

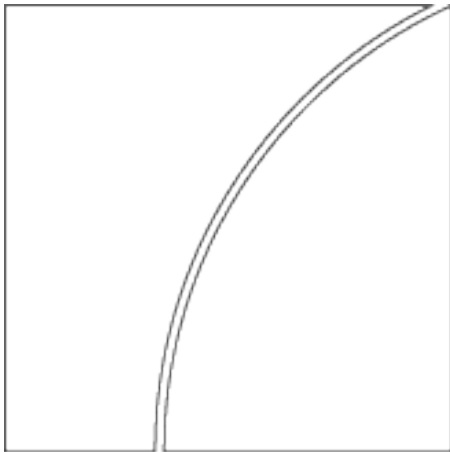
Basel Committee on Banking Supervision

CRE

Calculation of RWA for credit
risk

CRE56

Minimum haircut floors for
securities financing
transactions



**Version effective as of
01 Jan 2023**

First version in the format of the consolidated framework, updated to take account of the revised implementation date announced on 27 March 2020 and the technical amendments announced on 1 July 2021.



BANK FOR INTERNATIONAL SETTLEMENTS

Scope

56.1 This chapter specifies the treatment of certain non-centrally cleared securities financing transactions (SFTs) with certain counterparties. The requirements are not applicable to banks in jurisdictions that are prohibited from conducting such transactions below the minimum haircut floors specified in [CRE56.6](#) below.

56.2 The haircut floors found in [CRE56.6](#) below apply to the following transactions:

- (1) Non-centrally cleared SFTs in which the financing (ie the lending of cash) against collateral other than government securities is provided to counterparties who are not supervised by a regulator that imposes prudential requirements consistent with international norms.
- (2) Collateral upgrade transactions with these same counterparties. A collateral upgrade transaction is when a bank lends a security to its counterparty and the counterparty pledges a lower-quality security as collateral, thus allowing the counterparty to exchange a lower-quality security for a higher quality security. For these transactions, the floors must be calculated according to the formula set out in [CRE56.9](#) below.

56.3 SFTs with central banks are not subject to the haircut floors.

56.4 Cash-collateralised securities lending transactions are exempted from the haircut floors where:

- (1) Securities are lent (to the bank) 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.
- (2) Securities are lent (to the bank) 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 Section 3.1 of the Policy Framework for Addressing Shadow Banking Risks in Securities Lending and Repos.¹ For this purpose, banks may rely on representations by securities lenders that their reinvestment of cash collateral meets the minimum standards.

Footnotes

¹ *Financial Stability Board, Strengthening oversight and regulation of shadow banking, Policy framework for addressing shadow banking risks in securities lending and repos, 29 August 2013, www.fsb.org/wp-content/uploads/r_130829b.pdf.*

56.5 Banks that borrow (or lend) securities are exempted from the haircut floors on collateral upgrade transactions if the recipient of the securities that the bank has delivered as collateral (or lent) is either: (i) unable to re-use the securities (for example, because the securities have been provided under a pledge arrangement); or (ii) provides representations to the bank that they do not and will not re-use the securities.

Haircut floors

56.6 These are the haircut floors for SFTs referred to above (herein referred to as “in-scope SFTs”), expressed as percentages:

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%	

56.7 In-scope SFTs which do not meet the haircut floors must be treated as unsecured loans to the counterparties.

56.8

To determine whether the treatment in [CRE56.7](#) applies to an in-scope SFT (or a netting set of SFTs in the case of portfolio-level haircuts), we must compare the collateral haircut H (real or calculated as per the rules below) and a haircut floor f (from [CRE56.6](#) above or calculated as per the below rules).

Single in-scope SFTs

56.9 For a single in-scope SFT not included in a netting set, the values of H and f are computed as:

- (1) For a single cash-lent-for-collateral SFT, H and f are known since H is simply defined by the amount of collateral received and f is given in [CRE56.6](#).² For the purposes of this calculation, collateral that is called by either counterparty can be treated collateral received from the moment that it is called (ie the treatment is independent of the settlement period).
- (2) For a single collateral-for-collateral SFT, lending collateral A and receiving collateral B, the H is still be defined by the amount of collateral received but the effective floor of the transaction must integrate the floor of the two types of collateral and can be computed using the following formula, which will be compared to the effective haircut of the transaction, ie $(C_B/C_A)-1$.³

$$f = \left[\left(\frac{1}{1+f_A} \right) / \left(\frac{1}{1+f_B} \right) \right] - 1 = \frac{1+f_B}{1+f_A} - 1$$

Footnotes

² For example, consider an in-scope SFT where 100 cash is lent against 101 of a corporate debt security with a 12-year maturity, H is 1% [(101-100)/100] and f is 4% (per [CRE56.6](#)). Therefore, the SFT in question would be subject to the treatment in [CRE56.7](#).

³ For example, consider an in-scope SFT where 102 of a corporate debt security with a 10-year maturity is exchanged against 104 of equity, the effective haircut H of the transaction is $104/102 - 1 = 1.96\%$ which has to be compared with the effective floor f of $1.06/1.03 - 1 = 2.91\%$. Therefore, the SFT in question would be subject to the treatment in [CRE56.7](#).

Netting set of SFTs

56.10 For a netting set of SFTs an effective "portfolio" floor of the transaction must be computed using the following formula,⁴ where:

- (1) E_s is the net position in each security (or cash) s that is net lent;
- (2) C_t the net position that is net borrowed; and
- (3) f_s and f_t are the haircut floors for the securities that are net lent and net borrowed respectively.

$$f_{Portfolio} = \left[\frac{\left(\frac{\sum_s \left(\frac{E_s}{1+f_s} \right)}{\sum_s E_s} \right)}{\left(\frac{\sum_t \left(\frac{C_t}{1+f_t} \right)}{\sum_t C_t} \right)} \right]^{-1}$$

Footnotes

⁴ The formula calculates a weighted average floor of the portfolio.

56.11 For a netting of SFTs, the portfolio does not breach the floor where:

$$\frac{\sum C_t - \sum E_s}{\sum E_s} \geq f_{Portfolio}$$

56.12 If the portfolio haircut does breach the floor, then the netting set of SFTs is subject to the treatment in [CRE56.7](#). This treatment should be applied to all trades for which the security received appears in the table in [CRE56.6](#) and for which, within the netting set, the bank is also a net receiver in that security. For the purposes of this calculation, collateral that is called by either counterparty can be treated collateral received from the moment that it is called (ie the treatment is independent of the settlement period).

56.13 The following portfolio of trades gives an example of how this methodology works (it shows a portfolio that does not breach the floor):

Actual trades	Cash	Sovereign debt	Collateral A	Collateral B
Floor (f_s)	0%	0%	6%	10%
Portfolio of trades	50	100	-400	250
E_s	50	100	0	250
C_t	0	0	400	0

$f_{Portfolio}$	-0.00023
$\frac{\sum C_t - \sum E_s}{\sum E_s}$	0