

January 5, 2016

Secretariat of the Basel Committee on Banking Supervision Bank for International Settlements CH-4002 Basel, Switzerland

# **Re:** Comments in response to Consultative Document: *Haircut floors for non-centrally cleared securities financing transactions*

Ladies and Gentlemen:

The Global Financial Markets Association (GFMA)<sup>1</sup> appreciates this opportunity to comment on the November 2015 Consultative Document published by the Basel Committee on Banking Supervision (BCBS) entitled *Haircut floors for non-centrally cleared securities financing transactions* (Proposal). The Proposal adopts the haircut floors developed by the Financial Stability Board in 2014 and included in the FSB's report *Strengthening Oversight and Regulation of Shadow Banking – Regulatory framework for haircuts on non-centrally cleared securities financing transaction*<sup>2</sup> (FSB Report) and proposes minimum haircuts for securities financing transactions (SFTs) and unsecured loan capital treatment for SFTs that fail to meet the minimums.

While the GFMA generally supports the underlying policy goal of the Proposal—to prevent regulated banks from providing unsustainable financing to unregulated counterparties through insufficiently collateralized lending arrangements—we have some concerns and questions about its integration into the overall capital framework. In particular (and as discussed more fully below), we note that the Proposal envisions a novel, untested form of SFT regulation that relies upon application of computationally complex formulas to a wide range of transactions and a severe, single-sanction penalty that is unscaled to the degree of non-compliance. Moreover, we believe the Proposal is unclear in many areas as to whether and, if so, how the haircuts would apply to certain netting sets. In addition, due to shortcomings in the calculation methodology, we believe that mechanistic application of haircut minimums will result in anomalous or unintended outcomes in many cases.

<sup>&</sup>lt;sup>1</sup> The GFMA represents the common interests of the world's leading financial and capital market participants, and speaks for the industry on the most important global market issues. GFMA's mission is to provide a forum for global systemically important banks to develop policies and strategies on issues of global concern within the regulatory environment. GFMA brings together three of the world's leading financial trade associations: Association for Financial Markets in Europe (AFME) in London and Brussels, the Asia Securities Industry & Financial Markets Association (ASIFMA) in Hong Kong and the Securities Industry and Financial Markets Association (SIFMA) in New York and Washington are, respectively, the European, Asian and North American members of GFMA. www.gfma.org

<sup>&</sup>lt;sup>2</sup> FSB, Strengthening Oversight and Regulation of Shadow Banking: Regulatory framework for haircuts on noncentrally cleared securities financing transactions (14 Oct. 2014), available at http://www.financialstabilityboard.org/wp-content/uploads/r\_141013a.pdf.



Accordingly, we recommend that the BCBS implement the Proposal through a supervisory review process rather than through unsecured loan capital treatment. This supervisory review process would be reinforced by risk-adjusted capital charges where banks are unable to demonstrate compliance with the core principles of the FSB Report. In making these recommendations, we emphasize that GFMA fully supports the policy goals of the FSB and the BCBS but we are concerned that, in its present form, the Proposal does not fully advance those policy goals.

Our comments in this letter are organized into two primary sections. Section 1 addresses the general design of the Proposal and provides our recommendations for the supervisory review process and risk-adjusted capital requirements. Section 2 includes various technical comments and requests for clarification on the mechanics of the Proposal. In addition, <u>Annex A</u> to this letter contains several quantitative examples that highlight weaknesses in the netting formulas.

# 1. General design of the Proposal

As a preliminary matter, we emphasize that we support the FSB's and BCBS's efforts to impose minimum standards in SFT financing transactions with unregulated counterparties. Minimum standards in such transactions will not only reinforce the safety and soundness of the financial system, but will also help to ensure competitive equality across jurisdictions.

Our concerns with the Proposal arise in connection with the challenges of implementing it in practice. The Proposal contemplates running all SFTs through complex formulas, considering both trade level and netting set exposures, in a manner previously untested in regulatory capital standards. As discussed in Section 2 of this letter, there are significant ambiguities in the framework and, in some cases, anomalous or illogical outcomes appear to result from netting set calculations. A single sanction penalty is also an extremely blunt tool, which fails to account for de minimis or temporary collateral shortfalls, or to permit corrections where individual trades with appropriate collateralization nonetheless fail the netting set collateralization test.

In light of these concerns, we recommend a multi-step review process integrating both quantitative and qualitative reviews to identify SFTs where higher capital requirements should apply to advance the policy goals of the FSB and the BCBS.

#### Step 1: Exclude SFTs with out-of-scope counterparties

The Proposal exempts transactions with CCPs, central banks and regulated counterparties from application of the punitive capital charges. Accordingly, at the outset of its analysis, the bank would identify all SFTs with exempted counterparties and exclude them from further quantitative and qualitative review, applying instead the general regulatory capital rules to these transactions.

#### Step 2: Quantitative analysis of all SFTs with in-scope counterparties

The bank would apply the quantitative analysis in the Proposal to SFT netting agreements with all in-scope counterparties. The quantitative analysis on a given netting agreement would compare the netting set haircut and floor as calculated under the Proposal. After completing the quantitative analysis, the bank would apply the general regulatory capital rule to netting sets that meet the minimum floor.



# Step 3: Limited cure period for SFTs that fail the quantitative analysis

The bank would have a limited opportunity to "cure" SFT netting agreements that fail the quantitative standards. SFTs frequently involve large netting sets, in some cases with billions of euros of collateral. We believe that there could be cases in which shortfalls arise in SFT collateralization practices, particularly in the initial period as banks and market counterparties adjust to new regulatory standards. While the general risk-based capital rules would impose incremental penalties on such inadvertent, good faith shortfalls, the Proposal would impose more severe outcomes. Accordingly, we recommend that the BCBS consider recognizing a limited cure period in which good faith collateral shortfalls could be corrected before punitive capital treatment is applied. Such cure periods could be limited to defined circumstances to avoid abuse or arbitrage, such as by requiring that any shortfall be the result of good faith error and remedied within five business days upon discovery.

#### Step 4: Application of supervisory review factors for uncured SFTs

We recommend that the BCBS adopt a supervisory review approach where SFT netting agreements fail to meet the quantitative collateralization minimums after the cure period in Step 3. While we have considered various technical fixes to the netting formula that would address the BCBS's policy concerns, we believe that any netting formula, if applied rigidly, will necessarily result in potentially anomalous or unintended outcomes because it is impossible to anticipate every combination of asset and liability netting sets. As a result, rather than automatically apply unsecured (or otherwise punitive) loan exposures to these netting sets, the bank should be permitted to maintain its existing capital treatment if it can demonstrate valid commercial reasons for the SFT's collateralization arrangements against well-defined criteria.

For example, under this approach, even where a netting set breached the applicable haircut floors, a bank might be permitted to maintain its existing capital treatment where it can demonstrate that:

- Collateralization of the bank's SFTs is consistent with current market standards, taking into account the credit risk of the underlying collateral and the counterparty; and
- The bank is not, explicitly or implicitly, providing excess collateral in any SFT to compensate its counterparty for providing collateral to the bank in a separate SFT.

These factors are illustrative and could be refined to minimize the risk of arbitrage while ensuring that banks have sufficient flexibility to structure SFT liabilities in a commercially reasonable and responsible manner. In practice, supervisors would be able to review cases where SFT netting sets breach the applicable floors to verify that a bank's documentation record supports application of the criteria.

This approach has several key advantages over the Proposal's unsecured loan treatment. First, given the weaknesses in the Proposal's netting framework, this approach provides a methodology for correcting unintended or illogical outcomes, including in cases that are difficult to anticipate on an ex ante basis. Second, this approach reinforces and supports the FSB Report's haircut standards by ensuring that every transaction that fails the minimum standards is still subject to review. Third, banks would be



required to document their basis for concluding that the factors applied to a given SFT, minimizing the risk of arbitrage and facilitating horizontal reviews.

# Step 5: Application of risk-adjusted capital charges for SFTs that fail the supervisory review factors

Finally, in some cases an SFT netting agreement will fail the quantitative standards, remain uncured and fail to meet the supervisory review factors. In these cases, we believe that punitive capital charges should apply, consistent with FSB Report's recommendations.

We believe, however, that the capital treatment penalty should be calculated on a risk-adjusted basis. While we appreciate that a bright line rule may incentivize banks to adhere to the haircut minimums, an unsecured exposure treatment would be inappropriately severe in cases where there is a minor shortfall, and such treatment may have pro-cyclical effects in stressed markets where counterparties providing secured funding to banks seek higher collateral haircuts, which would have the effect of reducing the net collateralization attributed to the bank's secured lending arrangements.

We believe that the BCBS's objectives could be accomplished through a more risk-sensitive approach that would consider the degree of under-collateralization in an SFT, with enhanced capital requirements scaled in proportion to the size of the shortfall. The FSB Report specifically contemplated such a risk-sensitive approach as a possible option (Option 2) alongside unsecured loan treatment (Option 1), noting that the latter was "substantially the most punitive" approach.<sup>3</sup> We believe that Option 2 is the superior approach, for three reasons.<sup>4</sup>

First, Option 2 more closely aligns the SFT capital treatment with the actual underlying risk of these transactions and the spirit of the risk-based capital framework. For example, a collateralized secured lending transaction with a de minimis shortfall remains, in substance, a secured transaction in which the bank and its counterparty will manage their exposures and risk in response to the amount and quality of collateral; the risk management practices necessary to support an unsecured lending transaction are fundamentally different. Applying unsecured loan treatment in this example would disrupt efforts to align capital management and risk management and unnecessarily reduce risk sensitivity in the risk-based capital framework.

Second, Option 2 advances the BCBS's and FSB's policy goals better than Option 1. Option 2 achieves the principal objective of the Proposal—the introduction of regulatory capital-based incentives to support SFT haircuts—through meaningful but risk-adjusted capital penalties where an SFT is undercollateralized against regulatory haircut minimums. Imposing the same capital penalty on separate SFTs where the collateralization shortfalls are 0.01% and 10%, respectively, effectively makes a bank insensitive to the capital consequences of de minimis and significant collateralization shortfalls.

<sup>&</sup>lt;sup>3</sup> FSB Report, pp. 14-16.

<sup>&</sup>lt;sup>4</sup> In practice, a consistent risk-adjusted approach could be accomplished in both standardized approach and internal ratings-based approach calculations through appropriately scaled capital charges. We would welcome an opportunity to discuss specific methodological issues in the risk-based capital framework, if helpful.



Third, application of unsecured loan treatment to SFT netting sets may have inadvertent outcomes across a range of scenarios. A bank with a momentary or de minimis shortfall in SFT collateralization may be forced to re-price or reduce support for market activity in response to punitive unsecured exposures. In addition, because the Proposal would require banks to net collateral amounts on secured lending and secured borrowing transactions, the Proposal effectively caps the amount of collateral a bankcan provide in a secured borrowing transaction. Such a cap may weaken a bank's ability to negotiate commercially reasonable haircuts in distressed markets where counterparties require higher collateral haircuts to continue providing funding to the bank. By contrast, the risk-adjusted approach in Option 2 would permit the bank to continue engaging in such secured borrowing transactions while assigning higher capital requirements in response to the greater amount of collateral at risk.

#### 2. Technical comments and requests for clarification

#### a. Netting issues

The Proposal raises concerns with potential arbitrage scenarios involving assets and liabilities arising from transactions with the same counterparty.<sup>5</sup> The Proposal notes that, from the bank's perspective, the SFT haircut floors apply only to its assets (e.g., reverse repos), whereas its liabilities (e.g., repos) are exempted. As a result, a bank could (in theory) collateralize the asset leg in accordance with the haircut minimums, but provide surplus collateral to the counterparty on the liability leg, resulting in under-collateralization on a net basis.<sup>6</sup>

The Proposal attempts to address this arbitrage possibility through a netting formula that considers both the asset and liability components of the netting relationship.<sup>7</sup> The formula requires the bank to aggregate the collateral provided and received across assets and liabilities, apply the minimum collateral haircuts, and then apply unsecured loan treatment to in-scope transactions for which the asset-liability netting set calculation results in insufficient collateralization against the haircut minimums. We have concerns, however, that mechanistic application of this netting formula will result in anomalous or unintended outcomes.

Detailed examples illustrating some of the netting problems are provided in <u>Annex A</u> to this letter. We do not believe that the netting issues can be resolved by technical adjustments to the netting formulas alone; any mechanistic netting formula will be unable to capture the range of legitimate factors that influence asset and liability collateralization practices. We believe that the existence of these netting calculation challenges strongly supports the supervisory review approach summarized in Section 1 of this letter, since a pure calculation-based methodology would result in poorly calibrated outcomes in many cases.

<sup>&</sup>lt;sup>5</sup> The examples discussed in this section involve cases where the bank provides cash and receives securities collateral, which result in balance sheet assets for accounting purposes. In other cases, the bank may engage in a securities-for-securities transaction, which can result in either an asset or a liability. We refer to assets and liabilities in this section for ease of reference in the cash-for-securities example.

<sup>&</sup>lt;sup>6</sup> Proposal, Section 4(i).

<sup>&</sup>lt;sup>7</sup> Proposal, proposed rule text section 143(x).



Apart from supervisory review approach, we also seek to confirm whether and how the haircut floors would apply in certain netting scenarios. Based on our understanding the Proposal and the FSB's and BCBS's underlying policy goals, we seek confirmation of the following conclusions:

- (i) In a netting set where the bank is a net receiver of cash, the entire netting set and individual trades within it are exempted from the haircut minimums. *See* Netting Set #2 in <u>Annex A</u>.
- (ii) In a netting set where the bank is a net receiver of government securities, the entire netting set and individual trades within it are exempted from the haircut minimums. This example is the same as the prior example, with the only difference being that the bank is a net receiver of government securities rather than cash.

# b. Definition of government security

The Proposal exempts transactions that are backed by government securities. With reference to the FSB's Report,<sup>8</sup> we understand that transactions in the following securities are exempted from the minimum haircut floors under the government security definition:

- (i) Any security issued by a sovereign including a central bank or that is unconditionally guaranteed by a sovereign as defined under the Basel III standardized approach;
- (ii) Any security issued by supranational organizations such as the Bank for International Settlements (BIS), the International Monetary Fund (IMF), the European Central Bank (ECB) and the European Union (EU);
- (iii) Any security issued by a multilateral development bank (MDB) as defined under the Basel III standardized approach; and
- (iv) Any security issued by a public sector entity (PSE) as defined under the Basel III Standardized approach.

In addition, we seek confirmation that transactions involving the following securities would be exempt from the haircut minimums:

- Any security issued by the European Financial Stability Facility (EFSF) or European Stability Mechanism (ESM) as two other supranational organizations; and
- (vi) Any security issued or guaranteed by an entity that receives preferred treatment under the Basel III standardized approach given its quasi sovereign status, for example government-sponsored entities (GSE) including Fannie Mae and Freddie Mac in the United States.

<sup>&</sup>lt;sup>8</sup> FSB Report, footnote 11.

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# c. Treatment of broker-dealers and similar entities subject to net capital regimes

The Proposal exempts transactions in which the bank's counterparty is "supervised by a regulator that imposes prudential requirements consistent with international norms."<sup>9</sup> By contrast, the FSB Report included more specific guidance exempting transactions with "banks and broker-dealers subject to adequate capital and liquidity regulation on a consolidated basis."<sup>10</sup>

We request that the BCBS clarify that transactions with banks and broker-dealers subject to adequate capital and liquidity regulation on a consolidated basis are outside the scope of the Proposal. In particular, broker-dealers play a critical role in secured financing markets, and are subject to robust supervision and regulation at both the legal entity level and, where applicable, within consolidated banking groups. Failure to recognize broker-dealers and equivalently capitalized entities as regulated would represent a major break from the FSB framework and would disrupt the orderly operation of securities markets.<sup>11</sup>

More generally, beyond the specific case of broker-dealers and other entities subject to net capital regimes, we believe that it may be helpful for the BCBS to issue formal guidance clarifying which types of entities are subject to "prudential requirements consistent with international norms." We assume that all jurisdictions where supervisors are members of the BCBS will generally qualify for the regulated entity exemption, but there are likely to be other cases in other jurisdictions.

Also, the FSB recommendations noted that national jurisdictions have the ability to exempt insurance companies under certain circumstances.<sup>12</sup> We believe that it would be appropriate to confirm that this applies to the framework proposed by the BCBS.

# d. Inter-affiliate transactions

To achieve the overall policy goals, the Proposal would amend the existing Basel III Accord, which national supervisors have applied to both consolidated banking groups as well as to legal entities within banking groups, to impose unsecured loan treatment when SFT haircuts are not met.

While inter-affiliate transactions are excluded from consolidated banking groups' regulatory capital calculations, regulated legal entities within banking groups must include inter-affiliate transactions when determining capital adequacy. Beyond capital regulation, in many cases national laws already require banks to collateralize their inter-affiliate exposures,<sup>13</sup> thereby protecting the capital adequacy of regulated legal entities and supporting resolution and recovery planning for material operating entities. More generally, in light of significant variations in banking practices across jurisdictions, BCBS has

<sup>&</sup>lt;sup>9</sup> Proposal, proposed rule text section 143(i).

<sup>&</sup>lt;sup>10</sup> FSB Report.

<sup>&</sup>lt;sup>11</sup> In addition to broker-dealers, certain other regulated market participants are subject to prudential standards based on broker-dealer net capital standards. *See, e.g.,* IOSCO, *A Comparison and Analysis of Prudential Standards in the Securities Sector* (Mar. 2014), p. 71, available at: <u>https://www.iosco.org/library/pubdocs/pdf/IOSCOPD438.pdf</u> ("As proposed by the SEC, securities business swap dealers will now generally be subject to the same capital and margin treatments as broker-dealers.").

<sup>&</sup>lt;sup>12</sup> FSB Report, footnote 13.

<sup>&</sup>lt;sup>13</sup> See, e.g., Federal Reserve Act §§ 23A, 23B.



previously recognized that "[t]ransactions between a firm and its affiliates should be subject to appropriate regulation in a manner consistent with each jurisdiction's legal and regulatory framework."<sup>14</sup>

The Proposal does not discuss its potential application to inter-affiliate transactions. We respectfully request that BCBS clarify that the Proposal does not apply to inter-affiliate transactions. Limiting the Proposal to external transactions best supports BCBS' policy goal of preventing banks from providing unsustainable financing to unregulated counterparties while preserving banking groups' ability to manage collateral across consolidated legal entities consistent with applicable law and regulation. By contrast, through application of the framework to the consolidated organization, the banking group (and its consolidated legal entities) will effectively be prevented from providing unsustainable financing to unregulated external counterparties.

#### e. Cash collateralized securities borrowing transactions

The Proposal notes that the framework of haircut floors is intended to apply to transactions where the primary purpose of the transaction is to provide financing and is not intended to apply to transactions in which the purpose is to borrow or lend specific securities. Thus, securities lending transactions are exempted from the haircut floor requirements in two circumstances: (a) "[s]ecurities are lent at long maturities and the lender of securities reinvests or employs the cash at the same or shorter maturity, therefore not giving rise to material maturity or liquidity mismatch.",<sup>15</sup> and (b) [s]ecurities are lent at call or at short maturities, giving rise to liquidity risk, only if the lender of the securities reinvests the cash collateral into a reinvestment fund or account subject to regulations or regulatory guidance meeting the minimum standards for reinvestment of cash collateral by securities lenders set out in paragraph 143(xii). For this purpose, banks may rely on representations by securities lenders that their reinvestment of cash collateral meets the minimum standards."

A typical stock borrow transaction is driven not by an intent to provide financing, but rather by the borrower's need for a specific security (for example, to settle a short sale), and the cash provided is merely collateral. Instead of validating the stock borrowers' intent, the Proposal indicates that cash collateralized securities lending transactions are exempted from the haircut floors where the securities lender reinvests the cash in a way that mitigates material liquidity and maturity mismatch. As an alternative to validating the non-bank counterparties' use of cash collateral, we propose that, as an alternative to the obligations on the cash collateral holder in the Proposal's exemptions, the rule excludes transactions where the bank can demonstrate, regardless of the form of legal agreement, a need for a specific security (for example, delivery obligations, customer demand, segregation requirements, etc.) This clarification would ensure that any transactions which are not entered into for financing purposes are excluded from the framework, and that transactions which provide access to specific securities are not interrupted.

<sup>&</sup>lt;sup>14</sup> BCBS, Margin requirements for non-centrally cleared derivatives (Mar. 2015), Key principle 6.

<sup>&</sup>lt;sup>15</sup> Proposal, proposed rule text section 143(iv).



This recommendation could be accommodated in the Proposal's rule text by adding the underlined language to paragraph 143(iv):

143(iv). Cash-collateralized securities lending transactions are exempted from the haircut floors where:

- ...
- ...
- <u>The bank borrows the security to facilitate settlement of a specific transaction and the cash provided to the securities lender is collateral rather than financing.</u>

#### f. Collateral upgrade transactions

The FSB Report defines collateral upgrade transactions as "borrowing securities in Table 1 [the haircut floors table] against other securities in Table 1 that attract higher haircuts as collateral." The FSB Report states that such transactions could potentially be used to circumvent the numerical haircut if a bank provides a high-quality security with a low numerical haircut to a non-bank counterparty against a low-quality security with a high numerical haircut, and the non-bank counterparty subsequently exchanges the received high-quality security for cash in a repurchase agreement. Without additional rules, the non-bank entity could potentially be able to ultimately receive more financing than in a single transaction with a bank.

However, the rule defines in-scope security-for-security transactions as those in which the securities lender has the ability to re-hypothecate the security received, which could include collateral upgrade, collateral downgrade or transactions with equivalent collateral. We request that the rule clarify that the set of in-scope transactions only include transactions where the bank has received a security with a higher (worse) haircut floor than the security it has provided to the non-bank counterparty, and the non-bank counterparty has the ability to re-hypothecate the safer security. In addition, if the bank can demonstrate that the security received is intended to serve current or anticipated demand (e.g. delivery obligations, customer demand, segregation requirements, etc.) these transactions should be excluded. This clarification would ensure that any transactions which are not entered into for financing purposes are excluded from the framework, and that transactions which provide access to specific securities are not interrupted. In addition, we request that any security-for-security transactions in which the bank receives government securities as collateral be excluded from the framework, irrespective of the ability of the securities lender to re-hypothecate the security received.

Finally, we also request that BCBS consider a clarification to the text of paragraph 143(v) to avoid potential confusion at national implementation. We believe that the intent of this paragraph is to exempt securities-for-securities transactions where the bank's counterparty provides representations that the counterparty will not re-use the security received from the bank. The language is potentially confusing, however, since in its present form it requires that "they" be unable to re-use securities, which



might be interpreted to mean the bank or the bank's counterparty. We suggest that BCBS revise the language in this paragraph to replace "they" with "the bank's counterparty."

#### g. Qualifying cross-product master netting agreements

The Proposal includes several calculations for netting sets and portfolio margining arrangements, but not for qualifying cross-product master netting agreements where the independent amount is calculated on a portfolio basis across SFTs and derivatives. As the Proposal does not provide a methodology to calculate a minimum portfolio independent amount across derivatives and SFTs, we would request that the BCBS make clear that these portfolios are exempted from the requirements in the Proposal. More generally, the absence of a defined qualifying cross-product master netting agreement methodology reinforces our broader comment that the supervisory review approach is more appropriate than a bright line methodology with unsecured loan treatment.

#### h. Margining periods

The Proposal would apply the unsecured loan treatment to any SFT netting set in which collateralization requirements are not met. In practice, collateralization levels change every day as banks and counterparties collect, return or provide margin in response to market movements. For example, it is common to margin based on previous day's closing prices. As such, the Proposal should accommodate these temporary differences in margining amounts. Applying the haircut floors without any recognition of these temporary differences would misleadingly suggest that firms are under (or over) collateralized, whereas in reality they are in the process of re-margining their exposures. In particular, this is important in the case of the portfolio margin methodology which is based on actual margin collected from the counterparty.

#### i. Legacy SFTs

While we anticipate that future SFTs will comply with the haircut minimums, there may be cases where longer-dated legacy SFTs do not meet the standards and it would be commercially unreasonable to break trades or demand new collateralization arrangements. In these cases, the SFTs will mature and roll-off in the normal course, being replaced by haircut-compliant SFTs, once the Proposal and the FSB's related standards take effect. We seek confirmation that the Proposal would not be required to apply to such legacy SFTs, but would instead apply only on a going-forward basis.

Should the BCBS wish to discuss any aspect of our response in further detail, we would be pleased to make ourselves available. Please contact Robert Toomey of SIFMA (rtoomey@sifma.org) or Gary Simmons of AFME (gary.simmons@afme.eu)

Sincerely,

David Strongin Executive Director Global Financial Markets Association



Annex A: Netting issues

#### Summary of the problem

The Proposal illustrates the netting methodology through an example in which the collateralization levels of three in-scope trades (Trades A, C and D) are netted together to determine if the haircuts are met on an aggregate basis.<sup>16</sup> In the example, the aggregate value of cash and cash equivalents provided by the bank across the three trades is  $\in 165$  (0% haircut), whereas the aggregate value of collateral received is  $\in 170$  (6%). Because the aggregated amount fails to meet the 6% haircut minimum –  $\in 165$  of funding against  $\in 170$  of collateral is a 3.03% haircut – the two asset positions in the netting set (Trades A and C) receive unsecured loan treatment, although the remaining liability position (Trade D) is unaffected.

The illustrative example in the Proposal is incomplete, however, because the individual asset positions (Trades A and C) would also fail the haircut minimums on a standalone basis, even absent netting with the liability collateralization. As a result, the example does not demonstrate how the BCBS's concerns about netting set arbitrage might work in practice, since Trades A and C in this example would fail the minimums on a standalone and netting set basis.

In practice, the netting formula in the Proposal would lead to a range of anomalous outcomes, as explained in the examples below. As a general matter the issues arise because, in a netting set, the haircuts tend to operate not as floors but as both floors and caps, since an increase (or decrease) in collateralization in funding provided must be balanced out by a decrease (or increase) in collateralization in funding received, which becomes particularly difficult where banks' netting sets are weighted more heavily toward either assets or liabilities. These concerns are compounded by ambiguities in the Proposal, which may lead to more serious challenges if the scope of application is broadened.

# (i) <u>Small haircuts on secured lending and borrowing within the same net set</u>

The netting formula relies on a comparison of the relative collateralization between a firm's secured lending and borrowing. As a result, below-standard haircuts on secured lending would be permissible in a netting set if the bank also provides below-standard haircuts on secured borrowing amounts within the same netting set.

<sup>&</sup>lt;sup>16</sup> In the Proposal's example, Trade B involves a non-sovereign security-for-non-sovereign security SFT and is subject to a separate netting calculation.



Consider.	for	example	. this	netting	set:
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	Netting Set #1				
		Cash	<b>Collateral A</b>	Haircut	Floor
	Haircut Floor	0%	6%		
Repo	Trade A	-98	100	-2%	
Reverse	Trade B	100	-103	3%	
	Net trades	Cash	<b>Collateral A</b>	Haircut (Hj)	Floor (f)
	Haircut Floor	0%	6%		
	Trade 1	2	-3	50%	6%

In this case, the bank has lent cash of  $\notin 100$  against securities collateral of  $\notin 103$ , even though the securities collateral is subject to a 6% haircut. As a result, the secured lending transaction would fail the collateralization standard when considered in isolation. However, on a netting set basis, taking into account offsetting secured borrowing, the bank has provided  $\notin 2$  of cash against  $\notin 3$  of securities collateral. The netting set would be deemed to pass the collateralization standards because of the relative differences between the secured lending and borrowing transactions.

# (ii) <u>Netting sets weighted towards secured borrowing</u>

Another anomalous situation arises where a netting set is more heavily weighted towards secured borrowing over secured lending. In these cases, because the bank is a net receiver of cash and a net provider of securities, the formula effectively imposes higher haircuts on secured lending transactions than is required by the SFT haircuts.

	Netting Set #2				
		Cash	Collateral A	Haircut	Floor
	Haircut Floor	0%	6%		
Repo	Trade A	-1,000	1,065	-6.1%	
Reverse	Trade B	100	-112	12%	
	Net trades	Cash	<b>Collateral A</b>	Haircut (Hj)	Floor (f)
	Haircut Floor	0%	6%		
	Trade 1	-900	953	-5.56%	-5.66%

This example highlights an ambiguity in the Proposal. In this case, Trade B in isolation would be subject to a 6% haircut minimum. However, because the much larger Trade A position is slightly over-collateralized at 6.1%, the collateralization required on Trade B must be raised to 12% collateralization to achieve a minimum collateralization for the bank across the netting set.



# (iii) <u>Netting sets weighted towards secured lending</u>

The opposite scenario involves a netting set more heavily weighted towards secured lending over secured borrowing. In this case, even a modest increase in secured borrowing collateralization will tip the balance of collateralization below the haircut minimums. This example is particularly odd since it effectively prevents the bank's counterparty from imposing increases in collateralization in the bank's secured borrowing arrangements in response to market conditions.

	Netting Set #3				
		Cash	<b>Collateral A</b>	Haircut	Floor
	Haircut Floor	0%	6%		
Reverse	Trade A	1,000	-1,060	6%	
Repo	Trade B	-100	107	-7%	
	Net trades	Cash	<b>Collateral A</b>	Haircut (Hj)	Floor (f)
	Haircut Floor	0%	6%		
	Trade 1	900	-953	5.9%	6%

This situation could arise, for example, in cases where the bank's secured borrowing and lending arrangements have different maturities and the bank negotiates different haircuts at different moments in time. This situation could arise where the bank has a long-dated reverse repo with its counterparty with collateralization set at or slightly above the haircut minimums, and the bank negotiates shorter-dated repo funding amidst market turmoil. In response to potential concerns about collateral, the counterparty may require a greater haircut on the shorter-dated repo funding, potentially putting the net collateralization position below the haircut minimums, as is demonstrated in Netting Set #3 above.

# (iv) Netting sets with equal amounts of cash and sovereign collateral provided and received

Finally, a mechanical problem in the netting formula arises in cases where the bank provides and receives equal amounts of cash and sovereign collateral. In this instance, the bank has provided  $\in 0$  of cash and sovereign securities on a net basis, even if the non-sovereign securities collateralization amounts are imbalanced. The netting formula does not produce a netting set collateralization minimum, since including  $\in 0$  in the ratio introduces a computational error.

	Netting Set #4				
		Cash	<b>Collateral A</b>	Haircut	Floor
	Haircut Floor	0%	6%		
Repo	Trade A	-100	104	-4%	
Reverse	Trade B	100	-107	7%	
	Net trades	Cash	<b>Collateral A</b>	Haircut (Hj)	Floor (f)
	Haircut Floor	0%	6%		
	Trade 1	0	-3	#DIV/0!	#DIV/0!