

Basel Committee on Banking Supervision

DIS

Disclosure requirements

DIS21

Comparison of modelled and
standardised RWA

**Version effective as of
01 Jan 2023**

First version in the format of the consolidated framework, updated to take account of new implementation date as announced on 27 March 2020. Also, cross references to the securitisation chapters updated to include a reference to the chapter on NPL securitisations (CRE45) published on 26 November 2020.



BANK FOR INTERNATIONAL SETTLEMENTS

Introduction

21.1 The disclosure requirements under this section are:

- (1) Template CMS1 – Comparison of modelled and standardised RWA at risk level
- (2) Template CMS2 – Comparison of modelled and standardised RWA for credit risk at asset class level

21.2 Template CMS1 provides the disclosure of RWA calculated according to the full standardised approach as compared to actual RWA at risk level. Template CMS2 further elaborates on the comparison between RWA computed under the standardised and the internally modelled approaches by focusing on RWA for credit risk at asset class and sub-asset class levels.

Template CMS1 - Comparison of modelled and standardised RWA at risk level

Purpose: To compare full standardised risk-weighted assets (RWA) against modelled RWA that banks have supervisory approval to use in accordance with the Basel framework. The disclosure also provides the full standardised RWA amount that is the base of the output floor as defined in [RBC20.4\(2\)](#).

Scope of application: The template is mandatory for all banks using internal models.

Content: RWA.

Frequency: Quarterly.

Format: Fixed.

Accompanying narrative: Banks are expected to explain the main drivers of difference (eg asset class or sub-asset class of a particular risk category, key assumptions underlying parameter estimations, national implementation differences) between the internally modelled RWA disclosed that are used to calculate their capital ratios and RWA disclosed under the full standardised approach that would be used should the banks not be allowed to use internal models. Explanation should be specific and, where appropriate, might be supplemented with quantitative information. In particular, if the RWA for securitisation exposures in the banking book are a main driver of the difference, banks are expected to explain the extent to which they are using each of the three potential approaches (SEC-ERBA, SEC-SA and 1,250% risk weight) for calculating SA RWA for securitisation exposures.

		a	b	c	d
		RWA			
		RWA for modelled approaches that banks have supervisory approval to use	RWA for portfolios where standardised approaches are used	Total Actual RWA (a + b) (ie RWA which banks report as current requirements)	RWA calculated using full standardised approach (ie used in the base of the output floor)
1	Credit risk (excluding counterparty credit risk)				
2	Counterparty credit risk				
3	Credit valuation adjustment				
	Securitisation				

4	exposures in the banking book				
5	Market risk				
6	Operational risk				
7	Residual RWA				
8	Total				

Definitions and instructions

Rows:

Credit risk (excluding counterparty credit risk, credit valuation adjustments and securitisation exposures in the banking book) (row 1):

Definition of standardised approach: The standardised approach for credit risk. When calculating the degree of credit risk mitigation, banks must use the simple approach or the comprehensive approach with standard supervisory haircuts. This also includes failed trades and non-delivery-versus-payment transactions as set out in [CRE70](#).

The prohibition on the use of the IRB approach for equity exposures will be subject to a five-year linear phase-in arrangement as specified in [CRE90.2](#). During the phase-in period, the risk weight for equity exposures used to calculate the RWA reported in column (a) will be the greater of: (i) the risk weight as calculated under the IRB approach, and (ii) the risk weight set for the linear phase-in arrangement under the standardised approach for credit risk.

RWA for modelled approaches that banks have supervisory approval to use (cell 1/a): For exposures where the RWA is not computed based on the standardised approach described above (ie subject to the credit risk IRB approaches (Foundation Internal Ratings-Based (F-IRB), Advanced Internal Ratings-Based (A-IRB) and supervisory slotting approaches of the credit risk framework). The row excludes all positions subject to [CRE40](#) to [CRE45](#), including securitisation exposures in the banking book (which are reported in row 4) and capital requirements relating to a counterparty credit risk charge, which are reported in row 2.

RWA for portfolios where standardised approaches are used (cell 1/b): RWA which result from applying the above-described standardised approach.

Total actual RWA (cell 1/c): The sum of cells 1/a and 1/b.

RWA calculated using full standardised approach (cell 1/d): RWA as would result from applying the above-described standardised approach to all exposures giving rise to the RWA reported in cell 1/c.

Counterparty credit risk (row 2):

Definition of standardised approach: To calculate the exposure for derivatives, banks must use the standardised approach for measuring counterparty credit risk (SA-CCR). The exposure amounts must then be multiplied by the relevant borrower risk weight using the standardised approach for credit risk to calculate RWA under the standardised approach for credit risk.

RWA for modelled approaches that banks have supervisory approval to use (cell 2/a): For exposures where the RWA is not computed based on the standardised approach described above.

RWA for portfolios where standardised approaches are used (cell 2/b): RWA which result from applying the above-described standardised approach.

Total actual RWA (cell 2/c): The sum of cells 2/a and 2/b.

RWA calculated using full standardised approach (cell 2/d): RWA as would result from applying the above-described standardised approach to all exposures giving rise to the RWA reported in cell 2/c.

Credit valuation adjustment (row 3):

Definition of standardised approach: The standardised approach for CVA (SA-CVA), the basic approach (BA-CVA) or 100% of a bank's counterparty credit risk capital requirements (depending on which approach the bank uses for CVA risk).

Total actual RWA (cell 3/c) and RWA calculated using full standardised approach (cell 3/d): RWA according to the standardised approach described above.

Securitisation exposures in the banking book (row 4):

Definition of standardised approach: The external ratings-based approach (SEC-ERBA), the standardised approach (SEC-SA) or a risk weight of 1,250%.

RWA for modelled approaches that banks have supervisory approval to use (cell 4/a): For exposures where the RWA is computed based on the SEC-IRBA or SEC-IAA.

RWA for portfolios where standardised approaches are used (cell 4/b): RWA which result from applying the above-described standardised approach.

Total actual RWA (cell 4/c): The sum of cells 4/a and 4/b.

RWA calculated using full standardised approach (cell 4/d): RWA as would result from applying the above-described standardised approach to all exposures giving rise to the RWA reported in cell 4/c.

Market risk (row 5):

Definition of standardised approach: The standardised approach for market risk. The SEC-ERBA, SEC-SA or a risk weight of 1,250% must also be used when determining the default risk charge component for securitisations held in the trading book.

RWA for modelled approaches that banks have supervisory approval to use (cell 5/a): For exposures where the RWA is not computed based on the standardised approach described above.

RWA for portfolios where standardised approaches are used (cell 5/b): RWA which result from applying the above-described standardised approach.

Total actual RWA (cell 5/c): The sum of cells 5/a and 5/b.

RWA calculated using full standardised approach (cell 5/d): RWA as would result from applying the above-described standardised approach to all exposures giving rise to the RWA reported in cell 5/c.

Operational risk (row 6):

Definition of standardised approach: The standardised approach for operational risk.

Total actual RWA (cell 6/c) and RWA calculated using full standardised approach (cell 6/d): RWA according to the revised standardised approach for operational risk.

Residual RWA (row 7):

Total actual RWA (cell 7/c) and RWA calculated using full standardised approach (cell 7/d): RWA not captured within rows 1 to 6 (ie the RWA arising from equity investments in funds (rows 12 to 14 in Template OV1), settlement risk (row 15 in Template OV1), capital charge for switch between trading book and banking book (row 23 in Template OV1) and amounts below the thresholds for deduction (row 25 in Template OV1)).

Total (row 8):

RWA for modelled approaches that banks have supervisory approval to use (cell 8/a): The total sum of cells 1/a, 2/a, 4/a and 5/a.

RWA for portfolios where standardised approaches are used (cell 8/b): The total sum of cells 1/b, 2/b, 3/b, 4/b, 5/b, 6/b and 7/b.

Total actual RWA (cell 8/c): The bank's total RWA before the output floor adjustment (ie the amount specified in [RBC20.4\(1\)](#)). The total sum of cells 1/c, 2/c, 3/c, 4/c, 5/c, 6/c and 7/c.

RWA calculated using full standardised approach (cell 8/d): The bank's RWA that are the base of the output floor, as specified in [\[RBC20.4\]\(2\)](#) (ie amount before multiplication by 72.5%). The

total sum of cells 1/d, 2/d, 3/d, 4/d, 5/d, 6/d and 7/d. Disclosed numbers in rows 1 to 7 are calculated purely for comparison purposes and do not represent requirements under the Basel framework.

Linkages across templates

[CMS1: 1/c] is equal to [OV1:1/a]

[CMS1: 2/c] is equal to [OV1:6/a]

[CMS1:3/c] is equal to [OV1:10/a]

[CMS1: 4/c] is equal to [OV1:16/a]

[CMS1: 5/c] is equal to [OV1:20/a]

[CMS1:5/d] is equal to [MR2:12/a] multiplied by 12.5

[CMS1:6/c] is equal to [OV1:24/a]

Template CMS2 - Comparison of modelled and standardised RWA for credit risk at asset class level

Purpose: To compare risk-weighted assets (RWA) calculated according to the standardised approach (SA) for credit risk at the asset class level against the corresponding RWA figure calculated using the approaches (including both the standardised and IRB approach for credit risk and the supervisory slotting approach) that banks have supervisory approval to use in accordance with the Basel framework for credit risk.

Scope of application: The template is mandatory for all banks using internal models for credit risk. Similar to row 1 of Template CMS1, it excludes counterparty credit risk, credit valuation adjustments and securitisation exposures in the banking book.

Content: RWA.

Frequency: Semiannual.

Format: Fixed. The columns are fixed, but the portfolio breakdowns in the rows will be set at jurisdiction level to reflect the exposure classes required under national implementation of IRB and SA. Banks are encouraged to add rows to show where significant differences occur.

Accompanying narrative: Banks are expected to explain the main drivers of differences between the internally modelled amounts disclosed that are used to calculate their capital ratios and amounts disclosed should the banks apply the standardised approach. Where differences are attributable to mapping between IRB and SA, banks are encouraged to provide explanation and estimated materiality.

		a	b	c	d
		RWA			
		RWA for modelled approaches that banks have supervisory approval to use	RWA for column (a) if re-computed using the standardised approach	Total Actual RWA (ie RWA which banks report as current requirements)	RWA calculated using full standardised approach (ie RWA used in the base of the output floor)
1	Sovereign				
	Of which: categorised as MDB/PSE in SA				
2	Banks and other financial institutions				
3	Equity ¹				
4	Purchased receivables				

5	Corporates				
	Of which: F-IRB is applied				
	Of which: A-IRB is applied				
6	Retail				
	Of which: qualifying revolving retail				
	Of which: other retail				
	Of which: retail residential mortgages				
7	Specialised lending				
	Of which: income-producing real estate and high volatility commercial real estate				
8	Others				
9	Total				

Definitions and instructions

Columns:

RWA for modelled approaches that banks have supervisory approval to use (*column (a)*): Represents the portion of RWA according to the IRB approach for credit risk as specified in [CRE30](#) to [CRE36](#).

Corresponding standardised approach RWA for column (a) (*column (b)*): RWA equivalent as derived under the standardised approach.

Total actual RWA (column (c)): Represents the sum of the RWA for modelled approaches that banks have supervisory approval to use and the RWA *under standardised approaches*.

RWA calculated using full standardised approach (column (d)): Total RWA assuming the full standardised approach applied at asset class level. Disclosed numbers for each asset class are calculated purely for comparison purposes and do not represent requirements under the Basel framework.

Linkages across templates

[CMS2:9/a] is equal to [CMS1:1/a]

[CMS2:9/c] is equal to [CMS1:1/c]

Footnotes

1

The prohibition on the use of the IRB approach for equity exposures will be subject to a five-year linear phase-in arrangement as specified in [CRE90.2](#). During the phase-in period, the risk weight for equity exposures (to be reported in column (a)) will be the greater of: (i) the risk weight as calculated under the IRB approach, and (ii) the risk weight set for the linear phase-in arrangement under the standardised approach for credit risk. Column (b) should reflect the corresponding RWA for these exposures based on the phased-in standardised approach. After the phase-in period, columns (a) and (b) for equity exposures should both be empty.