can be readily used as collateral to secure additional funding.



transactions (per section 6). Specifically it is CS's view, with regard the treatment of SFT transactions with nonbank financials with less than six months' maturity, that treatment should be as follows:

- For SFTs financing any assets, other than Level 1 assets, 50% (the RSF factor for unsecured lending) *multiplied by* the RSF factor applied to the underlying collateral as if it were an unencumbered asset of the bank as long as the bank has the legal right to use the collateral during the term of the SFT. As an example, an SFT lending transaction secured by Level 2B collateral would receive an RSF factor of 25% (= 50% x 50%).
- SFTs secured by Level 1 assets should attract a 0% RSF in order to reflect the high liquidity of these securities as well as the dual sources of payment. This recommendation is also consistent with our recommendation that the RSF factor for Level 1 assets be 0%.

**Table 2** Recommended treatment for SFT with a maturity of less than six months

Counterparty type	ASF for repos / borrowing	RSF for reverse repo / lending
Bank financials	0%	0%
Nonbank financials	0%	0% (Level 1 assets) 50% x unencumbered asset RSF% (non-Level 1 assets)
Corporates (nonfinancial)	50%	50%

Based on preliminary analysis of our SFT positions backed by collateral (excluding Level 1 assets, which are effectively self-financing because of the stability of the funding markets for this type of collateral), we believe the RSF factor of 50% is very conservative if intended to account for franchise rollover of SFTs. We believe that a more appropriate RSF factor should be between 20% and 30% and the RSF factor for SFTs backed by Level 1 assets should have a 0% RSF factor.

## 5. Revisions to the NSFR framework related to other forms of secured lending

As noted above, the NSFR currently does not distinguish secured and unsecured lending arrangements. Secured loans have more stable and robust funding sources than unsecured loans because banks can liquidate collateral in the event of counterparty default.

**Recommendation:** Inter-bank loans should continue to receive a 0% RSF factor. However, all other unsecured lending with maturities of less than one year should receive a 50% RSF factor, while secured lending with maturities of less than one year should receive an RSF factor equal to the product of 50% and the RSF factor that applies to the collateral securing the loan if the collateral were an unencumbered asset of the bank. As an example, the RSF factor of a loan secured by physical traded commodities like oil will amount to 42.5% (= 50% x 85%).

## 6. Modification of RSF factors applicable to “linked transactions”

The NSFR draft rules focus on the categorization of individual categories of assets and liabilities based on the expected liquidity value and residual maturity. Although this supports the BCBS objective of simplicity, there is a lack of consideration for the funding and liquidity profile of certain “linked” transactions under the NSFR rules. Banks commonly act as market intermediaries to facilitate client trading strategies. There are derivative linked strategies where banks carry cash equity inventory to facilitate these strategies but where the bank does not face any material market or funding risk, and where symmetrical unwind of the ‘package’ is assured through credit, liquidity, and market risk safeguards. It is CS’s recommendation that the NSFR rules should appropriately recognize certain circumstances where the existence of specific liquidity, credit, market, and operational risk considerations support recognition specific “linked transactions” that otherwise would be penalized under the NSFR.

We acknowledge the BCBS concern that recognition of such linkage may increase the complexity of the NSFR, however, we concur with the industry view that a limited number of ring-fenced exemptions for linked transactions should be incorporated into the rules based on clear qualifying criteria where legal and operational safeguards exist while preserving the Committee’s objectives. The following subsections set out some examples of the specific circumstances where such a “linked” transaction treatment would be appropriate.

### 6.1 SFTs entered into to cover firm or client shorts

Banks commonly act as market intermediaries to facilitate client trading strategies. In such circumstances, a bank is effectively acting as a pass-through with back-to-back, offsetting trades such that the bank may borrow the security from a third party (in exchange for cash) and lend the same security to its client (also in exchange for cash). When the client terminates the trade, the bank receives the security back from the client (returning the cash) and returns the security to the third party (also in exchange for cash). Such an example would likely attract an asymmetrical NSFR treatment (0% ASF, 50% RSF) if assumed to be less than 6 months and conducted with non-bank financial institutions. This treatment would apply even where the bank puts in place risk management and contractual arrangements to ensure that it could unwind the client-facing and third party-facing transactions simultaneously, virtually eliminating the possibility of funding gaps. At a high level, the bank’s role in such transactions is similar to the riskless principal model in client clearing, which the Basel Committee has accommodated in the capital framework through specific exceptions to rules of general applicability.

This does not appear consistent with the BCBS’s NSFR objectives with regards to addressing banks’ longer term structural funding requirements. Rather, it has the potential to give rise to unintended consequences in the market as banks pass on increased funding costs to clients despite the intermediary role the banks play in such a transaction.

We concur with the industry view that while the above discussion relates to a bank’s role in facilitating client shorts, the same risk safeguards apply in the case of bank shorts. Bank shorting transactions are conducted for a variety of legitimate purposes and are in accordance with applicable legal and regulatory requirements including, for U.S. banks, the Volcker Rule’s prohibition on proprietary trading and Federal Reserve Regulation T, which permits banks to borrow securities only with a permitted purpose. Failure to accommodate them in the NSFR could disrupt banks’ ability to assist in capital formation activities or impair banks’ ability to manage risk. Unlike bank funding transactions where there may be a valid argument for building a conservative bias into the NSFR, we believe that there are no prudential reasons to impose liquidity surcharges on a bank’s highly regulated shorting strategies.



**Recommendation:** We concur with the industry recommendation that in the scenario where a bank borrows a security to cover a firm or client short position, the NSFR should recognize an exception from the general RSF factor that applies to loans, and instead permit the bank to recognize equal and offsetting ASF and RSF factors. The NSFR should incorporate such equivalent ASF and RSF factors in one of two ways. In the limited cases where equivalent factors would apply, the NSFR could (i) take the RSF factor applicable to one leg of the transaction and deem the offsetting position to have an equivalent ASF factor (e.g., a 50% ASF factor would apply to the offsetting position where, under the NSFR methodology, a 50% RSF applies to the original position); or (ii) simply deem these limited categories of transactions to net for liquidity purposes, excluding them entirely from the NSFR calculation. Either approach would achieve the same substantive goal of limiting the asymmetrical assumptions to situations where the bank is actually engaged in funding activities and has meaningful gap funding risk.

## **6.2 Assets held as market risk hedges to client-facing derivatives exposures**

### *Total Return Swaps*

Banks frequently hold as an example cash securities as market risk hedges against client facing total return swaps. Clients may execute total return swaps as a synthetic secured funding transaction whereby the swap agreement ensures a full pass through of the performance of the hedge to the client. Changes in the value of the hedge are offset by changes in the value of the swap, which are then met with regularly posted variation margin. In addition, the transaction will typically also include initial margin, which is used to finance the purchase of the hedge. The swap is recorded under ISDA/PSA documentation, which will also reference the quantity and CUSIP of the reference security, thereby making clear the link between the hedge security held and the swap. The trade tenors of such swaps range from overnight to 1 year with the vast majority of swaps terminable by the client or bank in less than 30 days.

There are protections that further ensure the hedge can be liquidated at the expiry of the swap. These protections include: a) the ability to physically deliver the security to the swap counterpart, b) termination provisions which give the bank the ability to move the final Termination Date if it cannot affect the unwind of the hedge, c) final price determination provisions which allow for scenarios in which the hedge cannot be unwound in full in one trading session, d) unwind expense provisions which give the bank the right to adjust the unwind proceeds to reflect the costs of unwinding the hedge, and e) market disruption provisions which allow the bank to terminate the transaction if there is disruption to its ability to hedge.

As a result, cash security positions linked in this way, exhibit maturity characteristics similar to those of the swap agreement, however, under the proposed NSFR rules such securities held to hedge the client exposure would receive an unencumbered RSF factor commensurate with the underlying security (without recognition of the bank's ability to liquidate the hedge at the swap maturity). The Committee has previously acknowledged trade linkages and the impact on residual maturity as noted in BCBS 211 FAQ #17.

### *Futures/Forwards market making*

Cash securities are frequently held as market risk hedges against futures and forward market making strategies. In these instances a bank may be left with exposure to an Index through the futures market. The cash security constituents of the index are purchased to hedge the future/forward position. Since the futures trades are typically against major market main indices, the cash hedges are highly liquid. The cash security hedges are financed in the secured funding markets.



Variation margin is posted regularly on the future/forward, and as a result the bank is insulated from price volatility risk in the underlying securities held as a hedge. Any change in value of the cash security hedge is offset by an equivalent change in value of the future, which is then met with variation margin.

Prior to expiry, the market provides additional liquidity risk management through Exchange For Physical (EFP) transactions which can be executed at any time prior to expiry, and which allow banks to collapse their futures and cash hedge positions with no price risk on the exit.

Futures, as exchange traded instruments, expire every third month and are therefore considered short term. Final settlement procedures of the futures market ensure that hedges can be liquidated, and that the liquidation price of the hedge is used to derive the close out value of the future, mitigating any funding and market risk on expiry. Futures are cash settled to "Special Opening Quotations", which allow banks to monetize cash hedges with riskless Market-on-Open orders.

**Recommendation:** Short term trading book activities, where banks enter into outright positions and link equivalent and equal value risk mitigation positions for client facilitation or market making purposes, shall be deemed to have 0% RSF. Linkage between outright positions and risk mitigation positions shall be deemed met if the bank can demonstrate to its supervisor's satisfaction that these are correspondent and equivalent in value both during the life of the transaction and upon unwind via one or more of the following measures:

- Legal provisions and market structures allowing the bank to divest itself of the positions without suffering a loss;
- Trading operation practices (such as market auctions) allowing the bank to minimize exposure differences between the hedge unwind and the outright position;
- Other structural provisions protecting the bank's liquidity requirements in the transaction.

**Alternative recommendation:** Trading book assets held as hedges against Synthetic Financing Transactions (such as Total Return Swaps, Futures and Forwards) that satisfy all of the following conditions, may be linked and subject to the proposed revised treatment for Secured Funding Transactions (SFTs). Qualifying conditions include:

Asset/hedge must be specifically referenced/linked by the derivative contract (CUSIP/ISIN):

- Hedge notional value or quantity should match; and
- Regularly settled variation margin.

The proposed revised treatment for SFTs would assign an RSF factor to the linked transaction based on:

- Residual maturity of the linked transaction;
- Counterparty; and
- RSF factor applicable to the underlying hedge.

To underline our recommendations we provide the following examples:

Example 1: Equity Swap [USD 100 Level 2B stock purchased as hedge to USD 100 notional TRS. <6month residual maturity. Counterparty = non-bank financial. 20% initial margin.]

- $USD\ 100 \times 0\% = USD\ 0$
- $50\% \text{ of } USD\ 100 = USD\ 50 \times 50\% \text{ Level 2B haircut} = USD\ 25 - USD\ 20 \text{ initial margin} = USD\ 5 \text{ RSF}$

Example 2: Future [USD 100 S&P constituent stocks purchased as hedge to S&P 500 Jun 14 Future. <6month residual maturity. Counterparty = OCCP/exchange]

- $USD\ 100 \times 0\% = USD\ 0$



- $\text{USD } 100 \cdot 0\% \cdot 50\% \text{ Level 2B haircut} = \text{USD } 0$ . SFT factor is zero if QCCPs are categorized as non-bank financial

## *Options market making*

Cash equities are frequently held as market risk hedges against equity option market making strategies (i.e. puts & calls). A portfolio of cash equities is typically held against the portfolio of client initiated options transactions, in what is commonly referred to as a delta hedge. The cash equity portfolio is continuously rebalanced to ensure the effectiveness of the hedge, which includes any changes in the market value of the underlying exposure to the equity market.

The weighted average life of the options portfolio is generally not considered short term, and so while the cash equity positions are linked, the funding risks associated with these portfolios differ from other linked transaction types (including swaps, futures and forwards).

That said, changes in the value of the hedge portfolio are for the most part offset with changes in the value of the options book which is then met with regularly posted variation margin providing insulation from funding risks associated with price volatility. As a result, we believe that applying the RSF factor for unencumbered equities to equity hedges linked to the options portfolio are overly punitive.

In addition, the options market provides operational and structural safeguards that mitigate risks of hedge liquidation at the expiry of the options. For example, a "Must-Be-Filled Order" (MBF) means a program trade that offsets a pre-existing expiring derivatives position that is traded in accordance with Exchange Requirements governing such trades. The MBF session takes place on the Thursday immediately before the option expiry day, thereby mitigating any price risk between liquidating the hedge and option expiry.

Various internal market, credit, and operational risk safeguards exist to ensure that the portfolio of securities used to hedge the equity options book is segregated, controlled and supervised as a part of banks' delta hedging mandate. Risk limit constructs ensure that banks cannot partially unwind linked structures, which would then also run afoul of Volcker restrictions. For national supervisors, banks will be able to demonstrate linkage through their risk management systems on a daily basis.

**Recommendation:** Trading book equities held as hedges against options, that satisfy all of the following conditions, may be linked and subject to 15% RSF for 'prime' equities (previously 50%), and 50% RSF for all other exchange traded equity (previously 85%):

- Segregated and separately controlled and supervised portfolio;
- Delta neutral; and
- Regularly settled variation margin.

The Basel Committee may conclude that, upon consideration of these structural, legal and operational dynamics together with recognition that equity securities are predominately held by banks as hedges to client facing derivatives, the concerns could otherwise be addressed by adjusting the unencumbered RSF factors for equities.

## **7. Recommended revisions to the NSFR framework related to counterparties**

The NSFR rules as currently proposed differentiate between "banks subject to prudential regulation" and "non-bank financial institutions" (paragraphs 29c, 32c and 32e). We support the need to distinguish between counterparties and the relative funding risks, however, it is our view that the category of "banks subject to prudential regulation" is too limited in scope. We support the industry recommendation that the "bank" category should be expanded appropriately to include entities that are subject to bank-like regulation and perform bank-like func-

tions in financial markets. As noted in the comments from the industry associations to the Financial Stability Board's ("FSB") recent effort to impose minimum haircuts in secured funding markets is limited to transactions with "entities not subject to regulation of capital and liquidity/maturity transformation." We support the FSB's approach to regulating the shadow banking sector, by introducing an analytical framework, and recommend that the Basel Committee consider how best to align its bank/nonbank classifications in a manner consistent with the FSB's approach.

**Recommendation:** The following counterparties should fall within the "bank" category currently proposed as "banks subject to prudential regulation":

- i. Qualifying Central Counter Parties (QCCP): To otherwise impose a more punitive RSF factor on trades with QCCPs than with 'banks subject to prudential regulation' undermines the incentives to centrally clear trades with QCCPs.
- ii. Broker-dealers embedded within banking organizations: CS understands that the Basel Committee intended for the bank category to include all consolidated subsidiaries of banking organizations including embedded broker dealer, but recommend this point be clarified in the final NSFR to avoid ambiguities and inconsistent national implementation.
- iii. Central banks: CS do not believe that the Committee intended to treat central banks as "nonbank financial" counterparties for purposes of the NSFR. CS recommends that the rules should confirm that central banks are included in the "bank" category.
- iv. Insurance companies subject to prudential regulation: There should be appropriate differentiation of prudentially regulated insurance entities from other non-bank financial institutions given the regulations and capital adequacy requirements these entities are subject to.

## 8. Asset quality and liquidity value of equities - Interplay of paragraphs 32a, 34b and 35c

The proposed NSFR rules set out revised RSF factors for equities (50% RSF applied to LCR High Quality Liquid Assets (HQLA) eligible equities, 85% to exchange traded LCR HQLA ineligible equities and 100% to all other equities). CS believe the current haircuts do not appropriately reflect the demonstrated performance of equities under both normal and stressed conditions whereby most major market exchange traded equities:

- i. Can be reasonably monetized under stressed conditions;
- ii. Exhibit positive characteristics of transparency, market structure, depth, performance in stressed liquidity conditions;
- iii. Meet the most critical of the liquid asset attributes specified for many of the level 1 and level 2A assets in the BCBS framework which require either a 5% or 15% stable funding;
- iv. Demonstrate resilience through sustained and vibrant secured funding markets as evident throughout the 2008/2009 stressed conditions; and
- v. Continue to grow as an asset through varied, highly liquid and independent structures and markets. For example: Non-cash collateral stock borrows, collateral upgrades, repo, total return swaps, futures and listed options.

We refer again to the study performed by the IIF and industry providing analytical and empirical support for the liquidity value of equities.



CS believes the RSF factors proposed by the Committee for exchange traded equities do not adequately reflect the liquidity value of the product. They are, in cases, overly conservative and inconsistent with historical equities market liquidity experiences. There is a meaningful difference between the industry's own evaluation of liquidity risk in equities and that implied by the NSFR. Assuming RSF factors incorporate both secured funding market dislocation and price volatility risk, we further believe that too much consideration is given to the price volatility of the product without sufficient consideration for protections built into the marketplace that safeguard banks from this risk.

Funding risk associated with price volatility in exchange traded equities is largely mitigated through a number of operational and legal safeguards offered by the market. First, exchange traded equities are highly liquid, even in times of stress. Banks can liquidate holdings in a very short amount of time, and are therefore not exposed to price volatility over extended periods of time. Second, to the extent that the bank is required to hold the security as part of structure or as a hedge, the price volatility will be mitigated through other transactions in the structure, and liquidity risk will be met through daily variation margin. This is discussed in more detail in section 6. Alternatively, the bank could easily replace the cash equity exposure with similar economics offered in liquid option, swap, or future markets.

While we acknowledge the differences in the treatment of equities between the LCR and NSFR, including the lifting of operational requirement and the cap on Level 2B unencumbered assets, we do not believe these differences are sufficient to capture the different objectives of the two measures. It is our understanding that while the LCR addresses the adequacy of a stock of high quality liquid assets to meet short-term liquidity needs under a specific acute stress scenario, the NSFR targets longer term structural liquidity mismatches. We recognize the goal of simplicity but reiterate that the "liquidity value of an asset depends on the underlying stress scenario, the volume to be monetized, and the timeframe considered" (Jan 2014 guidance for supervisors).

**Recommendation:** Major market, main index equities should receive an RSF factor of 15% including ETF that track a major market main index. All other major market equities traded on an exchange, but not included in the main index, should receive an RSF factor of 50%. All other equity should receive an RSF factor of 85%. An exemption should apply to equity specifically qualifying for treatment as a linked transaction.

"Major market" should be defined as MSCI constituent countries including Korea, Brazil and Taiwan. We would further recommend eliminating national supervisor discretion, noting inconsistent treatment of equities in the LCR across various supervisory bodies creating inconsistent application of the rule across the industry.

## 9. Options and termination rights that shorten asset effective maturity

The existence of options exercisable at the bank's discretion which expire within six months, either embedded or as a standalone instrument, as well as documented termination rights, effectively shorten the maturity of the related asset. Under the proposed NSFR rules there is no recognition of the value of the option or termination right in reducing the asset's residual maturity when determining the RSF factor applicable to the asset.

**Recommendation:** There should be recognition of options exercisable at the bank's discretion and termination rights, either embedded or as separate instruments, in shortening the maturity of assets. The maturity date for assets should be set to the earliest date a put can be exercised or funding terminated (if there is a reasonable expectation for the bank to do so) or on the assessment of the current market environment. The latter includes an analysis of the historical volatility of the instrument and changes of market parameters.



## 10. Options on equity and liability funding instruments (Paragraph 17)

Paragraph 17 sets out the requirements for consideration of options on equity and liability instruments in determining maturity of available stable funding. CS does not support the proposed wording with respect to options exercisable at the bank's discretion, namely "banks should assume that they will be exercised at the earliest possible date unless the bank can demonstrate to its supervisor's satisfaction that the bank would not exercise this option under any circumstances". In CS's view "under any circumstances" is inappropriate when in practice the exercise of a call option on funding is largely dependent on the realized market environment at the time of the call and the impact this has on multiple factors including the value of the call, reputational considerations and the ability to raise new funding in a stable versus stressed environment.

**Recommendation:** CS recommends that the maturity treatment for liabilities be as follows:

- i. *Option is exercisable at the investor's discretion (third party):* The maturity of the instrument is defined as earliest possible exercise date;
- ii. *Option is exercisable at the bank's discretion:* The maturity of these instruments is based on the expected probability from the current market environment. This includes an analysis of the historical volatility of the instrument and changes of market parameters;
- iii. *Option has market-based triggers:* Given that the exercise of the option is automatically triggered by changes in market parameters, the maturity treatment of these options should be based either on the expected probability from the current market environment (see above) or on contractual maturity. The use of the latter is currently required by the Prudential Regulation Authority of the UK for the liquidity reporting of options with market-based triggers (reference: Liquidity FAQs from FSA; 12 March 2010).

## 11. Short term securities (Paragraphs 31 and 32a)

While paragraph 13c of the NSFR proposed rules states that asset tenor should be taken into consideration, and paragraph 26 states that "assets should be allocated to the appropriate RSF factor based on their residual maturity or liquidity value", this principle is not applied in determining the required stable funding for short tenor vs. long tenor securities in banks' trading books. In the case of assets qualifying as HQLA, even very short dated securities (such as Commercial Paper) have the same stable funding requirement as longer dated securities, even though no "roll over" argument applies to such trading securities. Such treatment risks undermining the objective of the NSFR as a structural ratio.

**Recommendation:** To correctly reflect the asset tenor and the liquidity value of short dated (less than six months effective residual maturity) securities, a 0% RSF factor should be applied.

## 12. Gold RSF factor (Paragraph 34c)

Under the proposed NSFR rules gold has been assigned an RSF factor of 85% (previously 50% RSF factor under the drafted 2010 NSFR rules). In CS's view gold is very liquid and treated by the market as a "safe haven" in a period of stress.

**Recommendation:** The RSF factor should be revised back to 50% consistent with the previously issued rules.



## 13. Open and failed trades (Paragraph 35)

The proposed NSFR rules require a 100% RSF factor be applied to all assets that are not captured by other RSF factor categorizations under the rule set (paragraph 35). In CS's view there are certain asset classes where the application of 100% RSF factor does not appropriately reflect the liquidity value of these assets, namely open and failed trades. Between trade and settlement date (usually t+2 or t+3) accounting standards require securities sold to be reflected as Open Trade Receivables on balance sheet. Fails are recorded if a transaction has not settled on the trade settlement date. Securities that have been sold (trade date) prior to a NSFR reporting date with settlement following the NSFR reporting date will be assessed in the NSFR calculation with a 100% stable funding requirement, even in the case where the security sold is a Level 1 asset as defined in the NSFR (which otherwise, if not already sold, would be treated with a 5% RSF factor). The same treatment is applicable to Fails on NSFR reporting dates. This treatment would seem illogical, introduce volatility to the NSFR as a result of standard trade settlement cycles, and not be reflective of any of the stated principals (in paragraph 13).

**Recommendation:** The RSF factors should be determined based on underlying collateral regardless of trade state, i.e., pending settlement/open trade, fail and settled inventory. Such treatment will mitigate volatility in the RSF as a result of the trade settlement cycles.