Basel Committee on Banking Supervision

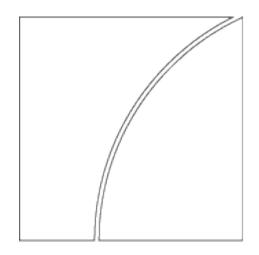CRE

Calculation of RWA for credit risk

CRE41

Securitisation: standardised approach

Version effective as of 15 Dec 2019

First version in the format of the consolidated framework.

BANK FOR INTERNATIONAL SETTLEMENTS

Standardised approach (SEC-SA)

41.1 To calculate capital requirements for a securitisation exposure to a standardised approach (SA) pool using the securitisation standardised approach (SEC-SA), a bank would use a supervisory formula and the following bank-supplied inputs: the SA capital charge had the underlying exposures not been securitised (K_{SA}); the ratio of delinquent underlying exposures to total underlying exposures in the securitisation pool (W); the tranche attachment point (A); and the tranche detachment point (D). The inputs A and D are defined in [CRE44.14](CRE44.14) and [CRE44.15](CRE44.15) respectively. Where the only difference between exposures to a transaction is related to maturity, A and D will be the same. K_{SA} and W are defined in [CRE41.2](CRE41.2) to [CRE41.4](CRE41.4) and [CRE41.6](CRE41.6).

41.2 K_{SA} is defined as the weighted-average capital charge of the entire portfolio of underlying exposures, calculated using the risk-weighted asset amounts in [CRE20](CRE20) in relation to the sum of the exposure amounts of underlying exposures, multiplied by 8%. This calculation should reflect the effects of any credit risk mitigant that is applied to the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures. K_{SA} is expressed as a decimal between zero and one (that is, a weighted-average risk weight of 100% means that K_{SA} would equal 0.08).

41.3 For structures involving a special purpose entity (SPE), all of the SPE's exposures related to the securitisation are to be treated as exposures in the pool. Exposures related to the securitisation that should be treated as exposures in the pool include assets in which the SPE may have invested, comprising reserve accounts, cash collateral accounts and claims against counterparties resulting from interest swaps or currency swaps.[1] Notwithstanding, the bank can exclude the SPE's exposures from the pool for capital calculation purposes if the bank can demonstrate to its national supervisor that the risk does not affect its particular securitisation exposure or that the risk is immaterial – for example, because it has been mitigated.[2]

> *In particular, in the case of swaps other than credit derivatives, the numerator of K_{SA} must include the positive current market value times the risk weight of the swap provider times 8%. In contrast, the denominator should not take into account such a swap, as such a swap would not provide a credit enhancement to any tranche.*

> *Certain best market practices can eliminate or at least significantly reduce the potential risk from a default of a swap provider. Examples of such features could be cash collateralisation of the market value in combination with an agreement of prompt additional payments in case of an increase of the market value of the swap and minimum credit quality of the swap provider with the obligation to post collateral or present an alternative swap provider without any costs for the SPE in the event of a credit deterioration on the part of the original swap provider. If national supervisors are satisfied with these risk mitigants and accept that the contribution of these exposures to the risk of the holder of a securitisation exposure is insignificant, supervisors may allow the bank to exclude these exposures from the K_{SA} calculation.*

41.4 In the case of funded synthetic securitisations, any proceeds of the issuances of credit-linked notes or other funded obligations of the SPE that serve as collateral for the repayment of the securitisation exposure in question, and for which the bank cannot demonstrate to its national supervisor that they are immaterial, have to be included in the calculation of K_{SA} if the default risk of the collateral is subject to the tranched loss allocation.[3]

> *As in the case of swaps other than credit derivatives, the numerator of K_{SA} (ie weighted-average capital charge of the entire portfolio of underlying exposures) must include the exposure amount of the collateral times its risk weight times 8%, but the denominator should be calculated without recognition of the collateral.*

41.5 In cases where a bank has set aside a specific provision or has a non-refundable purchase price discount on an exposure in the pool, K_{SA} must be calculated using the gross amount of the exposure without the specific provision and/or non-refundable purchase price discount.

41.6

The variable W equals the ratio of the sum of the nominal amount of delinquent underlying exposures (as defined in CRE41.7) to the nominal amount of underlying exposures.

41.7 Delinquent underlying exposures are underlying exposures that are 90 days or more past due, subject to bankruptcy or insolvency proceedings, in the process of foreclosure, held as real estate owned, or in default, where default is defined within the securitisation deal documents.

41.8 The inputs K_{SA} and W are used as inputs to calculate K_A, as follows:

$$K_A = (1 - W) \times K_{SA} + 0.5W$$

41.9 In case a bank does not know the delinquency status, as defined above, for no more than 5% of underlying exposures in the pool, the bank may still use the SEC-SA by adjusting its calculation of K_A as follows:

$$K_A = \left(\frac{EAD_{subpool\ 1\ where\ W\ known}}{EAD\,Total} \times K_A^{subpool\ 1\ where\ W\ known} \right) + \frac{EAD_{subpool\ 2\ where\ W\ unknown}}{EAD\,Total}$$

41.10 If the bank does not know the delinquency status for more than 5%, the securitisation exposure must be risk weighted at 1250%.

41.11 Capital requirements are calculated under the SEC-SA as follows, where $K_{SSFA(KA)}$ is the capital requirement per unit of the securitisation exposure and the variables a, u, and l are defined as:

(1)   a = −(1 / (p * K_A))

(2)   u = D − K_A

(3)   l = max (A − K_A; 0)

$$K_{SSFA(K_A)} = \frac{e^{au} - e^{al}}{a(u - l)}$$

41.12 The supervisory parameter p in the context of the SEC-SA is set equal to 1 for a securitisation exposure that is not a resecuritisation exposure.

41.13 The risk weight assigned to a securitisation exposure when applying the SEC-SA would be calculated as follows:

(1) When D for a securitisation exposure is less than or equal to K_A, the exposure must be assigned a risk weight of 1250%.

(2) When A for a securitisation exposure is greater than or equal to K_A, the risk weight of the exposure, expressed as a percentage, would equal $K_{SSFA(K_A)}$ times 12.5.

(3) When A is less than K_A and D is greater than K_A, the applicable risk weight is a weighted average of 1250% and 12.5 times $K_{SSFA(K_A)}$ according to the following formula:

$$RW = \left(12.5 \times \frac{K_A - A}{D - A} \right) + \left(12.5 \times K_{SSFA(K_A)} \times \frac{D - K_A}{D - A} \right)$$

41.14 The risk weight for market risk hedges such as currency or interest rate swaps will be inferred from a securitisation exposure that is pari passu to the swaps or, if such an exposure does not exist, from the next subordinated tranche.

41.15 The resulting risk weight is subject to a floor risk weight of 15%. Moreover, when a bank applies the SEC-SA to an unrated junior exposure in a transaction where the more senior tranches (exposures) are rated and therefore no rating can be inferred for the junior exposure, the resulting risk weight under SEC-SA for the junior unrated exposure shall not be lower than the risk weight for the next more senior rated exposure.

Resecuritisation exposures

41.16 For resecuritisation exposures, banks must apply the SEC-SA specified in CRE41.1 to CRE41.15, with the following adjustments:

(1) the capital requirement of the underlying securitisation exposures is calculated using the securitisation framework;

(2) delinquencies (W) are set to zero for any exposure to a securitisation tranche in the underlying pool; and

(3) the supervisory parameter p is set equal to 1.5, rather than 1 as for securitisation exposures.

41.17 If the underlying portfolio of a resecuritisation consists in a pool of exposures to securitisation tranches and to other assets, one should separate the exposures to securitisation tranches from exposures to assets that are not securitisations. The K_A parameter should be calculated for each subset individually, applying separate W parameters; these calculated in accordance with [CRE41.6](#) and [CRE41.7](#) in the subsets where the exposures are to assets that are not securitisation tranches, and set to zero where the exposures are to securitisation tranches. The K_A for the resecuritisation exposure is then obtained as the nominal exposure weighted-average of the K_A's for each subset considered.

41.18 The resulting risk weight is subject to a floor risk weight of 100%.

41.19 The caps described in [CRE40.50](#) to [CRE40.55](#) cannot be applied to resecuritisation exposures.

Alternative capital treatment for term STC securitisations and short-term STC securitisations meeting the STC criteria for capital purposes

41.20 Securitisation transactions that are assessed as simple, transparent and comparable (STC)-compliant for capital purposes as defined in [CRE40.67](#) can be subject to capital requirements under the securitisation framework, taking into account that, when the SEC-SA is used, [CRE41.21](#) and [CRE41.22](#) are applicable instead of [CRE41.12](#) and [CRE41.15](#) respectively.

41.21 The supervisory parameter p in the context of the SEC-SA is set equal to 0.5 for an exposure to an STC securitisation.

41.22 The resulting risk weight is subject to a floor risk weight of 10% for senior tranches, and 15% for non-senior tranches.