### POLICY ADVICE ON THE BASEL III REFORMS ON SECURITIES FINANCING TRANSACTIONS (SFTs)

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EBA



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## Executive summary

This document outlines the EBA policy response to Section 3 of the Call for Advice  $(CfA)^1$  on the implementation of the Basel III post-crisis reforms standards<sup>2</sup> that the EBA received from the European Commission. The Basel III post-crisis reforms standards were published by the Basel Committee on Banking Supervision (BCBS) on 7 December 2017<sup>3</sup>.

The EBA is asked to provide its assessment of the Basel reforms related to the own funds requirements for counterparty credit risk of securities financing transactions (SFTs). In particular the CfA requests the EBA to assess the impact of the revisions to the rules for calculating exposure values of counterparty credit risk (CCR) exposures stemming from SFTs, and the introduction of the minimum haircut floors framework for SFTs.

This document complements the quantitative impact study (QIS) report developed for the purposes of addressing the CfA, which should be read alongside this report. On the basis of its analysis and assessments performed for the purposes of the CfA, the EBA puts forward the following two policy recommendations in response to the CfA requests on SFTs:

Recommendation SFTs 1: Basel III post-crisis reforms on the calculation of the exposure values of SFTs except the minimum haircut floors framework

The EBA supports the introduction in the EU of the Basel III post-crisis reforms affecting the calculation of exposure values of counterparty credit risk exposures stemming from SFTs with the exception of the introduction of the minimum haircut floors framework for SFTs discussed in Recommendation SFTs 2.

#### Recommendation SFTs 2: Introduction of the minimum haircut floors framework for SFTs

The EBA shares the cautious stance taken by the ESMA and the European Commission on the introduction of numerical haircut floors for SFTs, and recommends at this stage to withhold the implementation in the EU of the minimum haircut floors framework for SFTs in the capital framework as designed in the Basel III post-crisis reforms standards. In addition, if numerical haircut floors for SFTs were to be introduced in the EU, the EBA is of the view that this should occur via market regulation, but only after further analyses and recommendations are provided by market authorities and systemic risk authorities.

<sup>1</sup> 

https://eba.europa.eu/documents/10180/2207145/Call+for+advice+to+the+EBA+for+the+purposes+of+revising+the+own+fund+requirements+for+credit%2C%200perational+market+%26+credit+valuation+adjustment+risk+040518.pdf

<sup>&</sup>lt;sup>2</sup> https://www.bis.org/bcbs/publ/d424.pdf

<sup>&</sup>lt;sup>3</sup> https://www.bis.org/bcbs/publ/d424.htm



## 1. Basel III post-crisis reforms on CCR of SFTs excluding the minimum haircut floors framework for SFTs

#### 1.1 SFTs in the CRR

- Regulation (EU) No 575/2013 (the Capital Requirements Regulation CRR) does not provide a definition of securities financing transactions (SFTs), despite in some instances referring to this term<sup>4</sup>, which are instead typically referred in the text as *'repurchase transactions, securities or commodities lending or borrowing transactions, and margin lending transactions'*.<sup>5</sup>
- 2. However, the CRR provides definitions of 'repurchase transaction' and 'margin lending transactions' in Article 4(1)(83) and Article 272(3) respectively. In addition, the CRR provides definitions of some types of SFTs, such as 'repurchase agreement', 'reverse repurchase agreement', and 'simple repurchase agreement', in Article 4(1)(82) and Article 4(1)(84) respectively.
- 3. SFTs are generally collateralised transactions, whereby cash, securities or commodities are transferred from one counterparty (transferor) to the other counterparty (transferee), and the transferee provides collateral in the form of cash or securities to the transferor so that, if the transferee were to default to return the cash, securities or commodities received, the transferor may liquidate or keep appropriation of the collateral to reduce the resulting loss.

## 1.2 Current methods for calculating own funds requirements for counterparty credit risk exposures stemming from SFTs

- 4. SFTs expose counterparties to counterparty credit risk. In addition, counterparties are also exposed to the credit or market risk of the securities lent or collateral posted to the counterparty in a SFT, if this remains with them.
- 5. This document focuses exclusively on the counterparty credit risk exposures stemming from SFTs, and in particular to their exposure values (as defined under Articles 111 and 166 of the CRR for the standardised approach (SA) and internal ratings based (IRB) approach to credit risk respectively), which is the target of the requests in Section 3 of the CfA.

<sup>&</sup>lt;sup>4</sup> See recitals 82, 83, and Articles 285(6), 285(7), 382(2), 416(2)(b) of the CRR.

<sup>&</sup>lt;sup>5</sup> See for instance Articles 92(3)(f)(ii), 111(1), 111(2), 162(1), 162(2)(d), 162(3)(c), 166(2), 166(7), 193(4), 194(9), 196, 206, 220, 221, 222(4), 224(2)(b), 224(4), 225(2)(b)(ii), 227(1), 227(2)(f), 271(2), 272(25), 273(2), 273(7), 285(2)(a), 299(2)(c), 299(2)(g), 301(1), 349(a)(iv), 378, 390(2), 429(9) of the CRR.



- 6. Under the CRR the following methods are available to calculate the exposure value of counterparty credit risk exposures stemming from SFTs:
  - Financial Collateral Simple Method (FCSM) (Article 222 of the CRR).
  - Financial Collateral Comprehensive Method (FCCM) (Article 223 of the CRR): under this method, institutions may use either supervisory volatility adjustments (so called 'supervisory haircuts') or own estimates of volatility adjustments (so called 'own-estimated haircuts').
  - In cases of master netting agreements covering SFTs, the institutions may employ two approaches that would allow them to better recognise the effects of netting:
    - Financial Collateral Comprehensive Method (FCCM) for master netting agreements covering SFTs (Article 220 of the CRR). When applying this method, the institution may use supervisory haircuts or own-estimated haircuts.
    - Internal Models Approach for master netting agreements covering SFTs (so called 'Repo VaR method') (Article 221 of the CRR).
  - Internal Model Method (IMM) for counterparty credit risk (Article 283 of the CRR). It should be noted that SFTs under the IMM may also be included within eligible cross product netting sets<sup>6</sup>.
- 7. The Repo VaR method or the IMM may be applied only subject to permission from the competent authority.
- 8. Exposure values for SFTs calculated in accordance with the above methods are then multiplied by risk weights under either the SA or IRB approach to credit risk, which will yield risk-weighted exposure amounts (i.e. risk-weighted assets RWAs) for counterparty credit risk associated with those SFTs.

# 1.3 Revisions to the methods for calculating exposure values for counterparty credit risk exposures stemming from SFTs, except the introduction of the minimum haircut floors framework for SFTs

- 9. Except the introduction of the minimum haircut floors framework for SFTs, which is covered in the next section, the Basel III post-crisis reforms standards revised the methods described above to calculate exposure values of counterparty credit risk exposures stemming from SFTs by introducing the following changes:
  - revision (i.e. recalibration) of the supervisory haircuts;

<sup>&</sup>lt;sup>6</sup> The definition of cross product netting is specified under Article 272(25) of the CRR.



- removal of the possibility for institutions to calculate own-estimated haircuts under the FCCM;
- the Repo VaR method is no longer permitted under the SA to credit risk (but is still allowed under the IRB approach);
- revision of the FCCM formula for master netting agreements covering SFTs, to better account for diversification and correlation.
- 10. Prior to adopting the above changes for the calculation of exposure values for CCR of SFTs, the BCBS consulted on them as part of the two consultative documents<sup>7</sup> on revisions to the SA to credit risk, and the consultative document<sup>8</sup> on constraints on the use of internal models approaches to reduce variation in credit risk RWAs.
- 11. The impact of the above revisions is outlined in the QIS report, and has been estimated on the basis of the quantitative information submitted by institutions for the purposes of the CfA. In particular, as can be seen in the QIS report, those revisions do not result in material<sup>9</sup> changes in SFT exposures at default (EADs) due to the reforms (in some cases they result in a decrease in EADs), while the revised RWAs for CCR of SFTs are also affected by the revisions to the credit risk framework.
- 12. In addition, Figure 1 outlines the impacts of the above revisions expected on own funds requirements for CCR of SFTs on the basis of the qualitative responses submitted by institutions for the purposes of the CfA. Many institutions that received the qualitative questionnaire did not provide a response. However, from the responses of institutions that provided feedback, it may be seen that the majority of institutions specified that the revisions are expected to result in a negligible increase, or no impact.
- 13. With regard to institutions that specified that some of the above revisions were associated with a 'high increase' in own funds requirements for CCR of SFTs, one institution commented that the removal of own estimates of haircuts will significantly affect the liquidity on primary and secondary markets for EU corporate debts and some emerging markets debts. Another institution had concerns that the standardised formula for portfolios covered by a master netting agreement would not be aligned with the recognition of netting for accounting purposes and allows limited recognition of netting in the case of diversified portfolios.
- 14. Overall, however, on the basis that the qualitative feedback received from institutions did not highlight substantial issues, and that the quantitative impacts resulting from the above revisions for calculating exposure values for CCR of SFTs do not appear to indicate unintended effects, it is considered appropriate to proceed with the implementation of the proposed revisions, with

<sup>&</sup>lt;sup>7</sup> First consultative document on revisions to the SA: https://www.bis.org/bcbs/publ/d307.pdf

Second consultative document on revisions to the SA: https://www.bis.org/bcbs/publ/d347.pdf

<sup>&</sup>lt;sup>8</sup> https://www.bis.org/bcbs/publ/d362.pdf

<sup>&</sup>lt;sup>9</sup> Excluding the impact of the minimum haircut floors framework for SFTs.



a view to ensuring alignment with the BCBS standards and meeting the objectives of the reforms.

Figure 1. Impact expected by institutions on current own funds requirements for CCR of SFTs due to the changes in the calculation of exposure values for CCR of SFTs, excluding the introduction of the minimum haircut floors framework for SFTs.<sup>10</sup>



Recalibration of the supervisory haircuts

Removal of the own estimates of collateral haircuts

Revision to the standardised formula for the calculation of the exposure value of SFTs covered by a master netting agreement

#### Source: Qualitative questionnaire submitted to institutions for the purposes of the CfA.

## Recommendation SFTs 1: Basel III post-crisis reforms on the calculation of the exposure values of SFTs except the minimum haircut floors framework

The EBA supports the introduction in the EU of the Basel III post-crisis reforms affecting the calculation of exposure values of counterparty credit risk exposures stemming from SFTs with the exception of the introduction of the minimum haircut floors framework for SFTs discussed in Recommendation SFTs 2.

<sup>&</sup>lt;sup>10</sup> N/A stands for 'Not Applicable'.



# 2. Minimum haircut floors framework for SFTs

## 2.1 Background, mechanics and objectives of the minimum haircut floors framework for SFTs

- 15. A novelty of the Basel III post-crisis reforms standards is the introduction, as part of the capital framework, of the minimum haircut floors framework for SFTs. This newly introduced framework is set under the SA to credit risk section of the Basel III post-crisis reforms standards<sup>2</sup> published in December 2017, in the credit risk mitigation (CRM) section, in paragraphs 179 to 188.
- 16. In April 2019 the BCBS launched the consultation on the Consolidated Basel Framework<sup>11</sup>. This new section of the BCBS website sets out the consolidated version of its global standards for the regulation and supervision of banks. Within the Consolidated Basel Framework the standards on the minimum haircut floors framework for SFTs have been included within the standards on the calculation of RWAs for credit risk, and are specified in the CRE56<sup>12</sup> standards named 'Minimum haircut floors for securities financing transactions', which will be effective as of 1 January 2022 together with the other revisions of the Basel III post-crisis reforms.
- 17. The minimum haircut floors framework for SFTs was introduced in the Basel standards taking into account a recommendation made by the Financial Stability Board (FSB) to the BCBS to introduce numerical haircut floors for non-centrally cleared SFTs in which financing against collateral other than government securities is provided to non-banks. This recommendation was put forward by the FSB in its report<sup>13</sup> on a regulatory framework for haircuts on non-centrally cleared SFTs published on 12 November 2015.
- 18. The paper that triggered that report and the development of the minimum haircut floors framework for SFTs is an earlier FSB report<sup>14</sup> published on 29 August 2013 on a policy framework for addressing shadow banking risks in securities lending and repos, which set out policy recommendations for addressing financial stability risks in relation to securities lending and repos. In addition to these policy recommendations, the FSB published on 14 October 2014 a report<sup>15</sup> on the regulatory framework for haircuts on non-centrally cleared SFTs, which also contained proposals for consultation. Taking also into account the results of a two-stage QIS for the calibration of the haircuts and the assessment of the impact of the proposals, the FSB

<sup>&</sup>lt;sup>11</sup> https://www.bis.org/bcbs/publ/d462.htm

<sup>&</sup>lt;sup>12</sup> https://www.bis.org/basel\_framework/chapter/CRE/56.htm?inforce=20220101

<sup>&</sup>lt;sup>13</sup> http://www.fsb.org/wp-content/uploads/SFT\_haircuts\_framework.pdf

<sup>&</sup>lt;sup>14</sup> http://www.fsb.org/wp-content/uploads/r\_130829b.pdf

<sup>&</sup>lt;sup>15</sup> http://www.fsb.org/wp-content/uploads/r\_141013a.pdf



finalised this framework for haircuts on non-centrally cleared SFTs on 12 November 2015 with the publication of the FSB report.

- 19. In the EU, the globally coordinated effort initiated by the FSB to reduce financial stability risks arising from shadow banking activities, in the context of SFTs, has resulted in the introduction of Regulation (EU) 2015/2365 (the Securities Financing Transactions Regulation SFTR). The two main components of the SFTR are a transaction reporting requirement and a transparency obligation towards investors on the reuse of collateral. The European Securities and Markets Authority (ESMA) is assigned the task of developing technical standards under this regulation.
- 20. With regard to haircuts for SFTs, the FSB recommended a two-pronged approach to limit the build-up of excessive leverage outside the banking system, and to help reduce procyclicality of that leverage:
  - qualitative standards for methodologies used by market participants that provide securities financing to calculate haircuts on the collateral received.
  - the introduction of numerical haircut floors on non-centrally cleared SFTs in which financing against collateral other than government debt securities is provided to non-banks.
- 21. According to the FSB report, the underlying goal of the numerical haircut floors framework for SFTs is to '*limit the possible build-up of leverage outside the banking system and reduce the procyclicality of that leverage. The numerical haircut floors are not intended to dictate market haircuts,* and market participants should conduct their own assessment as to the appropriate level of haircuts to apply in individual circumstances, considering all relevant risk factors. Market participants are encouraged to determine their own, more granular risk-based haircut schedules, in accordance with the methodology standards as set out in the FSB report, and to set higher haircuts than any regulatory numerical haircut floors where prudent'.
- 22. With respect to the implementation of numerical haircut floors, the FSB noted that the framework could be implemented through entity-based regulation, market regulation or via a hybrid approach (i.e. a combination of entity based regulation and market regulation). The FSB particularly recommended first the BCBS to review the capital treatment of SFTs to include the framework of numerical haircut floors by the end of 2015, and following this national authorities to implement haircut floors, either through implementation of the Basel framework for in-scope SFTs or by market regulation, by the end of 2018<sup>16</sup>:

<sup>&</sup>lt;sup>16</sup> Noting delays in the implementation of the framework in some jurisdictions, the FSB decided on 19 July 2019 to extend the implementation timelines for its recommendations related to the framework of numerical haircut floors (i.e. recommendations 14-18 in Annex 1 of the 12 November 2015 report). In particular, the implementation timelines for the policy recommendations related to the framework of numerical haircut floors will be extended to January 2022 for bankto-non-bank transactions and to January 2024 for non-bank-to-non-bank transactions.

https://www.fsb.org/2019/07/fsb-adjusts-implementation-timelines-for-its-policy-recommendations-to-address-financial-stability-risks-in-securities-financing-transactions/

https://www.fsb.org/wp-content/uploads/P190719-2.pdf



**FSB Recommendation 13:** For non-centrally cleared securities financing transactions in which banks and broker-dealers provide financing to non-banks against collateral other than government securities (i.e. bank-to-non-bank transactions), the Basel Committee on Banking Supervision (BCBS) should review its capital treatment of securities financing transactions and incorporate the framework of numerical haircut floors into the Basel regulatory capital framework (i.e. Basel III framework) by the end of 2015.

**FSB Recommendation 14:** Following the BCBS's incorporation of the framework of numerical haircuts floors into the Basel III framework, authorities should then implement the framework of numerical haircut floors by the end of 2018. That may be either through the Basel III framework or requiring banks and broker-dealers in bank-to-non-bank transactions to conduct transactions above the numerical haircut floor or collect minimum excess margin amounts consistent with the numerical haircut floors. Such a requirement could be directed solely at banks and broker-dealers (i.e. entity-based regulation) or could be encompassed within a requirement that applies on a market-wide basis (i.e. market regulation).

**FSB Recommendation 15:** Authorities should introduce the framework of numerical haircut floors on non-bank-to-non-bank transactions based on their assessment of the scale of securities financing activities and the materiality of non-bank-to-non-bank transactions in their jurisdictions by the end of 2018. Jurisdictions with large securities financing activities should apply numerical haircut floors to all non-bank-to-non-bank transactions using market regulation or an entity-based approach, and the jurisdictions with the very largest securities financing activities should do so using market regulation. In other jurisdictions (i.e. jurisdictions that do not have large securities financing activities), if the volume of non-bank transactions in the jurisdiction is material, authorities should ensure that such transactions are covered using either market regulation or an entity-based approach. Otherwise, it may be sufficient to limit the application of numerical haircut floors to bank-to non-bank transactions.

- 23. In the Basel framework, this request has been implemented by setting higher capital requirements for counterparty credit risk of SFTs that do not comply with the minimum haircut floors set out in the FSB standards. In practice, this is performed by considering uncollateralised (i.e. fully unsecured) the in-scope SFTs which do not meet the haircut floors<sup>17</sup>. This type of implementation for the numerical haircut floors corresponds effectively to an entity-based regulation for entities under the Basel scope (i.e. internationally active banks). Consequently, the transactions in scope of the framework are generally bank-to-non-bank transactions.
- 24. Table 1 outlines the haircut floors set out by the FSB and included in the Basel standards. In addition, Figure 2 outlines the mechanics envisaged by the minimum haircut floors framework for SFTs under the Basel standards, while Figure 3 summarises the objective of the minimum haircut floors framework for SFTs and how this is achieved thanks to such mechanics.

<sup>&</sup>lt;sup>17</sup> This is implemented in paragraph 185 of the Basel standards (or paragraph 56.7 of CRE56), which reads: 'In-scope SFTs which do not meet the haircut floors must be treated as unsecured loans to the counterparties'.



#### Table 1. Haircut floors for in-scope SFTs set by the FSB and included in the Basel standards.

Residual maturity of collateral	Haircut level	
	Corporate and other issuers	Securitised products
≤ 1 year debt securities, and floating rate notes	0.5%	1%
> 1 year, ≤ 5 years debt securities	1.5%	4%
> 5 years, ≤ 10 years debt Securities	3%	6%
> 10 years debt securities	4%	7%
Main index equities	6%	
Other assets within the scope of the Framework	10%	





- 25. To determine if SFTs are conducted below haircut floors which has the effect of not allowing to recognise the collateral received for credit risk mitigation purposes the Basel standards set out specific formulae to be applied either at single transaction level or, for portfolios of SFTs subject to an eligible netting agreement, at netting set level. These formulae are summarised in Annex 1.
- 26. As an example of how this framework would work consistently with those formulae, in a reverse repo transaction in which a bank gives to its counterparty (e.g. an unregulated entity) 100 in cash and receives as collateral 102 of main index equities, we would have A = 100, C = 102,  $f_A = 0$ ,  $f_C = 6\%$ , which would imply:



$$2\% = H = \frac{102 - 100}{100} < \frac{1 + 6\%}{1 + 0\%} - 1 = f = 6\%$$

That is, the effective haircut *H* of the transaction, which is 2%, is lower than the haircut floor *f* for this transaction, which is 6%, and consequently the SFT is conducted below the haircut floor. Under the Basel rule text, this will imply that the full amount of collateral received (i.e. 102) cannot be recognised by the bank for credit risk mitigation purposes when calculating the exposure value for this SFTs. Conversely, should have the bank received, for instance, 107 of main index equities as collateral instead of 102, the SFT would have been conducted above the haircut floor, and consequently the 107 collateral amount would have been considered eligible for credit risk mitigation purposes (assuming the other relevant requirements for the collateral are met) when the bank calculates capital requirements for counterparty credit risk of this SFT.

Figure 3. How the objective of the minimum haircut floors framework for SFTs is achieved in the context of the Basel standards.





- 27. This mechanics effectively introduces a cliff effect in terms of collateral eligible for CRM purposes, and consequently an abrupt and significant increase in exposure value as soon as the SFT is conducted below the haircut floor. By introducing this cliff effect, the intention is to incentivise institutions to conduct in-scope SFTs above the haircut floors set out by the FSB.
- 28. Figure 4 outlines the abrupt increase in exposure value E of a single SFT (e.g. a reverse repo) due to the cliff effect in collateral available for CRM purposes as soon as the SFT is conducted below the haircut floor. L is the amount of cash given by the bank to the counterparty, which provides collateral C to the bank. The volatility adjustment associated to the collateral C under the Financial Collateral Comprehensive Method is H, while the haircut floor for the transaction is f. The function  $1_A$  is an indicator function that equals 1 when event A occurs and 0 when event A does not occur. It can be seen how the exposure value E of the SFT is subject to a significant abrupt increase (actually a discontinuous bump) as soon as the collateral C received by the bank is lower than  $L \cdot (1 + f)$  (i.e. as soon as the transaction is conducted below the haircut floor).

Figure 4. Increase in the exposure value as soon as the SFT is conducted below the haircut floor. The red line depicts the exposure value E of the SFT as a function G of the collateral received C.



29. The BCBS issued a consultative document<sup>18</sup> on the introduction of the minimum haircut floors framework for SFTs on 5 November 2015. After considering the responses received during the consultation, the BCBS published on 7 December 2017 the final standards on haircut floors for SFTs as part of the Basel III post-crisis reforms standards.

<sup>18</sup> https://www.bis.org/bcbs/publ/d340.pdf



# 2.2 Policy issues and considerations, impacts and recommendation related to the minimum haircut floors framework for SFTs

- 30. Section 3.4 of the CfA requests, inter alia, the EBA to express its view on i) whether there is already excessive leverage in the EU outside the banking system, ii) to which extent the minimum haircut floors framework would reduce this excessive leverage, and iii) whether the introduction of the minimum haircut floors framework in the EU may have unintended consequences, in particular on the objective of creating a Capital Markets Union (CMU).
- 31. To address the above requests, the EBA has analysed potential effects of implementing the minimum haircut floors framework in the EU. For this purpose, the EBA has also considered responses to the qualitative questionnaire submitted by institutions for the purposes of the CfA, as well as information provided to the EBA by interested stakeholders. Following the analysis the EBA has identified some issues related to the implementation of the minimum haircut floors framework for SFTs, which may be broadly categorised as:
  - policy issues associated with regulatory arbitrage and the possibility to circumvent the minimum haircut floors framework for SFTs, incentives provided to banks by the framework and macroeconomic effects associated with this reform, which question the appropriateness of its implementation at this stage.
  - policy issues associated with the practical implementation of the framework, assuming this were to be implemented.
- 32. This section is structured as follows:
  - First, it describes the first set of issues, which concern the high-level design and objectives of the reform, including positions from other EU institutions, and potential effects in the context of the CMU.
  - Second, it provides an overview of the impact of the reform on the basis of information submitted by institutions for the purposes of the CfA.
  - Third, it describes issues related to the practical implementation of the haircut floors framework, taking particularly into account feedback provided by institutions and interested stakeholders.
  - Finally, on the basis of the assessment made it is provided a policy recommendation on the implementation of the FSB numerical haircut floors framework for SFTs in the EU.



## **2.2.1** Regulatory arbitrage and circumvention of the framework, incentives provided to institutions, positions of other EU institutions and potential effects in the context of the CMU

## Regulatory arbitrage, circumvention, and incentives provided to institutions by the framework

- 33. As noted above, the objective of the minimum haircut floors framework is to limit the build-up of excessive leverage outside the banking system and, to achieve this objective, haircut floors have been included in the Basel standards to be applied with the mechanics described above. As an effect of this, institutions are expected to conduct in-scope SFTs above the haircut floors, since, if they are conducted below the haircut floors, the collateral cannot be recognised by the institution for CRM purposes.
- 34. In this regard the EBA recognises that the minimum haircut floors framework for SFTs could allow to limit or reduce leverage outside the banking sector, and supports the FSB's objective of limiting or reducing such leverage.
- 35. The EBA however also sees some limitations on how much the minimum haircut floors framework for SFTs could limit the build-up of leverage for those counterparties in practice, considering that there may be other means by which leverage could be increased. For instance, despite not being equivalent in nature to a SFT, an unsecured loan provided by a bank (or another entity) to the counterparty would as well increase the counterparty's leverage, while at the same time there would not appear to exist limitations for banks in this regard to provide loans to counterparties (in this context we refer to equivalent limitations meant to limit the build-up of leverage outside the banking system<sup>19</sup>). Likewise counterparties could issue debt in which market participants (not necessarily banks) could invest, which would be another way of increasing their leverage.
- 36. Concretely, even if the framework were implemented, there would still be other means for counterparties to increase their leverage, while these means would not be somehow equivalently constrained to ensure the framework is not circumvented. These means could potentially also include the transactions excluded from the scope of the framework, e.g. SFTs collateralised by government securities<sup>20</sup> or centrally cleared SFTs.
- 37. In addition, even if the framework were able to limit or reduce the leverage outside the banking system, there would still be an issue that could prevent to achieve such objective. This issue relates to the fact that introducing the minimum haircut floors framework as currently designed in the Basel text could incentivise banks to enter into uncollateralised transactions whenever SFTs do not meet haircut floors (e.g. in those cases where banks' counterparties are unwilling to accept a haircut on their securities).

<sup>&</sup>lt;sup>19</sup> E.g. the large exposures framework should not be considered to target this objective.

<sup>&</sup>lt;sup>20</sup> In this regard it is noted that the vast majority of repo transactions are collateralised by sovereign securities, as evidenced in various studies and in the QIS report.



- 38. To see how this would occur, if we take an example (similarly to the above) where a bank gives 100 in cash to an unregulated entity in a reverse repo transaction and receives as collateral 102 of main index equities (which are associated with a 6% haircut under the framework), this SFT is in scope of the framework and not compliant with haircut floors. Consequently the bank will not be allowed to recognise the collateral for credit risk mitigation purposes. In terms of regulatory capital requirements, this situation would for the bank be identical to a situation in which it has provided to the counterparty an unsecured cash loan of 100. For the same capital requirement, the bank could choose to provide its counterparty with an unsecured loan of 100, which is expected to be associated with a higher return being such transaction uncollateralised compared to the situation in which the bank has received collateral and may ask for a lower return. At the same time providing an unsecured loan would be much more risky for the bank than conducting a collateralised transaction, but because this will not be associated with higher capital requirements, this could lead to regulatory arbitrage and banks to take more risks.
- 39. As an alternative where the haircut floors are not satisfied, the bank may also repackage the contract in such a way that the haircut floor is satisfied, while providing the exposure that is in excess of the haircut as unsecured lending. This would again lead to a more risky situation for the bank, and furthermore lower capital charges. To see how this would happen, considering the transaction described in the previous paragraph, such transaction could be structured as the combination of two separate contracts: i) a repurchase transaction under which the bank provides to the counterparty 96 in cash for 102 in main index equities as collateral (please note that this SFT complies with haircut floors) and ii) an unsecured loan of 4 in cash. In the initial case (of one SFT contract in which 100 in cash is given to the counterparty for 102 in main index equities), the exposure for the bank would be 100 (as the transaction is considered uncollateralised, since it breaches the haircut floor), while in the second case the exposure for the bank would be 96 - 102 \* (1 - 20%) + 4 = 18.4 (20% is the volatility adjustment associated with main index equities under the FCCM under the Basel III post-crisis reforms). In the second case the transaction is more risky than in the first case, since the collateral may not be used to recover losses on the unsecured loan if the counterparty were to default on such loan, while at 1the same time the capital requirement is much lower.
- 40. This regulatory arbitrage, or possibility of circumventing the framework, could theoretically incentivise institutions to take more risks for the same capital requirements. Furthermore, such arbitrage possibilities could be exploited by knowledgeable banks that aim at maximising their returns. While a different setup on SFTs from the one currently used could involve operational challenges, since banks would need to change their practices and review their contracts, it still represents a way by which the framework may be circumvented or arbitraged, and, worse, increase the risks for banks for the same amount of capital requirements.
- 41. It should particularly be noted that the cliff effect for the collateral which becomes ineligible for credit risk mitigation purposes as soon as the haircut floor is breached and consequent increase in exposure value as envisaged in the rules as shown above, should represent a high incentive for institutions to change their SFT contracts conducted below haircut floors whenever their counterparties are unwilling to accept a haircut on their securities.



- 42. It is recognised that the minimum haircut floors framework for SFTs as designed in the Basel standards could achieve its objective (i.e. limiting or reducing leverage outside the banking system) if implemented in accordance with its intended expectations. This would require an implementation in a way under which banks will ask their counterparties to provide more collateral for the in-scope SFTs below haircut floors while not providing unsecured financing. That said, the actual implementation in practice may also, looking solely at the incentives in the regulation, lead banks to favour unsecured lending activities in response to the introduction of the haircut floors requirement in the capital framework.
- 43. More fundamentally, as a consequence of the above, from a prudential perspective the minimum haircut floors framework if implemented in the capital framework as envisaged in the Basel standards could theoretically lead to a more risky situation for institutions than the status quo (since banks could have the incentive to go unsecured on their SFTs that do not satisfy the haircut floors), while at the same time it would be unclear whether the application of the framework will have a positive effect in practice on limiting the build-up of leverage outside the banking system. While there are clearly other factors at play in addition to the regulatory framework, the consistency of the regulatory framework and the incentives provided also need to be balanced accordingly. In this particular case, there is a theoretical risk that the framework will induce changes in bank behaviours, which would not be desirable.
- 44. The EBA recognises that there may be several cases in which banks' counterparties will accept to post further collateral for the same amount of financing requested to meet the haircut floors, or alternatively find other sources of collateral rather than bear the higher unsecured financing costs, which could overall limit, or even exclude the potential consequences noted above. Likewise, banks may decide not to favour unsecured lending activities as opposed to secured ones in response to the introduction of the minimum haircut floors framework in the capital framework, which would also rule out those potential consequences. It is however difficult to assess what will happen finally in practice, which therefore calls for prudence at this stage and further assessments, e.g. those proposed by ESMA<sup>21</sup> (see pargraph 53), before implementing numerical haircut floors on SFTs.
- 45. In addition, some banks may also decide to still conduct transactions below haircut floors and bear the unsecured (punitive) capital requirement envisaged by the minimum haircut floors framework under the Basel rules (e.g. to retain particular clients not willing to accept haircuts). In such cases, while the capital requirement will be equivalent to the one for unsecured transactions, the bank will be in a much safer position, since it will have recourse to the collateral received in the transaction. Nevertheless, in such situations the objectives of the minimum haircut floors framework would not be achieved, which besides questions the implementation of haircut floors in the capital framework as envisaged in the Basel standards as opposed to implementation via market regulation which would disallow transactions conducted below haircut floors (see below).
- 46. There are also other considerations which question the appropriateness of implementing the minimum haircut floors framework for SFTs in the EU as envisaged under the Basel standards.



One is the fact that the haircut floors in the Basel standards only refer to bank-to-non-bank transactions, while non-bank-to-non-bank transactions (i.e. SFTs outside the banking system) would not be subject to haircut floors (since the Basel standards are targeted to internationally active banks).

- 47. Despite the amount of non-bank-to-non-bank transactions is expectedly limited, as shown in the ESMA report<sup>21</sup> on SFTs under Article 29(3) of the SFTR made in cooperation with the EBA and the European Systemic Risk Board (ESRB), the treatment of non-bank-to-non-bank transactions should be similar to that of bank-to-non-bank transactions.
- 48. As noted in that ESMA report, the consistent treatment would ensure a level playing field in the EU financial system and address all potential sources of leverage outside the banking sector, while preventing the risk of regulatory arbitrage. Conversely, in the absence of a framework for non-bank-to-non-bank transactions, the application of haircut floors exclusively for bank-to-non-bank transactions may just lead market participants to shift their activities in the shadow banking sector. It should be noted that this potential effect was also mentioned by institutions in their feedback for the purposes of the CfA.
- 49. In addition, despite introducing haircut floors should serve as backstop with a view to limit the build-up of excessive leverage while maintaining incentives for market participants to conduct their own analysis of the appropriate level of haircuts, the framework could also lead to a 'race to the bottom', by which haircuts for SFTs are set by banks just to comply with haircut floors, leading to a decrease from the current market levels for the haircuts.
- 50. All in all, the EBA therefore believes a cautious approach should be taken in implementing the minimum haircut floors framework for SFTs in the EU within the capital framework as currently designed in the Basel standards. This is particularly relevant given the possibility of unintended behavioural consequences, at least in theory. At the same time, the EBA notes the seemingly limited materiality of the framework, which would lead to a more complex framework for a quite limited scope of exposures (as can be seen in the QIS report). It is acknowledged that this framework is part of the BCBS standards, and that it was introduced due to a request from the FSB. Nevertheless the EBA is concerned that the prudential objectives of the capital framework could actually be superseded in this context to pursue objectives that are targeting other goals, e.g. limiting the build-up of leverage outside the banking system, although this could go at the expense of the former objectives.
- 51. In particular, the EBA, as a prudential authority whose mission is especially to safeguard the soundness of the banking sector, considers the prudential objectives of the capital framework more important than the objective of limiting or reducing leverage outside the banking system, which would instead be an objective more in the remit of e.g. systemic risk authorities.

<sup>&</sup>lt;sup>21</sup> https://www.esma.europa.eu/sites/default/files/library/2016-1415\_-\_report\_on\_sfts\_procyclicality\_and\_leverage.pdf



#### Positions of other EU institutions

- 52. In its analysis for the purposes of the CfA of whether the introduction of minimum haircut floors for SFTs could have unintended consequences, the EBA has also considered positions from other EU institutions. In particular, the ESMA, the ESRB and the European Commission have already published papers related to the FSB numerical haircut floors framework for SFTs, and put forward policy recommendations related to the introduction of haircut floors for SFTs.
- 53. Notably, ESMA in its 2016 report<sup>21</sup> under Article 29(3) of the SFTR stated:

In the executive summary:

"[...] ESMA recommends that:

a. The FSB qualitative standards on the methodology used to calculate haircuts in noncentrally cleared SFTs should be introduced as a first step to improve the transparency and stability of haircuts, and the resilience of financial institutions;

*b.* The procyclicality of collateral haircuts used by CCPs should be addressed in the context of the EMIR review;

c. Numerical haircut floors for non-centrally cleared transactions, such as those set out by the FSB, can only be introduced and calibrated following a thorough analysis using granular SFT data (which will become available after the full implementation of the SFTR), and following careful assessment of the scope, considering in particular the size and relevance of EU government bond markets;

d. Other macroprudential instruments, including counter-cyclical ones, should be agreed at international level first, and can only be introduced after a careful assessment that the already introduced measures (such as capital requirement and bilateral margins) are not sufficient to limit the leverage in the system. Only subject to these two conditions can it be considered whether additional macro-prudential instruments would still be needed."

And in the conclusions of the report:

" [...]

181. While remaining fully committed to the implementation of international agreements to foster and preserve the stability of the financial system, ESMA considers that it is too early to draw definitive conclusions as to the impact of the FSB numerical haircut floors on the resilience of the financial system and on the build-up of leverage. Therefore, ESMA recommends that EU regulatory authorities remain cautious when considering the introduction of new quantitative regulatory requirements. While acknowledging the timeline of the FSB recommendations under which, by 2018, the most important jurisdictions should have introduced a framework for haircuts on non-centrally cleared



## SFTs, ESMA would propose to submit a report, prepared in similar fashion to this one, once mandatory reported data of sufficient quality becomes available.

186. Once sufficient historical SFTR data become available, ESMA would propose submitting another report, aimed at assessing the procyclicality of haircuts and leverage from SFTs. This would leave time for the impact of the full implementation of the prudential requirements and other relevant regulatory reforms established in response to the financial crisis to be assessed.

187. Should any further measures be contemplated, ESMA considers that a rigorous impact assessment should be carried out in order to determine whether such measures would be proportionate having regard to financial stability risks covered by the already agreed reforms and the cumulative effect of regulation, in particular the impact on market liquidity and access to clearing services. The design and calibration of additional instruments should be based on clear empirical evidence and detailed analysis of the procyclical effects that are specifically related to margins and haircuts. Furthermore, given the global nature of the SFTs (in European repo markets the share of domestic transactions is only a third), the potential use of macroprudential instruments should be first agreed at international level, in order to maximise their effectiveness and minimise the risk of regulatory arbitrage, while ensuring a level-playing field for market participants inside and outside the EU. ESMA also understands that, at this stage, there is no clear practical evidence that countercyclical measures (e.g. time-varying floors) would effectively reduce procyclicality. While they might reduce the build-up of leverage, it is unclear whether they can ease the deleveraging pressures during an economic downswing. Such an asymmetric effect could create negative externalities and reinforce the perception by market participants that regulatory requirements lead to lower market liquidity.

188. Finally, ESMA recommends that, prior to any further assessments of SFTs, leverage, numerical haircut floors, and potential introduction of additional quantitative macroprudential instruments, the following microprudential measures be considered in the short-term:

a. Introduction of the FSB qualitative standards for the methodologies used by market participants to calculate haircuts on non-centrally cleared SFTs, in order to bring greater transparency and stability, especially to haircuts used on risk assets. These standards should seek maximum alignment with the minimum requirements contained in EMIR, where ESMA would be in a position to leverage from the knowledge it has already acquired in this area.

b. A framework for countercyclical measures on CCP collateral haircuts in the context of the EMIR review, in line with the conclusions of the ESMA's EMIR Review Report No.2.

[...]"



54. The ESRB, in its opinion<sup>22</sup> to ESMA under Article 29 of the SFTR, took a different position, according to which it recommended the implementation of the FSB framework on numerical haircut floors before further data are available. It acknowledged however that there is indeed a general lack of data and that further empirical and conceptual analysis is needed. Moreover, the ESRB noted that, in line with the FSB framework, numerical haircut floors should be implemented using market regulation. In the conclusions of its opinion the ESRB stated:

"[..]

A prudent framework for minimum haircuts should limit the build-up of significant leverage. Implementation in the EU of the FSB regulatory framework for haircuts on non-centrally cleared SFTs (FSB, 2015) is therefore a starting point for limiting the build-up of leverage. In this respect, a large majority of ESRB members support the implementation of the FSB framework into the European regulatory framework. In line with the FSB framework, the numerical haircut floors should be implemented using market regulation. However, as outlined in Section 5.1, the FSB framework on non-centrally cleared SFTs was designed to address risks within the shadow banking system. Therefore, a large majority of ESRB members are of the opinion that the implementation of the FSB regime of minimum haircuts and quantitative margin standards should be kept under review, in particular to assess whether it might be extended to cover a wider set of SFTs in order to address any identified regulatory arbitrage or other risks.

[...]

In order to prevent the build-up of systemic risk resulting from excessive leverage, and to further limit the procyclicality of margins and haircuts, a macroprudential approach towards their setting should be developed. This might, for example, include giving macroprudential authorities the power to set countercyclical minimum haircuts on both centrally and non-centrally cleared transactions (ESRB, 2015; ECB, 2015a; CGFS, 2010). However, as described in Section 6, a few members take a different view on the practical implementation of a macroprudential framework in this area. [...]"

55. These papers were followed by a report<sup>23</sup> under Article 29(3) of the SFTR from the European Commission to the European Parliament and the Council, which concluded that it seems beneficial to assess the potential introduction of qualitative standards and numerical haircut floors on the basis of granular SFT data which will be available once the comprehensive reporting obligations of the SFTR become effective. In the conclusions this Commission report stated:

"To a large extent, the FSB recommendations on SFTs have been addressed in the EU through the adoption of SFTR and specific provisions in sectoral financial services legislation and guidelines. As such, there does not seem to be a need for further regulatory action at this stage.

<sup>22</sup> https://www.esrb.europa.eu/pub/pdf/other/20161004\_esrbopinion.en.pdf

<sup>&</sup>lt;sup>23</sup> https://ec.europa.eu/info/sites/info/files/171019-sftr-report\_en.pdf



As regards the cross-sector qualitative standards for the calculation of haircuts and the introduction of numerical haircut floors, an assessment of the need for and the scope of a potential regulatory action in this field should be based on comprehensive and detailed data on SFT markets which will be available once the SFTR reporting obligation becomes effective. Moreover, the current market dynamics (as described in section 3) reinforce the need for a certain degree of caution and robust evidence when reflecting on regulatory action implying quantitative requirements. Progress at international level is comparable to the EU (i.e. in the early assessment phase) and no other region has taken a decision on regulatory action on haircut floors at this stage. If applicable, the introduction of numerical haircut floors should ideally happen in a globally coordinated manner to avoid compromising a level playing field or putting market participants in the 'first-moving' jurisdiction at a competitive disadvantage.

The Commission will continue to thoroughly monitor developments in SFT markets and the international regulatory space. The Commission will reassess the added value of qualitative standards and haircut floors on the basis of a report to be prepared by ESMA once comprehensive SFT data is available."

#### Potential effects in the context of the CMU

- 56. With regard to the CfA enquiry of whether the minimum haircut floors framework for SFTs may have any unintended consequences on the objective of creating a CMU in the EU, it has been noted by institutions that, if haircuts are raised, the liquidity available in the market could be reduced. As liquidity shrinks, fewer investments can be funded, so there could be less liquidity available to fund companies in the CMU. In addition, potential effects on market-making activities (please see the treatment for securities borrowing transactions below) may also need to be considered. Finally, while noting that the actual effects of the minimum haircut floors framework for SFTs on the CMU are difficult to predict with certainty, institutions commented that these may potentially include higher costs for clients, reduced client facilitation and reduced market liquidity.
- 57. In this regard the EBA notes that, while additional regulatory requirements might impose some restrictions of limited magnitude, these should be considered together with the benefits brought by the reforms, which should outweigh such effects. It is also important to note that the EBA has been presented with no quantitative evidence to support the reduction in liquidity provided by market makers and that the actual business decisions and strategies of firms in general are likely to play a larger role in this context.

#### 2.2.2 Impact of the minimum haircut floors framework on institutions

58. The impact of the minimum haircut floors framework for SFTs appears to be quite diverse across institutions, which may indeed have different business models and positions in SFTs. However, as expected, the minimum haircut floors framework for SFTs is found to have a material impact on EADs of in-scope SFTs non-compliant with haircut floors, as can be evidenced in the QIS



report. The overall capital impact appears however quite limited, despite this framework would introduce further complexity in calculations of capital requirements.

59. In addition, Figure 5 outlines the qualitative responses of institutions on the materiality of the expected impact on current own funds requirements for CCR of SFTs due to the introduction of the minimum haircut floors framework. It can be seen that most institutions did not provide feedback, while, for institutions that responded, the expected impacts are quite heterogeneous.

Figure 5. Impact expected by institutions on current own funds requirements for CCR of SFTs due to the introduction of the minimum haircut floors framework for SFTs.



Source: Qualitative questionnaire submitted to institutions for the purposes of the CfA.

- 60. Figure 6 shows again the rather heterogeneous configuration across institutions concerning SFTs which are in scope of the framework and which would be non-compliant with haircut floors. While for some institutions their in-scope SFTs are generally compliant with haircut floors, for a limited number of institutions a high share of their total SFTs is not compliant. However, in this case too, the vast majority of institutions did not provide feedback.
- 61. This result is consistent with the results from Figure 7, which show how institutions consider the FSB numerical haircut floors in comparison with the haircuts applied to their in-scope SFTs. While again the vast majority of institutions did not provide feedback, for 11 institutions the haircut floors are broadly higher than those they currently use (and would therefore be hit by the minimum haircut floors framework), while for 7 they are broadly lower (and would hence not be materially affected by the framework). 13 institutions noted instead that their SFT haircuts are broadly the same as the FSB haircut floors.



62. This analysis suggests that, while from a banking-wide perspective the minimum haircut floors framework does not seem to have a material impact, this would however occur for a limited number of institutions, which will have strong incentives to review their practices related to SFTs to avoid the capital penalty envisaged by the framework.

Figure 6. Estimate of the percentage of number of SFTs on a single transaction level which are in scope of the minimum haircut floors framework for SFTs and which are transacted below minimum haircut floors (i.e. those which would be considered non-compliant with the minimum haircuts), with respect to all SFTs.



Source: Qualitative questionnaire submitted to institutions for the purposes of the CfA.



Figure 7. How institutions assessed the FSB numerical haircut floors to compare with haircuts currently applied on their in-scope SFTs.

*Source:* Qualitative questionnaire submitted to institutions for the purposes of the CfA.



63. Figure 8 outlines how institutions expect to change their practices on SFTs in response to the introduction of the minimum haircut floors framework, for those institutions that noted they will change their practices. While the number of institutions that responded to expect to change practices related to SFTs in response to the introduction of the minimum haircut floors framework for SFTs is limited, it can be seen that the actions that may be taken could be different, ranging from increasing the haircuts on the SFT contracts to reducing the volumes of SFTs, or making changes to the structure of the transactions. This could include restructuring the transactions as mentioned above. In addition, one institution noted that it would lower its haircuts, which would go against the intentions of the FSB numerical haircut floors framework.

Figure 8. Changes of practices on SFTs by institutions expecting to change practices in response to the introduction of the minimum haircut floors framework for SFTs.



Source: Qualitative questionnaire submitted to institutions for the purposes of the CfA.

64. Overall, these analysis based on quantitative and qualitative information submitted by institutions for the purposes of the CfA would appear to be inconclusive on the final impacts of the minimum haircut floors framework as designed in the Basel standards, particularly considering that most institutions did not provide feedback. While capital requirements for inscope SFTs are expected to increase if affected institutions do not change their practices on SFTs, they should normally decrease if institutions increase the haircuts for their SFTs while not providing unsecured lending, or could remain broadly constant if they repackage their contracts as described above.



65. The ultimate impact of the reform is thus considered unknown and it is noted also depends intrinsically on the scope of the framework, which some industry representatives claim is unclear (please see next subsection). For these reasons the EBA, similarly to other EU institutions considers that it is too early to draw definitive conclusions as to the impacts of the FSB haircut floors, and considers that further analyses should be made before proceeding with the implementation.

## **2.2.3** Issues associated with the practical implementation of the minimum haircut floors framework

- 66. This section outlines some policy issues raised by institutions in the feedback to the qualitative questionnaire submitted for the purposes of the CfA, as well as by interested stakeholders (e.g. industry associations), and is more related to the practical implementation of the minimum haircut floors framework for SFTs. It should however be noted that these issues are likewise relevant to the objectives of the haircut floors reform since they have an effect on how it is implemented and thus should also be relevant to the development of legislative proposals for the purposes of this reform.
- 67. These issues are related to either the scope of the framework (i.e. meaning which SFTs should be subject to this framework) or the mechanics for calculating the exposure value of SFTs under the Basel rule text. Defining the scope of the minimum haircut floors framework, as well as having consistent and clear rules for its mechanics, should be a prerequisite for a harmonised implementation of the framework. This would ensure a level playing field for institutions in the calculation of exposure values of SFTs, and reduce unwarranted variability of RWAs stemming from SFTs, particularly considering that this framework outlines standardised rules.
- 68. Some industry representatives have claimed that the FSB standards have not been transposed consistently in the Basel text, leading to inconsistencies and questions on how the rules should be applied in practice. In this context the EBA notes that the BCBS minimum haircut floors framework was introduced by taking into account the FSB recommendations described above, therefore the FSB report<sup>13</sup> published on 12 November 2015 could be used as a source to better understand the underlying objectives and make relevant considerations for the purposes of the rules applicable to banks in the absence of further guidance. For example, Annex 2 of that FSB report for example in relation to securities borrowing transactions, intragroup transactions, etc.). Nevertheless it is also acknowledged that the BCBS standards and where available BCBS frequently asked questions (FAQs) are in practice the only ones that matters for the purposes of the minimum haircut floors framework under the Basel accord.
- 69. These industry participants also claimed that the inconsistencies in the interpretation of the Basel rule text make it impossible to appropriately assess the impact of the minimum haircut floors framework for SFTs, and in turn the impact of the Basel III post-crisis reforms. While these participants claim to support the objectives of the numerical haircut floors framework developed by the FSB as a means to limit the build-up of excessive leverage outside the banking



system, they are concerned about the — according to them — overly broad scope of the framework and its conservative calibration in the context of the large volume of post-crisis reforms that have already addressed SFTs, which collectively they consider to have addressed the safety and soundness of the financial system.

- 70. The issues raised on the minimum haircut floors framework for SFTs and outlined below are generally similar to FAQs/Q&As, and while some issues pertain to a particular jurisdiction implementation of the rules, others are considered instead of a more broader nature, and should therefore be addressed at international level to ensure a consistent implementation of the rules across jurisdictions if the concerns are indeed pertinent.
- 71. Taking into account the feedback to the qualitative questionnaire by institutions for the purposes of the CfA, as well as for instance referring to the December 2018 GFMA and ICMA Repo Market Study on post-crisis reforms and the evolution of the repo and broader SFT markets<sup>24</sup>, the two main issues also in terms of materiality of the resulting capital requirements appear to be the requests to exclude from the scope of the framework i) securities borrowing transactions and ii) transactions with regulated entities.

#### Treatment for securities borrowing transactions<sup>25</sup>

- 72. Industry representatives and institutions enquired whether securities borrowing transactions are in scope of the minimum haircut floors framework, and advocated that these transactions be excluded from its scope. These transactions are typically under-collateralised from the perspective of the bank, since the bank is providing more collateral to the securities lender for borrowing the security (e.g. to borrow a security valued 100 the bank would have to provide 105 in cash as collateral to its counterparty); therefore, these transaction would fall below haircut floors and would be subject to the punitive capital treatment envisaged by the rules. Furthermore, it was commented that, for the same reason, securities borrowing transactions within netting sets will 'taint' other transactions in the netting set, i.e. lead the netting set not to comply with the haircut floor.
- 73. These industry representatives commented that securities borrowing transactions are not shadow banking financing transactions and their intent is not to provide financing. On the contrary, it was commented that these transactions support liquidity in securities markets, increase market efficiency and allow banks to source specific securities when clients request them (e.g. to meet collateral requirements). In addition, it was commented that securities

<sup>&</sup>lt;sup>24</sup> The December 2018 Repo Market Study developed by the Global Financial Markets Association (GFMA) and the International Capital Market Association (ICMA) is available at: https://www.gfma.org/gfma-and-icma-release-study-on-post-crisis-reforms-and-the-evolution-of-the-repo-and-broader-sft-markets/

https://www.gfma.org/wp-content/uploads/2019/05/gfma-icma-sft-study-december-2018.pdf

<sup>&</sup>lt;sup>25</sup> It is noted that Q3 of Annex 2 of the 12 November 2015 FSB report specifies: 'Securities borrowing should be outside the scope if the lender of securities receives cash collateral and that cash collateral is reinvested in accordance with the minimum standards set out in Section 3.1 of the August 2013 FSB Report, or if the lender of securities does not re-use non-cash collateral received. In addition, securities borrowing can be excluded if the borrower of the securities intends to use the received securities to meet a current or anticipated demand (e.g. delivery obligations, customer demand, segregation requirements).'



borrowing transactions also support price discovery and reduced price volatility, market-making activities and banks' short positions. It was also noted that securities borrowing transactions provide incremental income for mutual funds and pension funds when they lend their securities, thus improving their returns.

74. For these reasons it was commented that the minimum haircut floors framework applied to securities borrowing transactions will severely hinder such business activity, with undesired effects on its benefits. It was also commented that the undesired impacts on market-making activities would go against the objectives of the CMU, which requires strong European capital markets.

#### Exclusion of transactions with particular counterparties<sup>26</sup>

- 75. Industry representatives enquired what counterparties should be considered 'supervised by a regulator that imposes prudential requirements consistent with international norms', with reference to such specification in paragraph 180 of the Basel text. In particular, some institutions commented that the scope of the transactions captured by the minimum haircut floors framework is too broad, in that haircut floors would apply to transactions conducted with too many counterparties. In this regard industry participants advocated that transactions with regulated entities, such as mutual funds, pension funds, insurance companies and broker/dealers be excluded from the scope of the framework (although it is noted that any such exemption would require these counterparties to be mapped to some types of counterparties defined under EU legislation).
- 76. Relevant in this context would also be the treatment of intragroup counterparties (and thus intragroup transactions)<sup>27</sup>.
- 77. The definition of counterparties that would determine whether transactions are in scope or out of scope of the haircut floors framework is clearly of key importance to properly shape the framework and achieve the intended objectives. In this regard the EBA is of the view that for this issue, similarly to the previous issue, a consistent treatment should be applied across jurisdictions in the specification of the counterparties the transactions with which should be exempted. Nevertheless the EBA also recognises that this issue could likely also be of political nature.

<sup>&</sup>lt;sup>26</sup> The 12 November 2015 FSB report specifies that 'The framework of numerical haircut floors will apply to non-centrally cleared securities financing transactions in which financing against collateral other than government securities is provided to non-banks. Centrally-cleared securities financing transactions and financing provided to banks and broker-dealers subject to adequate capital and liquidity regulation on a consolidated basis are excluded'. Footnote 11 of that report also specifies: 'On an exceptional basis, national/regional authorities may also exclude insurance companies subject to regulatory capital and liquidity requirements and that have access to central bank facilities as appropriate.'

<sup>&</sup>lt;sup>27</sup> Regarding the treatment of intragroup transactions, see Q1 of Annex 2 of the 12 November 2015 FSB report.



## Application of the minimum haircut floors framework under the standardised and IRB approaches to credit risk

- 78. The EBA has been informed that there have been also doubts by institutions as to whether the minimum haircut floors framework applied exclusively to SFTs under the SA to credit risk, or would also apply to SFTs under the IRB approach to credit risk, on the basis that the minimum haircut floors for SFTs standards text is specified in the credit risk mitigation section of the Basel III post-crisis reforms standards in the chapter referring to the SA.
- 79. Under the Consolidated Basel Framework, the minimum haircut floors for SFTs standards have been separated as an independent section (CRE56)<sup>12</sup> of the credit risk standards, which should now unambiguously refer to all in-scope SFTs, regardless of whether they are treated under the SA or the IRB approach. In this regard the EBA supports that a consistent treatment should be applied to SFTs regardless of whether they are treated under the SA or the IRB approach, and therefore the minimum haircut floors framework should not refer exclusively to SFTs under the SA.

#### Paragraph 183 of the Basel minimum haircut floors framework standards

80. Some industry representatives expressed concern and enquired about the requirement of paragraph 183 of the Basel minimum haircut floors framework standards, which reads:

Banks that lend securities are exempted from the haircut floors on collateral upgrade transactions if they are unable to re-use, or provide representations that they do not and will not reuse, the securities received as collateral against the securities lent.

81. Without pre-empting any BCBS (and potentially FSB) clarification on this requirement, the EBA considers that the objective of this paragraph is to avoid that the counterparty of the bank obtains financing and increases its leverage by reusing the securities received as collateral (or would be consistent with the objective that the FSB framework should be applied to transactions where the primary motive is to provide financing, i.e. cash, rather than to borrow or lend specific securities). That is, the intent of this paragraph is considered to exempt securities-for-securities transactions where the bank's counterparty provides representations that the counterparty will not reuse the security received from the bank. In particular, the requirement in paragraph 183 is intended to implement the second paragraph of Section 3.4 of the 12 November 2015 FSB report<sup>13</sup>, which reads:

Similar to the exemptions for cash collateralised securities lending (as explained in Section 3.3), securities lenders could be exempted from the numerical haircut floors on "collateral upgrade" transactions — or securities borrowing/lending transactions against the pledging of other securities as collateral, rather than cash — if they are unable to re-use, or provide representations that they do not and will not reuse, the securities received as collateral against the securities lent.



82. Therefore, to be consistent with this FSB requirement, it is considered that paragraph 183 should be read as (unless the FSB text is directly included in the Basel standards):

Banks' counterparties that lend securities (to the bank) are exempted from the haircut floors on collateral upgrade transactions — or securities borrowing/lending transactions against the pledging of other securities as collateral, rather than cash — if they (i.e. the banks' counterparties) are unable to re-use, or provide representations that they do not and will not reuse, the securities received as collateral against the securities lent.

Please also refer to footnote 25 of this document (related to Q3 of Annex 2 of the 12 November 2015 FSB report), which provides further guidance on this requirement.

#### Formulae of the minimum haircut floors framework for SFTs

83. With respect to the mechanics of the minimum haircut floors framework for SFTs, some industry representatives expressed concern with respect to the formulae to be employed to calculate and compare the haircut floors for eligible netting sets of SFTs. One institution in its feedback to the qualitative questionnaire for the purposes of the CfA commented that, even where individual trades were compliant with the haircut floors, the netting set composed by those trades may not be compliant. Annex B of the December 2018 GFMA and ICMA Repo Market Study<sup>24</sup> outlines other examples which the industry considers to be anomalous outcomes resulting from the application of the formulae set out in the Basel standards.

#### Other issues

- 84. Some institutions and stakeholders also enquired about other policy issues that would be relevant for a consistent implementation of the rules:
  - The treatment of SFTs included in cross product netting sets whose exposure values are calculated under the IMM for counterparty credit risk. In particular it was noted that the minimum haircut floors standards do not mention cross product netting sets, while the formulae specified therein refer to single SFTs and netting sets of SFTs, but not cross product netting sets.
  - The definition of government securities<sup>28</sup> under the minimum haircut floors for SFTs standards, and potentially the definitions of other types of securities mentioned in the table in paragraph 184 of those standards (i.e. Table 1 of this document).
  - Confirmation that margin lending transactions are in scope of the minimum haircut floors framework for SFTs.

<sup>&</sup>lt;sup>28</sup> With regard to this issue, it is noted that footnote 4 of the 12 November 2015 FSB report clarifies that 'Government securities are defined as claims on sovereigns under the Basel III standardised approach. This includes claims on: central governments (and their central banks); certain non-central government public sector entities (PSEs) identified as sovereigns in the standardised approach; multilateral development banks (MDBs) that meet the criteria for a 0% risk-weight under the standardised approach; the Bank for International Settlements (BIS); the International Monetary Fund (IMF); the European Central Bank (ECB); and the European Union (EU).'



85. Some institutions noted that there may be some operational challenges in implementing the requirements of the minimum haircut floors framework, such as with regard to the identification of the transactions in scope of the framework and compliance with the requirements of investments of cash collateral under paragraph 182 of the Basel standards.

## **2.2.4** EBA recommendation on the implementation of the minimum haircut floors framework for SFTs in the EU

- 86. Taking into account the above analysis of the minimum haircut floors framework for SFTs designed under the Basel standards, including the regulatory arbitrage and possibility of circumvention, the incentives it provides to institutions, the potential market consequences and the positions of the other EU institutions, the EBA believes a cautious approach is warranted before proceeding with the implementation in the EU of the minimum haircut floors framework in the capital framework as designed in the Basel standards. Consequently, the EBA recommends at this stage to withhold the implementation in the EU of the minimum haircut floors framework for SFTs in the capital framework as designed in the Basel standards.
- 87. More broadly, the EBA suggests that the issues identified above should be carefully considered before proceeding with the implementation. Other unintended consequences (e.g. potential impacts on market-making activities or short selling) highlighted by stakeholders above, as well as the issues linked to the practical implementation of the framework (e.g. the definition of its scope and mechanics), if indeed appropriate concerns, should likewise be considered and addressed before proceeding with the implementation.
- 88. For the purposes of the CfA, the EBA also considered the possibility of developing potential adjustments to the design of the minimum haircut floors framework to address the issues noted above, but refrained from doing so for a number of reasons. First, any changes or alternative design of the framework would be appropriate to be developed at international level (i.e. by the FSB or alternatively the BCBS) to ensure a level playing field across jurisdictions being the SFT market global, and in addition the limited time available for delivering the CfA response would not have been sufficient for such an ambitious project.
- 89. In this context, it is noted that alternative designs of the framework were already considered at international level during its development: for example, the FSB<sup>14</sup> considered an alternative design under which a penalty function would progressively increase the capital requirement with the increase of the amount of uncollateralisation with respect to the haircut floors, but such a design was not reflected in the Basel standards. That alternative design could still be subject to the regulatory arbitrage issues described above<sup>29</sup>, and it would also deviate from the Basel standards which the EU aims to timely and consistently implement; therefore, the EBA refrained from inspecting further alternative implementation designs of the framework.

<sup>&</sup>lt;sup>29</sup> Although it is noted that under such alternative design there may be less incentives for institutions to go unsecured.



- 90. For the same reasons, the EBA refrained except in limited cases from providing policy guidance and clarification on the scope and mechanics of the minimum haircut floors framework in the context of this response to the CfA. Any policy guidance in this regard should first occur at international level, to ensure a consistent implementation across jurisdictions and a level playing field in the rules to be applied for SFTs.
- 91. Upon due consideration of the identified issues on the haircut floors framework for SFTs (if they are appropriate concerns), and only after analyses and recommendations supporting the implementation of haircut floors for SFTs are provided by market and systemic risk authorities (e.g. by supporting that the implementation of haircut floors would be beneficial from a system-wide perspective, including banks), the EBA would support proceeding with implementing haircut floors for SFTs in the EU. In particular the EBA supports the FSB objective of limiting or reducing leverage outside the banking system, and recognises that haircut floors on SFTs could serve for such goal along with other potential benefits<sup>30</sup>.
- 92. In this regard, recommendation 14 of the FSB report<sup>13</sup> (reported above) envisages that the implementation of haircut floors could occur either via implementation of the Basel III standards (i.e. via the capital framework) or via market regulation.
- 93. The main difference between implementing haircut floors for SFTs via market regulation rather than via the capital framework by transposing the Basel standards consists in the fact that under market regulation normally there would not be the discretion to conduct in-scope SFTs below the haircut floors. Conversely, by implementing the minimum haircut floors framework as designed by the Basel standards, in-scope SFTs could still be conducted below haircut floors, however in this case the institution would be required to hold higher capital requirements for such SFTs (which should provide the incentive for the institution to conduct those in-scope SFTs above the haircut floors).
- 94. In this regard, there are potential pros and cons of either type of implementation. For example, by implementing via the capital framework institutions could still conduct SFTs below haircut floors (although subject to higher capital requirements), which could turn out to be beneficial in a situation of financial distress with squeezed liquidity and falling asset valuations. Nevertheless it could be argued that, in a situation of financial distress, market participants typically tend to increase the amount of collateral required from counterparties and hence the haircuts, therefore in such a situation haircut floors may not represent a constraint anyway, as actual haircuts would likely be above the floors.
- 95. However, more fundamentally, the possibility to split/repackage SFT contracts could represent a way thanks to which market participants may in practice circumvent the framework either under a market regulation for haircut floors or under implementation of haircut floors via the capital framework as designed under the Basel standards. Accordingly, it could be claimed that by design either implementation could potentially be arbitraged by market participants.

<sup>&</sup>lt;sup>30</sup> For instance, incentives to centrally clear SFTs.



- 96. There is however a crucial aspect that distinguishes the implementation of haircut floors via market regulation versus via the capital framework, which is the fact that if implemented under the capital framework by transposing the Basel standards such an implementation would not allow to target non-bank-to-non-bank transactions (unless additional separate regulatory initiatives are formulated), whose treatment as noted above should be similar to that of bank-to-non-bank transactions (which are instead captured by the Basel standards). In contrast, implementation via market regulation would ensure a level playing field in the financial system while preventing market participants to shift their activities in the shadow banking sector. In this context it should particularly be noted that also the FSB in its recommendation 15 (reported above) recommended authorities to introduce haircut floors also for non-bank-to-non-bank transactions by the end of 2018, however on the basis of an assessment of the scale of SFT activities and the materiality of non-bank-to-non-bank transactions in their jurisdictions.
- 97. In this regard, implementation of haircut floors via market regulation where this was first suggested by market authorities and systemic risk authorities could allow to target at the same time bank-to-non-bank transactions and non-bank-to-non-bank transactions that should be in scope of the framework under a comprehensive consistent regulation. This is considered beneficial with respect to implementing haircut floors in the capital framework for banks (e.g. in the CRR), and separately in other regulatory texts for the other types of counterparties that should also be subject to requirements on haircut floors, with a view to capture also non-bank-to-non-bank transactions.
- 98. In addition, if the objective of the mechanics of the minimum haircut floors framework for SFTs in the capital framework is to ensure that institutions do not conduct the in-scope SFTs below haircut floors, such objective could be achieved in a cleaner way under a market regulation, where there would not be the discretion (at least under normal market conditions) to conduct them below the floors. In fact, as noted above, if haircut floors were implemented in the capital framework as designed in the Basel standards, institutions could still trade SFTs conducted below haircut floors (while subject to punitive capital requirements), which would not allow to meet the objectives of the framework.
- 99. Furthermore, from a practical perspective the implementation of haircut floors via market regulation would not require amendments to the capital rules (e.g. to the CRR). On the contrary, haircut floors for in-scope SFTs would apply as envisaged under the market regulation, with an automatic direct impact on institutions' capital requirements for those SFTs, but there would not be the need to enforce a particular credit risk mitigation treatment for SFTs that did not satisfy the haircut floors (since the in-scope transactions would automatically be transacted above the floors due to the market regulation).
- 100. On the basis of these considerations, the EBA considers at this stage more appropriate that, if numerical haircut floors for SFTs were to be finally be introduced in the EU, this should occur via



market regulation (which would disallow<sup>31</sup> the discretion for in-scope SFTs to be conducted below haircut floors), but only after analyses and recommendations supporting this proposal are provided by market and systemic risk authorities.

- 101. However the EBA also considers of utmost importance that any implementation of rules on SFTs, including haircut floors, should occur in a consistent and simultaneous fashion across jurisdictions, to ensure a level playing field in the global SFT markets and prudential treatment for relevant market participants. To this end, the EBA is also open to consider and support alternative implementations of haircut floors for SFTs, to the extent that these are consistently supported at international level. However, the EBA would not support to implement haircut floors for SFTs if other main jurisdictions do not follow the same path.
- 102. In particular, the implementation of haircut floors for SFTs via market regulation in the EU while implementation via the capital framework in other jurisdictions, could lead to an unlevel playing field for EU institutions, since unlike their non-EU peers they would not be allowed to conduct in-scope SFTs below haircut floors.
- 103. Finally, the EBA considers that an eventual implementation of haircut floors for SFTs via market regulation and not via the capital framework by transposition of the Basel III postcrisis reforms standards — should not be considered a deviation from the consistent implementation of the Basel framework (e.g. in the context of BCBS RCAP assessments). This is because the high-level design for the implementation of numerical haircut floors for SFTs was designed by the FSB, which required the BCBS to implement the haircut floors as part of the Basel standards, but which also considers implementation via market regulation a valid alternative with respect to implementing via an entity-based approach. In fact, as noted above, implementation via market regulation would have (automatic) direct consequences also on institutions' capital requirements for SFTs, consistently with what should happen under implementation via the capital framework, while addressing the same policy objective (i.e. limiting the build-up of leverage outside the banking system).

#### Recommendation SFTs 2: Introduction of the minimum haircut floors framework for SFTs

The EBA shares the cautious stance taken by the ESMA and the European Commission on the introduction of numerical haircut floors for SFTs, and recommends at this stage to withhold the implementation in the EU of the minimum haircut floors framework for SFTs in the capital framework as designed in the Basel III post-crisis reforms standards. In addition, if numerical haircut floors for SFTs were to be introduced in the EU, the EBA is of the view that this should occur via market regulation, but only after further analyses and recommendations are provided by market authorities and systemic risk authorities.

<sup>&</sup>lt;sup>31</sup> Under particular circumstances or market conditions, such regulation could also be designed to allow in-scope SFTs to be conducted below haircut floors (e.g. on the basis of assessments by relevant authorities), thus waiving under those circumstances the mandatory requirement to conduct those SFTs above haircut floors.



# Annex 1: Formulae of the minimum haircut floors framework for SFTs

The framework requires the following inequalities to be met for in-scope SFTs for the bank to consider the collateral received in the SFT eligible for credit risk mitigation purposes:

• For a single in-scope SFT:

$$H = \frac{C}{A} - 1 = \frac{C - A}{A} \ge \frac{1 + f_C}{1 + f_A} - 1 = f$$

where:

H = effective haircut of the SFT

*f* = effective floor of the SFT

A = asset given by the bank to the counterparty

C = collateral received by the bank from the counterparty

 $f_A$  = haircut floor related to the asset given to the counterparty

 $f_c$  = haircut floor related to the collateral received from the counterparty

• For eligible netting sets of SFTs:

$$H_{portfolio} = \frac{\sum_{t} C_{t} - \sum_{s} A_{s}}{\sum_{s} A_{s}} \ge \frac{\frac{\sum_{t} [C_{t} \cdot (1 + f_{t})]}{\sum_{t} C_{t}}}{\frac{\sum_{s} [A_{s} \cdot (1 + f_{s})]}{\sum_{s} A_{s}}} - 1 = f_{portfolio}$$

where:

 $H_{portfolio}$  = effective haircut of the 'portfolio' (netting set) of SFTs

 $f_{portfolio}$  = effective floor of the 'portfolio' (netting set) of SFTs

 $A_s$  = net position in each security (or cash) s that is net lent to the counterparty

 $C_t$  = net position in each security (or cash) t that is net borrowed from the counterparty

 $f_s$  = haircut floor related to security s that is net lent to the counterparty

 $f_t$  = haircut floor related to security *t* that is net borrowed from the counterparty

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