

Joint Associations – EC DG FISMA Consultation Paper

On Further considerations for the implementation of the NSFR in Europe

The Association for Financial Markets in Europe, the International Swaps and Derivatives Association and the Institute of International Finance (collectively, the ‘Joint Associations’) and their members welcome the concept of a longer term measure of structural liquidity. We strongly support the underlying policy goals of the NSFR, including its core objective of requiring banks to develop and maintain sustainable funding structures. We appreciate the work that the European Commission (‘EC’) is completing in this area and the opportunity to respond to the questions posed in the EC’s consultation paper ‘On Further Considerations for the Implementation of the NSFR in the EU’.

We set out our responses to the questions below and would note that we are undertaking further quantitative work on the impact of the NSFR on capital markets activities which we expect to be able to share shortly. In the meantime, we have inserted placeholders in the text below where we expect the main additional elements of our quantitative analysis to be most relevant. We attach also a table which summarises the changes we are suggesting and a separate annex on trade finance.

By way of background, the Joint Associations have expressed to the BCBS very significant continuing reservations on the current BCBS NSFR standard and its impact on capital markets. These reservations lead to a conclusion that in its current form the NSFR might impair the viability of the Capital Markets Union. But these concerns are not limited to Europe, we urge the Commission to discuss their findings with Basel Committee members with a view to addressing these concerns on a global basis. Whilst the Basel Committee did consult prior to finalising the NSFR, it also introduced a number of new treatments in the final standard which it did not consult on, nor – as it acknowledged¹ – did it have sufficient data to analyse. The Joint Associations make a number of recommendations in this response, but it is important that the NSFR – which is a new and untested regulatory standard – is subject to an appropriate monitoring period, prior to implementation as a Pillar 1 standard, as was the case with the Leverage Ratio.

We have noted the analysis that the European Banking Authority (‘EBA’) has undertaken on the NSFR but we feel that this is incomplete in several important areas. In particular, we believe that any evaluation of NSFR impacts in Europe must consider how banks allocate regulatory capital, funding and liquidity costs

¹ As stated in the Basel III Monitoring Report issued March 2015: “revisions adopted in the revised standard have not yet been incorporated into the NSFR data collection exercise”.

internally within their organisations, as required by BCBS standards². Although exact practices vary by institution, as a general principle banks evaluate internal business units' profitability against all applicable prudential standards; the return on equity of a business unit that produces high regulatory capital requirements, for example, will be evaluated against the regulatory capital required to support that unit's activities. As a result, if capital markets activities in Europe are subject to unrealistic NSFR treatments, every business line within a European capital markets franchise – whether contained within a traditional investment bank or within a more retail focussed institution – will be evaluated against the implied regulatory funding costs of operating such businesses. While it might be thought that a bank with an overall NSFR 'surplus' might just transfer the benefit of such surplus (arising from retail activities, for example) banks have found by experience that cross subsidisation is rarely simple and leads to business and risk management distortions. Moreover, post-crisis, banks are now cognisant of the need to be rigorous about cost allocation and cost discipline - limiting the ability of even an NSFR surplus bank to 'subsidise' the funding costs of a capital markets franchise with, for example retail division ASF surpluses.

NSFR deficits are more likely to arise in connection with capital markets activities than with commercial banking activities. Contrary to what might be thought at first glance, banks that may have NSFR 'surpluses' but are without existing capital markets franchises will almost certainly be unable to meet capital markets demand through expansion into markets businesses. Acting as a market maker in capital markets requires major fixed cost infrastructure investment in technology, trading expertise, risk management expertise, and product development and a bank primarily operating in retail markets would not be able to become a market maker without a costly strategic expansion into such activities. And of course if such a bank were to succeed in expanding such businesses, the same issues that now affect significant market makers would begin to affect it.

While end-users may (or may not) be able and willing to absorb some incremental cost increases, which cannot be the prudential objective of the NSFR, in capital markets services we believe that the larger effect will be a contraction of financial markets activity and increased financial market volatility. If the cumulative effects of NSFR and other requirements are not manageable, a bank will reduce its inventories impairing market liquidity. Less liquid markets in turn

² BCBS, *Principles for Sound Liquidity Risk Management and Supervision* (Sept. 2008), Principle 4, available at <http://www.bis.org/publ/bcbs144.pdf> ('a bank should incorporate liquidity costs, benefits and risks in the internal pricing, performance measurement and new product approval process for all significant business activities (both on and off balance sheet), thereby aligning the risk taking activities of individual business lines with the liquidity risk exposures their activities create for the bank as a whole').

will reduce issuers' access to investors through reduced participation, less efficiencies and increased costs.

More widely, we consider it unfeasible that there would be sufficient market capacity for European banks to issue the requisite amount of long term debt or secured funding to close all ASF shortfalls, estimated at €595bn in the EBA's report. Instead, this again indicates that banks' only option would be to reduce business and capital markets activity.

1. In light of previous consultations, could you describe more specifically, if appropriate, the specific activities, transactions and business models where you have evidence that the implementation of the NSFR could have an excessive impact or important unintended consequences?

There are a variety of activities, transactions and business models where the BCBS NSFR, if implemented in its current design, would likely have excess impacts or important unintended consequences. While we have summarised a number of these impacts and consequences here, we recommend that the Commission undertake a more comprehensive analysis, which the Associations stand ready to assist with, given the limited period of time to prepare comments in response to the consultation.

A. Derivatives funding requirement

We respectfully request that the calibration of the combined derivatives funding required, as envisaged within the BCBS standard, be reconsidered. In particular, the recognition of variation margin received by banks, which has been aligned to the Leverage Ratio, is inappropriate in a long term funding standard. The restriction on the netting of high quality securities variation margin, and the application of the leverage ratio netting rules for cash variation margin, could severely impact the availability of derivatives for end-users. Furthermore, the application of the 20% add-on, in its current form, compounds this issue.

End users, such as corporates and pension funds, use derivatives to achieve a wide range of economic objectives. For example end-users may need to gain exposure to a specific asset class, such as government bonds to hedge interest rate or inflation risk. By failing to differentiate the economic purpose, funding profile and underlying risk exposure of certain derivatives portfolios, the BCBS NSFR may introduce frictional costs for derivatives transactions that are disconnected from actual funding risk considerations.

Existing studies demonstrate that the BCBS NSFR framework, if imposed in its current design, would result in significant additional costs to derivative end-

users.³ These costs are impossible to quantify with precision at this stage, since banks have not yet internalized the costs of, and restructured businesses in response to, the NSFR. However, the unrealistically punitive funding assumptions of the BCBS NSFR, combined with the existing empirical research, provide clear indications of the challenges European end-users will face in these markets. We discuss this issue in more detail in response to *questions three and four*

B. Securities hedging

End users may wish to gain exposure to securities for a variety of reasons. Banks play an important role in providing end-users with this exposure but must hedge the risk of the transaction by purchasing the underlying. For example, an asset manager may require exposure to equity stock, which the bank will provide to the client, by purchasing the stock to hedge the position from a market risk perspective. The calibration of the securities RSF within the NSFR e.g. 5-85% RSF fails to take into account the short-term nature of hedging instruments and the legal and operational provisions in place which ensure the close out price is fully absorbed by the client. We discuss this issue in more detail in our response to *question five*.

C. Securities Market Making

The NSFR, if implemented in its current form, could have multiple unintended consequences for primary and secondary dealing in securities.

Market makers in sovereign securities generally earn very marginal revenues and yet require large balance sheet support. To the extent that a bank, or a capital markets franchise within a bank, is constrained by the NSFR, the bank will have to consider adjustments to its inventory in light of the relative return on equity generated by sovereign market making. Reducing or eliminating primary dealer activity will be a logical solution where the bank's existing revenue from the activity is already low and the incremental costs of NSFR funding charges create an economic incentive to reduce inventory.

Market makers in equities and other securities, such as corporate debt and securitizations, face extremely penalizing long term funding charges (e.g. 50-85% RSF) under the NSFR. Whilst appropriate for the LCR, which is a short-term stress metric, the replication of these haircuts within the NSFR bares no logic and

³ See, e.g., Oliver Wyman, *Impact of NSFR on capital markets: Considerations for implementation* (January 2015), pp. 12-21.

risks jeopardizing the market-making function of banks in equities and corporate debt; a function which is vital for supporting real-economy end users who rely on an active and sizable market for financing. In particular, financial equities and corporate bonds do not qualify as HQLA. Whilst this makes sense in a LCR scenario, it does not logically translate within a long term funding metric. We discuss this issue in more detail in response to *question five*.

D. Asymmetrical treatment of repo and reverse repo

Whilst the calibration of reverse repo is a notable improvement from the previous BCBS standard, the 10-15% RSF imposes a levy which will undoubtedly restrict the ability of banks to provide market liquidity for sovereign and other securities. The International Capital Market Association (ICMA) noted in their recent paper entitled “Impacts of the Net Stable Funding Ratio on Repo and Collateral Markets” that *“the impact of the NSFR, if simply adopted exactly as outlined by the BCBS, would create significant additional stress and weaken the effectiveness of the market. Given the role of repo and collateral markets at the heart of the financial system, this would have negative implications for the smooth functioning of broader financial markets – which would, in turn, lead to increased costs and risk for market participants, including those corporates and governments borrowing to finance their economic needs. At the same time there would also be a detrimental impact on the effectiveness of many of the measures put in place to improve the stability of the financial system, dependent as they are on high quality collateral”*. We discuss this issue in more detail in response to *question six*.

E. Client and firm short coverage

Banks play a vital role in facilitating market liquidity for securities, by executing long and short positions on behalf of both clients and the firm. Short sale proceeds from clients receive no stable funding recognition in the NSFR (0% ASF), regardless of the franchise nature of this business. However, when the bank reverses in stock to cover the short, this receives a punitive 10-15% RSF even though the short sale proceeds fully fund the transaction. Firm short coverage, on the other hand, is an entirely self-funding activity e.g. stock is sold short and the firm reverses in collateral to cover the position. We discuss this issue in more detail in response to *question seven*

F. Segregated client assets

The BCBS NSFR penalizes segregated cash accounts maintained by a bank as an unaffiliated custodian with a 15% RSF factor while giving no ASF recognition to

the client payables that effectively fund such segregated assets. We discuss this issue in more detail in response to *question five*.

G. Off balance sheet collateral swaps

Banks source collateral in a variety of manners; through outright purchase, secured borrowing, rehypothecable margin received or asset exchanges e.g. collateral swaps. Collateral swaps, where the bank receives collateral which is of higher quality than the collateral posted, in a term transaction, receive no ASF value in the NSFR despite being akin to repo. This treatment risks disincentivizing off-balance sheet asset exchange activity, which is a vital component of market liquidity for securities.

2. If a respondent is a bank, could you please quantify the level of your expected shortfall of stable funding, the changes to the composition of your balance sheet that may result from meeting the NSFR and what the impact of these changes may be on the European economy?

[Quantification to be provided by Joint Associations]

3. In light of previous consultations, could you provide substantiated evidence about possible issues caused by the application of the BCBS NSFR standard to derivative transactions at European level and which have not been taken into account at Basel level? If yes, what alternative treatment would you propose for NSFR calculation purposes to deal with the funding needs arising from derivatives transactions? If possible, please provide the impact on your institution of the alternative treatment you propose (as compared to BCBS standards).

We respectfully request that the treatment of derivatives under the NSFR needs to be reconsidered. In particular, we believe that two broad elements of the framework would benefit from further consideration: the recognition of margin received by banks and the 20% required stable funding (RSF) for derivatives liabilities. Without modification, these two components, according to a quantitative impact study (QIS) conducted by the industry⁴, will result in:

⁴ Industry Analysis of the 2015 QIS on the Net Stable Funding Ratio for Derivatives. The analysis was based on the July 2015 submissions of 12 GSIBS and internationally active banks.

- An estimated funding requirement allocation of €767 billion for the entire industry (extrapolated from a €345 billion requirement across 12 banks⁵) – this is approximately 10 times larger than the total amount of actual funding required;
- This translates into an additional annual cost (based on a long term funding cost of between 150-200bps) of between €12-€15 billion.⁶

We believe that unless the rules are revised, the current requirements could severely impact the availability and pricing of hedging products for end users, and negatively impact the development of robust European capital markets. End users use derivatives to hedge their risks and any rules that could constrain the use of derivatives, may: (i) impact end users' ability to hedge their funding and currency risks on both newly issued debt and banks loans; (ii) hinder infrastructure projects capacity to eliminate mismatches between their revenues and liabilities, thus making such assets less attractive and riskier from an investment perspective; (iii) constrict companies ability to hedge their commercial and day-to-day risks resulting in a weakening of their balance sheets, uncertainty in financial performance, and more expensive funding; (iv) obstruct cross-border capital flows; (v) choke the development of a high quality securitisation market; (vi) impede investors looking to hedge the risks inherent in capital markets instruments and their ability to provide sufficient returns to policyholders; and (vii) disrupt flows of foreign direct investment into Europe.

Recognition of margin received by banks

Under the final BCBS framework, provided certain conditions are met, NSFR derivative assets and liabilities are calculated after counterparty netting and deduction of variation margin. However, the rules introduce an asymmetry between posted and received collateral, which creates an oversized stable funding requirement not commensurate with the true funding obligations associated with the underlying derivatives portfolios. More generally, the asymmetrical treatment of variation margin received by banks creates unnecessary frictions with regulator-approved variation margin standards, including those permitted in European markets.⁷

As described below, we believe that there are two narrowly tailored accommodations that should be adopted by the European Commission to better capture the funding value of margin received by banks: (i) recognising the full

⁵ Estimate based on assumption that survey participants represent 45% of total market impact.

⁶ An updated version of the study will be submitted to the EC at a later stage.

⁷ The European Supervisory Agencies RTS covering the risk mitigation techniques related to the exchange of collateral to cover exposures arising from non-centrally cleared over-the-counter (OTC) derivatives

value of all cash variation margin received; and (ii) recognising the full value of all qualifying securities variation margin received, subject to LCR HQLA-based haircuts.

i. Recognition of all cash variation margin received

For derivatives liabilities all (posted) collateral must be netted, whereas received collateral related to derivatives assets can only be netted when it is allowable cash collateral. The NSFR does not recognise a large portion of cash collateral received because recognition is dependent on the Basel III Leverage Ratio (LR) netting criteria. This is particularly problematic because the leverage ratio netting criteria are exposure-based and do not reflect underlying funding risk.

We are concerned because the linkage to the netting criteria leads to extreme results that have no grounding in funding or liquidity risk management. These include:

- The disallowance of collateral as soon as an agreement exhibits a minimal amount of under-collateralisation (where the mark-to-market is not fully extinguished⁸) which introduces significant NSFR volatility that is not related to funding risk.
- The disallowance of collateral received that is not calculated and exchanged on at least a daily basis⁹. This means firms would have to ignore all collateral received from counterparties that post collateral more infrequently; and
- Cash variation margin received that is not in the same currency of the currency of settlement of the derivative contract is disallowed¹⁰.

We believe that all cash variation margin that has been received is a source of funding for the bank. While it is appropriate to discount collateral that has not been received due to settlement timing or a dispute, ignoring the remaining cash balance received from the same counterparty could lead to extreme results. For example, a one euro collateral shortfall could invalidate €3 billion in cash collateral that a bank would use to fund the receivable. This “all or nothing”

⁸ According to Article 25(iv) of the Basel Leverage Ratio Framework, variation margin may only be viewed as a form of pre-settlement payment if a number of conditions are met including: “Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty. <http://www.bis.org/publ/bcbs270.pdf>

⁹ Article 25(ii) of the Basel Leverage Ratio Framework

¹⁰ Article 25(iii) of the Basel Leverage Ratio Framework

criteria will potentially drive huge day-over-day swings in the derivatives NSFR requirement and unnecessarily increases costs.

Moreover, ignoring collateral received purely based on the fact that it is posted on a weekly basis as opposed to a daily basis does not make sense from a funding perspective in the context of a ratio designed to ensure stable funding over a one-year time horizon.

The industry QIS estimates that linkage to the leverage ratio netting criteria will result in a funding requirement of €130 billion to be allocated to derivatives portfolios across the industry.

We, therefore, believe that the treatment of variation margin should be amended so as not to disallow all collateral when there is partial collateralisation. We note that the Basel Committee has reopened the Leverage Ratio rules for consultation¹¹, in which it has proposed to amend the netting criteria under paragraph 25(iv) by no longer requiring the exposure be 'fully' extinguished. We understand the change is designed to allow for the recognition of variation margin received in situations where the intent is to extinguish the mark-to-market exposure (subject to thresholds and minimum transfer amounts) but a margin dispute arises, where any non-disputed margin that has been exchanged can be recognised. But we also believe that margin exchanged should be recognised in situations where the intent is to extinguish the mark-to-market exposure but operational or settlement issues prevent the full amount being transferred. We, therefore, urge the Commission to amend paragraph 429a(3)(d) of the leverage ratio delegated act, to reflect the change to the Basel text.

We also believe that collateral that is posted and calculated on a more infrequent basis than daily should be not be disallowed for the purposes of the NSFR.

Furthermore, regarding the requirement that only cash variation margin received in the same currency of the currency of settlement of the derivative contract is recognised, we support the interim response, as defined in the BCBS October 2014 FAQs, that the currency of settlement means any currency of settlement specified in the derivative contract, governing qualifying master netting agreement (MNA) or the credit support annex (CSA) to the qualifying MNA. However, we understand that the BCBS is currently considering proposing an FX haircut where the currency of the cash variation margin does not match the termination currency of the netting set (i.e. the MNA currency). We believe that no haircut should be applied in cases where the currency of the CVM does

¹¹ <http://www.bis.org/bcbs/publ/d365.pdf>

not match the termination currency of the MNA. In the event a haircut is employed in the leverage ratio framework, we do not believe it would be appropriate to import such a requirement for the purposes of cash variation netting in the NSFR.

ii. Recognition of rehypothecable high quality liquid assets (HQLAs) received

As noted above, the BCBS NSFR limits variation margin received to cash that meets the Leverage Ratio netting standards. In addition to recognising all cash received as eligible to reduce derivatives assets, we also believe that high quality liquid asset securities received as variation margin should reduce a bank's derivatives assets. The BCBS NSFR prohibits a bank from reducing its derivative assets with non-cash HQLA variation margin received from a counterparty, even when the securities received have cash-like liquidity characteristics (e.g., German Bunds or UK Gilts). This means that Bunds or Gilts, which are treated as cash equivalents for liquidity ratio purposes, are treated as if they were illiquid assets with no funding value.

According to the industry study, an estimated funding requirement of €125 billion will be levied on the entire industry as a result of the lack of recognition of HQLAs.

This will likely have a disproportionate negative impact on certain types of end-users – such as pension scheme arrangements (PSAs) – because many typically rely on the ability to post securities as collateral. Those end users may need to reduce their derivatives hedging positions or rely on the repo market to transform their assets into cash collateral, and take on substantial new liquidity risk positions.

We also believe that the NSFR as drafted could undermine the intent of existing European derivatives requirements. PSAs generally allocate only small portions of their portfolios to cash, instead holding higher yielding securities in order to ensure beneficial returns for pensioners, and thus, maximizing efficiencies and returns for policyholders. This has already been recognised by European policymakers in the context of the European Markets Infrastructure Regulation (EMIR), where such entities have been exempted¹², under Article 89(1), from clearing OTC derivative contracts that are objectively measurable as reducing investment risks directly relating to the financial solvency of PSAs. Without an exemption such entities would have to divest a significant proportion of their

¹² Temporarily until August 16, 2017 - http://ec.europa.eu/finance/financial-markets/docs/derivatives/20150605-delegated-act_en.pdf

assets for cash in order for them to meet the ongoing variation margin requirements of central counterparties. Similarly, without changes to the NSFR, the added funding requirements (and associated costs) linked with such derivative exposures collateralised with HQLAs could force PSAs and other types of counterparties that rely on the ability to post securities as collateral to divest their assets for cash.

We believe that the NSFR should give funding credit for rehypothecable HQLA collateral, particularly Level 1 assets (as per the liquidity coverage ratio), with appropriate haircuts.

4. More specifically, regarding the 20% RSF factor applicable to gross derivatives liabilities, do you think it would be possible and appropriate to develop a more risk-sensitive approach that would take better account of the funding risk arising from banks' derivative activities over a one year horizon? In that case, what could be this approach? Do you think that the use of the SA-CRR could provide an appropriate measure? If possible, please provide the impact on your institution of the alternative treatment you propose (as compared to the BCBS standards).

The industry is particularly concerned by the 20% RSF that applies to derivatives liabilities before the netting of posted collateral or derivatives assets. The measure was not included in any BCBS NSFR consultative document prior to appearing in the final standard and hence the industry did not have an opportunity to comment on it. The Associations are uncertain how the BCBS developed this methodology and whether its impact is fully understood.

We understand the measure – which will result in an industry-wide funding requirement of €340 billion to be allocated to derivatives portfolios¹³ and potentially have a negative effect on markets and end users – is designed to capture contingent liquidity risks. However, we believe that such contingent funding risks related to derivatives MTM movements are already adequately captured by the Liquidity Coverage Ratio (LCR) – a stressed measure whose buffer is designed to be drawn down in times of stress. The NSFR is not designed as a stress-based ratio but is instead a requirement designed to ensure that banks fund their activities with sufficiently stable sources of funding.

Furthermore, we believe the size of a gross payable on a bank's balance sheet is an inappropriate indicator of a firm's market contingent funding requirements as it is not related to either: (i) the collateral a firm is required to post to secure its derivative liabilities or (ii) the rehypothecable cash and liquid securities

¹³ As per the Industry QIS.

collateral a firm receives from other counterparties to secure its derivative assets.

Moreover, the industry is continuing to evolve and refine its approaches to managing contingent pledging risk from derivatives. At this time, however, there are no widely accepted methodologies or approaches to quantifying this sensitivity. Banks employ a variety of in-house developed models to establish buffers against this risk, models that are not necessarily amenable to use in the NSFR.

Therefore, the industry believes the current 20% of gross derivatives liabilities cannot be reasonably evaluated or trading actions adapted without further understanding of the basis and intent of the RSF factor. We believe that it does not address some key elements of derivative pledge sensitivity and therefore cannot be practically translated into product pricing and trading actions. In particular:

- i. Gross figures do not address the fact that only collateralized trades will drive contingent funding needs;
- ii. Static NPV positions cannot reflect the sensitivity of one portfolio versus another; and
- iii. There is no temporal aspect which would justify raising long term funding against short term maturing trades.

We, therefore, believe it would be more sensible to explore the possibility of adopting a measure that is more sensitive to future funding risk.

Given the tight timeline to respond to the consultation we have been unable to sufficiently consider and perform a thorough analysis of the potential impact of different alternative methodologies. We, therefore, will continue to consider alternatives to the 20% RSF over the coming months and commit to provide the Commission with commentary and analysis on suitable alternatives.

Given the 20% RSF measure has never been fully assessed and impact tested, nor have any alternatives been adequately evaluated, we believe it is crucial that the Commission defer the adoption of a measure until it has been able to fully assess and observe the potential impacts of different alternatives. This can be achieved by including in the final standard a requirement that the Commission (i) publish a report a year post the entry into force of the regulation examining the contingent liquidity risks associated with variation margin payments in derivatives portfolios; and (ii) empower it to adopt a measure through the use of a delegated act. This would de facto give the Commission a sufficient observation

period in which it can effectively monitor the changes in derivatives funding requirements as well as perform the required impact analysis and assessment of the suitability of alternative approaches.

As a part of this monitoring period we believe the Commission should consider in its analysis methodologies including, but not limited to, the below. However, we reiterate that the industry has not had sufficient time to explore the suitability of the below methodologies, and we aim to provide additional considerations and analysis as to their appropriateness over the coming months.

- Use of the standardised approach to counterparty credit risk (SA-CCR): Using SA-CCR in either of its current forms (for risk-based capital, or as modified for leverage), would not be appropriate, as it is a measure of Potential Future Exposure (PFE) used for credit risk purposes, and not a measure of contingent funding risk. The Associations are willing to explore further whether a modified version would be suitable. Further analysis is required and should thoroughly assess whether the different elements of the SA-CCR framework are appropriate for calculating future funding risk. For example, the 1.4x multiplier is applied to take into account model risk and potentially high correlations of exposures across counterparties – this would be inconsistent with the basic underlying principle of calculating contingent funding risk. Also, the measure does not recognise that collateral inflows from one counterparty can fund collateral outflows to another. In addition, the appropriateness of including uncollateralised liabilities in the MTM component should be considered in more detail. We believe an approach based on SA-CCR would need very careful consideration and further analysis given its potential complexity.
- Use of a historic look-back approach (HLBA): Using the HLBA approach as detailed in the LCR in its current form would not be suitable, as such a measure is a stressed outflow for a one month horizon, defined as the largest absolute collateral flow observed on 30 consecutive days. Moreover, a HLBA should not be based on the largest absolute collateral flow. We would also caution that an inherent flaw in any HLBA is that it is backward-looking and restricts the ability of banks to actively manage their funding profiles on a reactive basis.
- 20% Floor: This simple measure would involve applying the 20% RSF on derivatives liabilities to be applied as a floor. Under the floor approach the total derivatives RSF requirement would be the larger of (i) the 20% of liabilities and (ii) the receivable and IM RSF requirements. The floor

would ensure firms have at least a minimum amount of RSF for derivatives portfolios.

We reiterate that further analysis of the 20% RSF is important and makes sense for Europe at a time when it is focused on recovery and on developing the CMU. However, the same comments are valid globally and – because international consistency remains very important – the Associations urge the EC and European members of the Basel Committee work with their global peers to find more appropriate approaches and to take the changes that result from the Commission’s final analysis back to the Basel Committee to obtain the necessary revisions of the global NSFR. The liquidity metrics are very new compared to the approaches to capital requirements, and it is right that they should be refined where necessary to find approaches that are more reflective of the liquidity and funding risks that regulators are attempting to address.

5. If you propose special treatment for specific activities (e.g. hedging instruments, client clearing...) how would you define these activities?

Hedging Instruments

In terms of the definition of hedging activity, it may be useful to consider two particular instances as follows:

- a) the bank provides a client with exposure to an underlying security through a derivative contract, and funds the purchase of liquid securities as a market risk hedge to the derivative.
- b) a client provides initial margin which a bank then uses to purchase securities as a market risk hedge to the client facing derivative;

Instance (a):

We believe that, in order to reflect more accurately the actual liquidity and funding risk related to hedge positions stemming from derivatives, the NSFR should assign specific RSF factors taking into account the maturities of the derivatives they are hedging.

In general, the BCBS NSFR is sensitive to the relative maturities of assets and liabilities. In fact, for non-derivative asset and liabilities, remaining maturity is one of the principal drivers of RSF and ASF factors, respectively. The maturity of derivatives positions is not taken into account in the BCBS NSFR, however. As a result, the BCBS NSFR assumes that all derivatives require the same level of funding support, which diverges from ALM principles.

This lack of ALM risk-sensitivity could be addressed by adjusting the RSF factors of derivatives securities hedges. For example, where the bank maintains a security as an explicit hedge for a related derivative position (as demonstrated in accordance with regulatory standards), the RSF factor of that hedge security could be adjusted by the remaining maturity of the underlying derivative, using the three maturity buckets that generally apply in the BCBS NSFR, multiplied by the RSF factor that would otherwise apply to the security. To illustrate:

Remaining contractual maturity of derivative	Adjustment	Level 1 security hedge factor RSF	Level 2a security hedge factor RSF	Level 2b security hedge factor RSF	Non-HQLA security hedge factor RSF
0-6 months	15%	0.75%	2.25%	7.5%	12.75%
6-12 months	50%	2.5%	7.5%	25%	42.5%
12 months +	100%	5%	15%	50%	85%

To the extent that a derivative is in a larger portfolio of positions, the weighted average of the portfolio could be used to determine maturity. To avoid arbitrage and ensure a minimum level of RSF, derivatives with no explicit maturity date could be assigned a minimum maturity of three months, or some other amount that could be calibrated after full empirical review.¹⁴

This approach has a number of clear advantages. First, it introduces greater ALM sensitivity into derivatives transactions by building on the same maturity bucket approach that is otherwise used throughout the NSFR, ensuring methodological consistency.

Second, it builds on a much longer BCBS tradition of calibrating derivative prudential standards relative to maturity and asset class. While they are subject to ongoing development and implementation, Potential Future Exposure (“PFE”) calculations for regulatory capital purposes have long used a scaled approach that considers derivative maturity and asset class.

Finally, this approach is relatively simple, conceptually clear, and easy to implement and monitor through supervisory mechanisms.

Instance (b):

In this case the BCBS NSFR fails to consider the funding value of initial margin received by banks. The BCBS NSFR assigns no ASF value to rehypothecable initial margin received from counterparties, even when such initial margin can be used as an actual funding source by a bank under applicable regulations.

¹⁴ A three-month minimum standard would align with similar assumptions in the Fundamental Review of the Trading Book (FRTB). See FRTB, ¶ 149.

We agree, in principle, that when considered in isolation initial margin is not a stable funding source for a bank's entire balance sheet; however, the relevant question is whether it is an appropriately matched funding source for assets held by the bank as derivatives hedges that are, in reality, actually funded by the initial margin, and which will be sold by the bank when the derivative position closes out.

One weakness of the BCBS NSFR is that it assumes that all assets require long-term funding, whereas in reality the funding requirements for a particular asset depend on the purpose for which the bank holds the asset. Clearly, assets held by the bank for long-term investment require long-dated funding support; similarly, market-making positions in less liquid securities also present funding risk. When securities are held as market risk on derivatives hedges, however, the funding requirements of such assets depend on the underlying derivative. Derivatives hedges supporting a one-month swap require one month of stable funding, as they will be liquidated at the termination of the swap; hedges supporting a one-year swap require one year of funding. There are legal and operational provisions in place to ensure that price volatility, upon the sale of the stock, is absorbed by the client.

When available for reuse by a bank, initial margin is uniquely well-suited to match funding sources with funding requirements. The bank receives the initial margin at the outset of the derivative transaction, which corresponds with the need to purchase the hedge security, thus matching the start of the funding requirement with the start of the available funding. To this effect, we suggest there is no funding requirement for securities held as a market risk hedge, where the client fully funds the purchase of the hedge through initial margin.

As we discuss in question 7, we will be undertaking further work on the definition of the specific activities in which we recommend special treatment which we expect to be able to share with the European Commission.

Segregated assets

One of the core functions of regulated financial institutions is to provide retail customers, institutional investors and sovereign entities with access to financial markets, including by providing cash management services and by acting as a custodian for segregated client assets. This role has long been recognized in European law and regulation, and the special treatment of segregated client assets is codified in banking standards.

The BCBS NSFR penalises segregated cash accounts maintained by a bank as an unaffiliated custodian with a 15% RSF factor while giving no ASF recognition to the client payables that effectively fund such segregated assets. This penalty is particularly illogical when one considers that a bank could reduce its RSF by simply transforming segregated cash positions, where permitted by applicable regulation, into Level 1 securities, which receive only a 5% RSF. Ironically, while the real-world funding requirements of these two positions are identical (both are directly client-funded), the NSFR would impose a three-time-greater penalty on managing such segregated assets in cash form, even though cash, by definition, presents lower liquidity risk in the event of large and sudden customer redemptions.

As with primary dealing in sovereign securities, banks typically earn very small returns from business lines involving large pools of segregated client assets. Under the BCBS NSFR, however, banks would pay a penalty for providing client asset segregation services through the funding costs of long-term debt necessary to generate ASF in support of these positions. Not only is this outcome illogical from an ALM perspective, it would weaken the portal of market access across all broker-dealer and client-clearing platforms that require client asset segregation.

Neither the BCBS NSFR nor the EBA Report ever considered a specific treatment for segregated client assets. We recommend that a 0% RSF charge apply to such positions. Segregated customer assets can be clearly identified on a bank's balance sheet under applicable regulatory standards (which may vary by jurisdiction within the European Union).

The January 2015 report the GFMA and IIF commissioned from Oliver Wyman on the potential market impact of the NSFR found that there were over €100bn of segregated assets held for clients globally which would need to be funded long term.

Applying our Joint Associations assumption of long term funding costs of 150 – 200 bps this would result in additional costs of over €15bn.

[Joint Associations Likely to follow with further quantification].

Client Clearing

Client clearing firms are impacted by the BCBS NSFR in two ways. First, as summarized above, these firms may have segregated assets on their balance sheets related to client-cleared positions. Even though clients directly fund these positions—the bank's balance sheet serves as a custodian or intermediary—the BCBS NSFR would nonetheless impose funding charges on these positions, placing a regulatory tax on market access.

Second, the BCBS NSFR may potentially result in RSF charges in connection with initial margin posted by the bank to CCPs on behalf of client positions. Even though these charges do not appear to be contemplated by the BCBS NSFR, European implementation may inadvertently result in funding charges if a client-clearing exemption is conditioned on the bank acting as an “agent,” given the diversity of clearing models in Europe.

The BCBS NSFR contemplates that a 0% RSF will apply to initial margin posted by the bank to a CCP when acting in a client clearing capacity.¹⁵ The U.S. proposed rulemaking to implement the BCBS NSFR has somewhat confused this simple principle by conditioning the 0% RSF on a requirement that the client-clearing bank act in an “agent” capacity.¹⁶ There is no “agent” limitation in the BCBS NSFR, and the legal form of client-clearing structures varies by jurisdiction within Europe. We recommend that the 0% RSF condition be defined solely with reference to European client clearing regulations, rather than layering in additional “agent” or similar requirements.

Accordingly, for purposes of the European NSFR, there are two relevant accommodations for client clearing businesses. The first is to apply a 0% RSF to any segregated assets held by a bank in its client clearing capacity, as summarized in the preceding section. The second is to clarify that a 0% RSF will apply to *all* initial margin posted by the bank in client clearing transactions, irrespective of the legal form of the client clearing arrangement.

[Joint Associations to follow with quantitative analysis].

6. In light of previous consultations, could you provide substantiated evidence about possible issues caused by the application of the BCBS NSFR standard to short term transactions with financial institutions at European level and which have not been taken into account at Basel level? If yes, what alternative treatment would you propose for NSFR calculation purposes to deal with the funding needs arising from short-term transactions with financial institutions? If possible, please provide the impact on your institution of the alternative treatment you propose (as compared to the BCBS standards).

The Joint Associations recommend that further consideration is given to the ASF and RSF factors assigned to repo transactions under the proposed framework.

Repo transactions play a vital role within the financial system and underpin the functioning of primary and secondary capital markets in addition to the shorter-term money markets. More broadly, the repo market promotes the more efficient

¹⁵ BCBS NSFR FN 18.

¹⁶ U.S. NSFR Proposed Rule, Section 107(b)(7).

use of available tradeable stock for collateral management. Owing to the size of the European repo market, small asymmetries in ASF and RSF factors (e.g. 10-15%) will have a very large impact. For further detail on the role of the repo markets and the likely impact of the NSFR, we would refer to the recent report from International Capital Market Association¹⁷.

Although not explicit, we understand the policy objective of introducing asymmetry is to penalise bank interaction with the unregulated financial sector such as hedge funds. Quite aside from questioning whether the NSFR is the appropriate regulation to achieve this (capital requirements would seem to be the best place to deal with exposures), no evidence has been provided by the Basel Committee as to what is the 'right' amount of interaction, or how the proposed asymmetry in the NSFR would deliver it. We would note that repo business is a high volume and low margin business which is already shrinking on account of the leverage ratio, and may be contributing to a decline in liquidity in the financial markets. The proposed treatments under the NSFR are therefore particularly disproportionate and at risk of unintended consequences.

As an alternative to the current approach, the Joint Associations would suggest that the asymmetry is removed, or re-proposed with supporting analysis as to the intended outcome and an assessment of whether it would deliver it. As an inferior alternative, the asymmetry of ASF and RSF factors for repo transactions could be applied only to agreements with non-regulated financial entities.

[Joint Associations to follow with quantification of impact of current approach]

7. If you propose special treatment for specific activities (e.g. client's short facilitations activities, prime brokerage business...), how would you define these activities?

As previously communicated to the Commission, the Joint Associations do propose specific treatments for certain activities, including:

1. Client short facilitation transactions;
2. Client short facilitation transactions in derivative form;
3. Firm short transactions;
4. Segregated client assets; and,
5. Client clearing transactions

We will be undertaking further work on the definition of these activities which we expect to be able to share with the European Commission.

¹⁷ International Capital Market Association, ICMA European Repo and Collateral Council 'Impacts of the Net Stable Funding Ratio on Repo and Collateral Markets', March 2016.

The Associations have previously submitted materials explaining the ALM features of certain capital markets transactions that, we believe, are inappropriately calibrated within the BCBS standard. Please see annexes 3 to 6 for further details. We continue to support the recognition of these transactions.

In this submission, we have provided additional discussion regarding derivatives funding, derivatives hedging, segregated client assets and client clearing activities. In addition to these specific areas, we think that the Commission should consider modified treatment in the European NSFR for client short transactions, SME access to capital markets and collateral swaps.

Client short transactions:

Short transactions play a vital role in the operation of liquid and dynamic capital markets. For NSFR purposes, however, a bank facilitating client shorts is burdened with a significant penalty. Although the bank receives short sale proceeds from a client, which provide an effective funding source for short-dated client-related assets, this liability receives 0% ASF recognition. However, when the bank pledges cash collateral to borrow securities, a 15% RSF requirement is applied to the cash collateral as a “loan” to a financial institution.

The BCBS NSFR appears to impose this asymmetry, at least in part, in response to concerns about underlying liquidity risk in such short facilitation transactions. Subsequent to finalisation of the BCBS NSFR, however, BCBS separately undertook a new rulemaking to address liquidity risk in securities lending.¹⁸ Under this separate framework, a bank pledging cash collateral to a securities lender would be required to obtain representation from the securities lender that the cash collateral is being reinvested in short-dated, highly liquid investments, thus minimizing (and possibility eliminating) the risk that a securities lender would be unable to easily unwind a large securities lending portfolio.

Accordingly, we recommend that the Commission consider applying a 0% RSF to cash collateral provided to securities lenders for purposes of covering client shorts, or otherwise recognizing appropriate adjustments in the European NSFR that will avoid disruptions to client short activities.

The illustrative analysis that the Joint Associations commissioned from Oliver Wyman suggests that the BCBS standard could double the cost of short transactions (from around 25bps to 50 bps).

[Joint Associations to follow with further quantitative analysis].

¹⁸ BCBS 340 (Nov. 2015).

SME access to capital markets

In its current design, the BCBS NSFR imposes meaningful barriers on SMEs' ability to access capital markets. SME securities, by definition, generally do not qualify as Level 2B assets, since SME issuers are not among the largest corporates whose securities are included in major indices. As a result, SME debt and equity securities will either receive 85% or 100% RSF factors, in contrast to the 50% RSF factor that applies to large companies' securities.¹⁹ This penalty on SME securities will incentivize banks to withdraw support for market-making in such securities, and in particular for debt securities which generally require bank balance sheet inventories.

This barrier to access could be mitigated, in part, by reasonable accommodations in the European NSFR that would be consistent with prudent ALM at banks. To the extent investors seek exposure to European SME securities through derivatives with banks acting as intermediaries, the NSFR could recognise offsets between initial margin funding received by banks and the bank's balance sheet positions of SME securities, which serve as market risk hedges. Similarly, to the extent that SME securities are eligible to serve as collateral in repurchase agreements, adjustments to RSF factors that reflect funding capacity would allow banks to match funding sources with funding requirements. Finally, as discussed in greater length in Part C below, eliminating RSF penalties on segregated assets would indirectly support SMEs' market access, since investors in such securities would not face penalties for maintaining cash positions at broker-dealers.

Collateral swaps

Collateral swaps, where a bank is upgrading lower quality assets for higher quality Level 1 HQLA, receive full value in the LCR if maturing less than thirty days. For example, if RMBS (Level 2B) is swapped for 0% risk weight government bonds (Level 1) for greater than one year, this would receive 0% outflow in the LCR and the government bonds would be recognised as Level 1 HQLA in the liquid asset buffer. In the NSFR however, the collateral lent (in this example, RMBS) is considered "encumbered" for more than one year requiring 100% long term funding, and no funding value is assigned to the Level 1 asset received, even where the asset is eligible as HQLA in the liquid asset buffer. This

¹⁹ BCBS NSFR ¶¶ 42(c) (85% RSF applies to non-HQLA debt securities with greater than one year maturity and exchange traded equities; 43(c) (100% RSF applies to non-exchange-traded equities); 40(a) (50% RSF applies to Level 2B securities, including debt and equity securities of major corporates).

incentivises banks to reuse the asset received in the collateral swap, by putting it out on repo for instance for greater than one year (100% ASF); thereby potentially increasing systemic risk.

To support these transactions, which in turn support the market liquidity of assets in Europe, we recommend the appropriate value is reflected in the NSFR, whilst respecting the BCBS NSFR maturity buckets and encumbrance framework.

We would welcome the opportunity for continued engagement with the European Commission on these areas over the coming weeks and look forward to being able to share the additional quantitative work that we expect to complete shortly

Yours faithfully



Michael Lever
Managing Director &
Head of Prudential Regulation
Association for Financial Markets in Europe
(AFME)



Mark Gheerbrant
Head of Risk and Capital
International Swaps and
Derivatives Association, Inc.
(ISDA)



David Schraa
Regulatory Counsel
Institute of International Finance (IIF)

Annex 1 Table of Main Suggested Changes

Current Treatment	Suggested Treatment
High quality government securities – 5% RSF	0% RSF for high quality sovereign securities to support market liquidity
Reverse repo with financial institutions – 10 to 15% RSF	0% RSF for transactions with regulated financial institutions
Derivatives – Recognition of margin received	<ul style="list-style-type: none"> - Recognition of all cash variation margin received - Recognition of the full value to all qualifying securities variation margin received, subject to LCR HQLA based haircuts - Reflection of the value of re-usable initial margin
Derivatives – 20% add-on for liabilities	<p>Deferral of adoption of a measure until a full assessment and observation of potential implications of alternatives can be assessed. Possible alternatives might include:</p> <ul style="list-style-type: none"> - A modified version of SA-CCR - A Historical Look Back Approach - A 20% Floor
Short Coverage – 0% ASF for short sale proceeds from client, but 15% RSF for collateral provided to securities lenders	Application of 0% RSF to cash collateral provided to securities lenders for the purpose of covering client shorts.
Segregated Client Assets - 15% RSF, no ASF recognition to associated client payables that fund such assets.	Elimination of asymmetry to reflect 'pass through' nature of business.
Client Clearing – Scope for interpretation in current standard.	Application of a 0% RSF to any segregated assets held by a bank in its client clearing capacity and/or clarification that a 0% RSF will always apply to initial margin posted by the bank in client clearing transactions.
Securities hedging	<p>0% RSF for securities hedging an initial margin client facing derivative</p> <p>Maturity adjustment for securities hedging all other client facing derivatives (see table in question five).</p>
Collateral Swaps	ASF recognition for collateral swaps greater than one year where the bank receives higher quality collateral

Annex 2 - Trade Finance

We welcome the EBA's proposal on export/import loans which recognises the ST nature of the trade finance by applying 10-25%. However, there are still a number of areas in which clarification is needed and there are possible impacts that could significantly impede trade finance activities.

Export/Import Loans

1. Trade finance loans are extended to corporate as well as financial institution clients. We would like the EC to provide further clarification and confirm whether RSF for export/import loans is based on a product type only or whether it takes into account the type of counterparty.
2. While unsecured ST funding to FIs attracts a maximum 15% RSF, would ST export/import loans to FIs attract between 10-25% RSF? The latter would suggest that ST trade finance loans carry a higher liquidity risk than the unsecured loans, therefore our proposal would be that trade finance loans to FIs should not attract more than the ST funding RSF of 15%.

Contingent Trade Finance Products

3. The RSF factors for off-balance sheet trade finance instruments were harmonised in the EBA's report. We also note the introduction of maturity based RSF factors for these facilities which was not in place in NSFR previously. There are three main areas we would like the EC to consider which we believe result in unduly punitive treatments:

a) EBA proposes a 5%/10%/15% RSF for <6, >6<1y and >1y maturities of letter of credit and bank guarantee facilities. However, committed credit and liquidity facilities regardless of maturity continue to attract a 5% RSF (*Given the EBA's NSFR report did not comment on committed facilities, we assumed the Basel RSF would be applied*).
Given trade finance facilities are uncommitted in nature, it is not clear why higher RSF factors are applied to trade finance facilities than to the committed facilities?

b) Bank guarantees are used to essentially insure a buyer or seller from loss or damage due to non performance by the other party in a contract. Consequently, the drawdown rates are significantly lower compared to letters of credit.

As a result, it is unclear why the RSF for bank guarantees would be as high as for the letters of credit.

c) The EBA has introduced an application of RSF based on the maturity of the trade finance facilities.

Not all off-balance sheet trade exposures will necessarily convert to on-balance sheet exposures during the lifetime of the facility. For trade related contingencies, including commercial letters of credit, a full presentation of documents is needed before a related payment to the

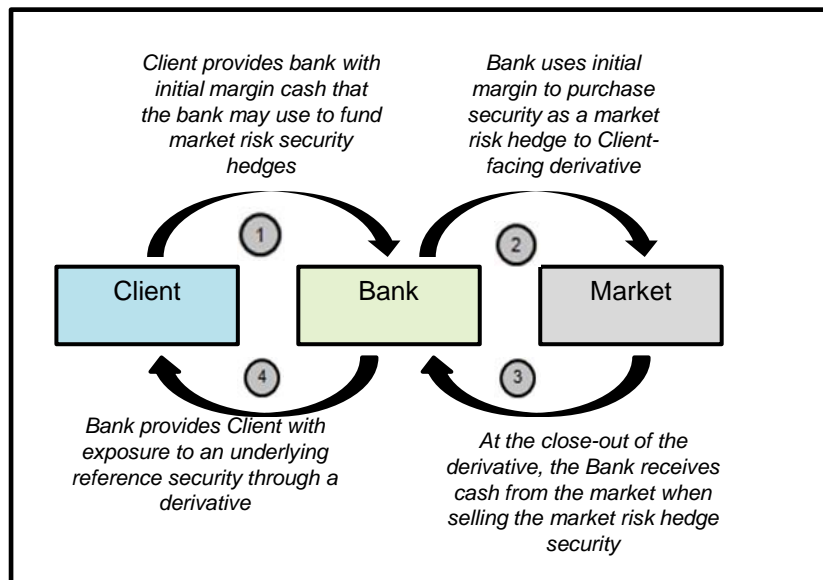
exporter/seller is confirmed and the instructing party's (i.e., the bank's client) account will be debited. As such, long-term funding is not necessary for these types of transactions and would not add to the security of OBS trade lending to the real economy.

Instead, a high amount of required stable funding set aside for these products would increase the liquidity premium applied by an institution to this type of lending and would ultimately lead to a reduction in availability or an increase in pricing to companies who utilize trade finance in their business operations. As such, we believe these types of products ultimately warrant an appropriately low RSF.

Further supporting evidence on this can be found in ICC Trade Register Report 2015 (attached).

Annex 1 : Linked Transaction - Derivatives hedges / initial margin

Client-financed market risk hedges result in interdependent assets and liabilities



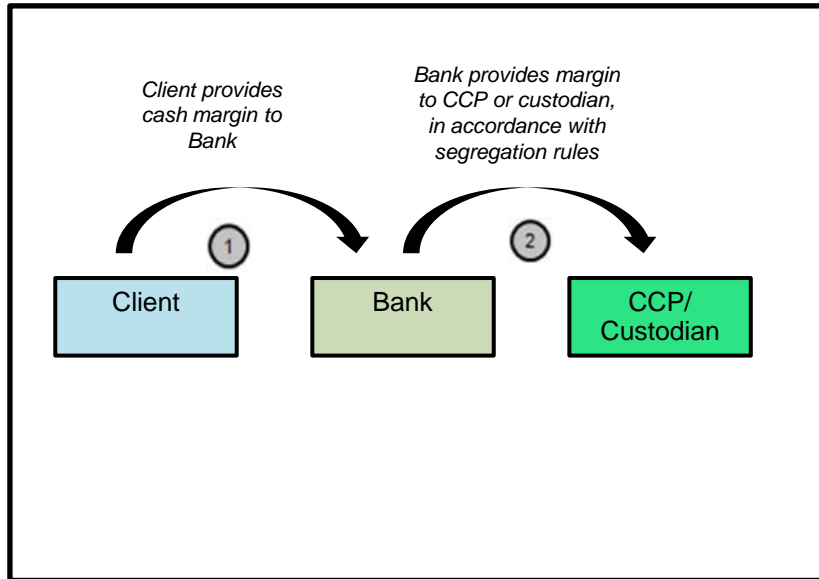
Definition of Linked Activity

1. Assets and liabilities clearly identifiable
2. In practice, the maturities of assets and liabilities will match
3. Principal amount of the client financing (liability) will equal principal amount of the hedge security (asset)
4. Bank is acting as a “pass-through unit” to channel the initial margin into the hedge security
5. Bank’s liability is facing the Client; Bank’s asset counterparty is the security issuer
6. Client initial margin will be returned, so the liability will not remain due while the asset remains
7. Principal payment flows from the asset (sale of the hedge security) are used to cover the liability (return of cash to the Client)
8. The liability funds the cash to purchase the market risk hedge security and no other assets
9. No inappropriate incentives – the Client’s initial margin covers the Bank’s funding needs

- ① Bank Liability
 - ② Bank Asset
 - ③ No balance sheet position until close-out of the derivative; in substance, this leg only represents the monetization of Step 2.
 - ④ Client-facing swap providing exposure to underlying security
- } Interdependent asset and liability

Annex 2 : Linked Transaction - Client clearing

Interdependent assets and liabilities directly support client clearing at CCPs



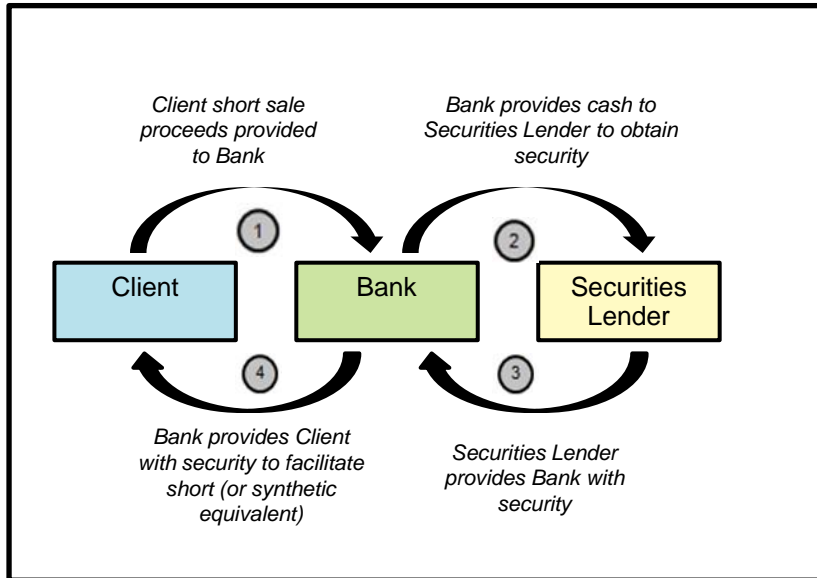
1 Bank Liability } Interdependent asset and liability
 2 Bank Asset }

Definition of Linked Activity

1. Assets and liabilities clearly identifiable
2. In practice, the maturities of assets and liabilities will match, since the bank closes out the liability when it receives margin from the CCP or custodian and returns cash to the Client
3. Cash received from the Client (liability) will equal the margin posted to the CCP or custodian (asset)
4. The Bank is acting as a “pass-through unit” to facilitate the Client’s cleared transaction
5. The Bank’s liability is facing the Client, whereas the Bank’s asset is facing the CCP or custodian (different counterparties)
6. The liability will not remain on the balance sheet when the asset is removed
7. Principal payment flows from the asset (return of the cash to the Bank) are used to cover the liability (return of the cash to the Client)
8. The liability funds the margin posted to the CCP or custodian and no other assets
9. No inappropriate incentives – the liability and asset are directly related to client clearing, and a client asset segregation regime applies

Annex 3 : Linked Transaction - Client short facilitation

Interdependent assets and liabilities avoid incremental funding requirements for banks



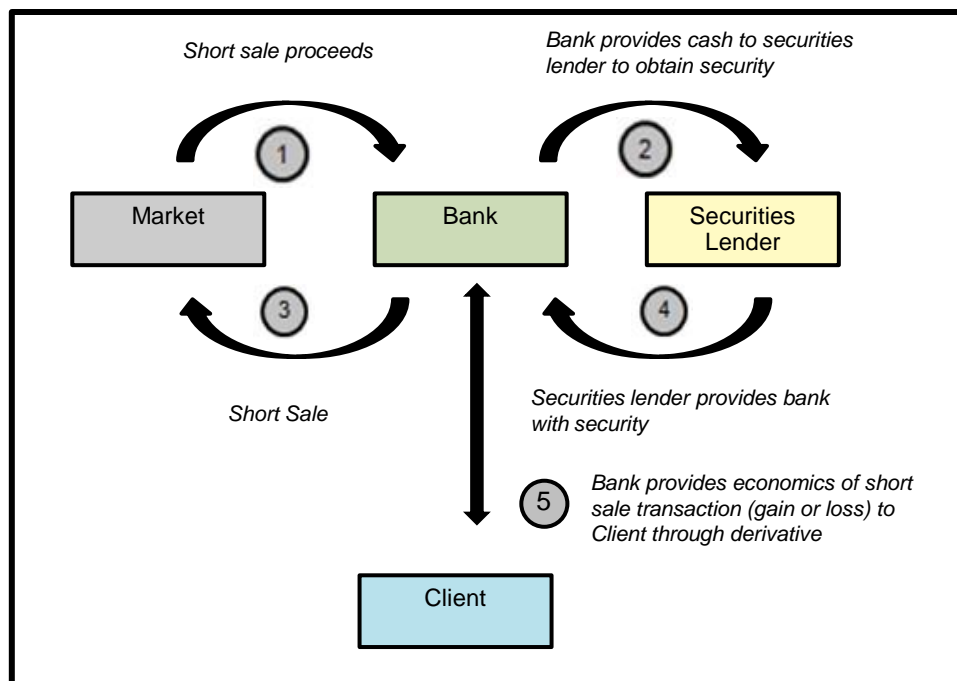
- 1 Bank Liability
 - 2 Bank Asset
 - 3 Borrowed security is not a Bank asset, only the cash provided (Point 2) is an asset
 - 4 Excluded from balance sheet assets under accounting rules
- } Interdependent asset and liability

Definition of Linked Activity

1. Assets and liabilities clearly identifiable
2. In practice, the close out of the asset and liability maturities will match
3. Principal amount of the client short sale proceeds (liability) may not exactly equal the principal amount of the cash provided to the Securities Lender (asset), but only the matching amount is deemed to be interdependent
4. The Bank is acting as a “pass-through unit” to provide the borrowed security to the Client
5. The Bank’s liability is facing the Client, whereas the Bank’s asset is facing the Securities Lender
6. The close-out of the customer short and the return of the security will occur simultaneously
7. Principal payment flows from the asset (return of the cash to the Bank) are used to cover the liability (return of the cash to the Client)
8. The liability funds the cash to the Securities Lender and no other assets
9. No inappropriate incentives – the liability and asset are directly related to client facilitation

Linked Transaction: Client short facilitation in derivative form

Economics of client short transactions can also be provided in derivative form



- ① Bank Liability
 - ② Bank Asset
 - ③ Balance sheet impact is summarized in Point 1
 - ④ Borrowed security is not a Bank asset, only the cash provided (Point 2) is an asset
 - ⑤ Client-facing derivative providing exposure to underlying security, which may be a Bank asset or liability, but is not itself an interdependent asset or liability
- } Interdependent asset and liability

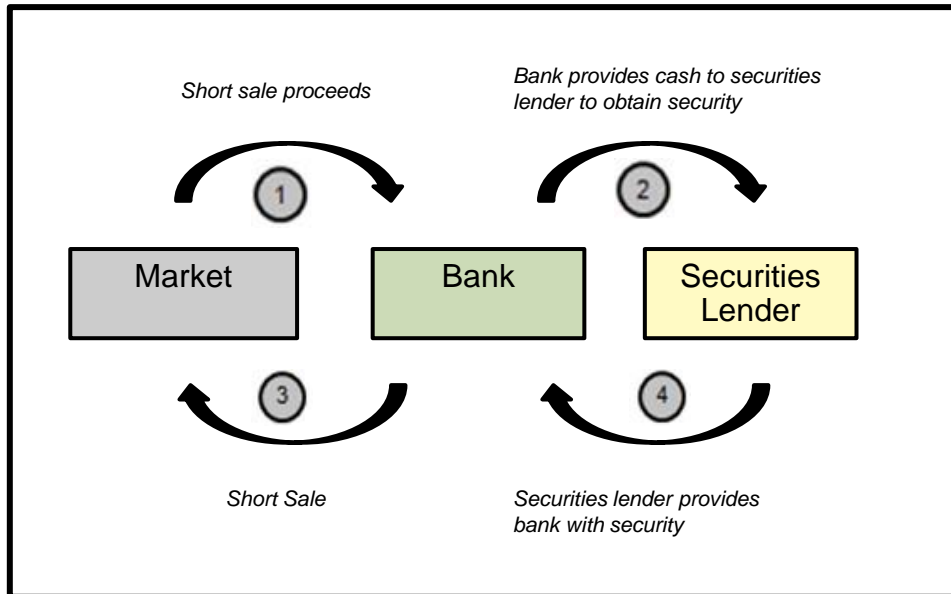
Definition of Linked Activity

1. Assets and liabilities clearly identifiable
2. In practice, the close out of the asset and liability maturities will match
3. Principal amount of the client short sale proceeds (liability) may not exactly equal the principal amount of the cash provided to the Securities Lender (asset), but only the matching amount is deemed to be interdependent
4. The Bank is acting as a “pass-through unit” to provide the economics of the short sale transaction to the Client
5. The Bank’s liability is facing the Client, whereas the Bank’s asset is facing the Securities Lender; the Client-facing derivative may be an asset or a liability, but is not the interdependent asset/liability for purposes of Paragraph 45
6. The close-out of the short position and the return of the security will occur simultaneously
7. Principal payment flows from the asset (return of the cash to the Bank) are used to cover the liability (return of the cash to the Market)
8. The liability funds the cash to the Securities Lender and no other assets
9. No inappropriate incentives – the liability and asset are directly related to client facilitation

Linked Transactions: Firm shorts

Funding and liquidity profile of firm shorts very similar to client short facilitation

Definition of Linked Activity

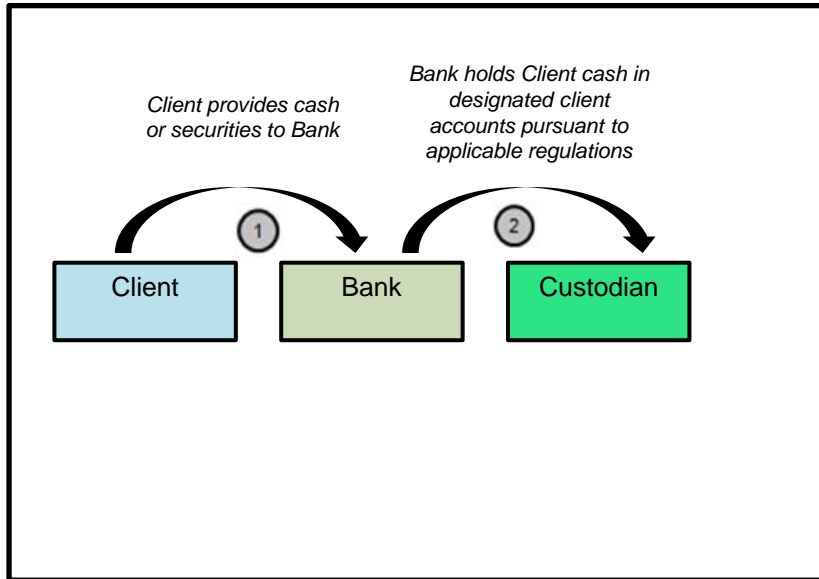


- 1 Bank Liability
 - 2 Bank Asset
- } Interdependent asset and liability
- 3 Balance sheet impact is summarized in Point 1
 - 4 Borrowed security is not a Bank asset, only the cash provided (Point 2) is an asset

1. Assets and liabilities clearly identifiable
2. In practice, the close out of the asset and liability maturities will match
3. Principal amount of the short sale proceeds (liability) may not exactly equal the principal amount of the cash provided to the Securities Lender (asset), but only the matching amount is deemed to be interdependent
4. The Bank is acting as a “pass-through unit” to match the liability cash flow with the asset cash flow
5. The Bank’s liability is facing the Market, whereas the Bank’s asset is facing the Securities Lender
6. The close-out of the short position and the return of the security will occur simultaneously
7. Principal payment flows from the asset (return of the cash to the Bank) are used to cover the liability (return of the cash to the Market)
8. The liability funds the cash to the Securities Lender and no other assets
9. No inappropriate incentives – the liability and asset are directly connected to one another

Annex 4 : Linked Transaction - Segregated client assets

Interdependent assets and liabilities directly support client asset segregation practices



Definition of Linked Activity

1. Assets and liabilities clearly identifiable
2. In practice, the maturities of assets and liabilities will match, since the bank closes out the liability when it receives cash from the custodian and then returns cash to the Client
3. The amount of cash posted to the custodian bank (asset) will equal the corresponding amount of cash received from the Client (liability)
4. The bank is acting as a “pass-through unit” to facilitate the segregation of Client cash
5. The Bank’s liability is facing the Client, whereas the Bank’s asset is facing the custodian (different counterparties)
6. The liability will not remain on the balance sheet when the asset is removed
7. Principal payment flows from the asset (return of the cash to the Bank) are used to cover the liability (return of the cash to the Client)
8. The liability funds the cash to the custodian and no other assets (per regulatory requirements)
9. No inappropriate incentives – the liability and asset are directly related to client business and are subject to a specific regulatory regime

