

II

(Non-legislative acts)

REGULATIONS

COMMISSION DELEGATED REGULATION (EU) 2021/424

of 17 December 2019

amending Regulation (EU) No 575/2013 of the European Parliament and of the Council with regard to the alternative standardised approach for market risk

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 ⁽¹⁾, and in particular Article 461a thereof:

- (1) In 2019, the Basel Committee on Banking Supervision (BCBS) published the revised 'Minimum capital requirements for market risk', which addressed the weaknesses in the prudential treatment of banks' trading book activities ⁽²⁾.
- (2) The alternative standardised approach laid down in Chapter 1a of Title IV of Part Three of Regulation (EU) No 575/2013 currently lacks technical specifications to be fully operational. Those specifications should be aligned with the BCBS Minimum capital requirements for market risk.
- (3) The BCBS Minimum capital requirements for market risk specify the calculation of the own funds requirements for curvature risk for instruments with optionality. That calculation comprises a number of steps, including how to apply shocks to risk factors and how to aggregate curvature risk across risk factors. For foreign exchange risk factors, the calculation needs to be adjusted to avoid double-counting curvature risks. Without that adjustment, such double-counting may occur because in the BCBS Minimum capital requirements for market risk, foreign exchange risk factors are expressed using the reporting currency of an institution.
- (4) Instruments without optionality should only be subject to own funds requirements for delta risk for the non-exotic underlying(s) of the instruments, but not for curvature risk. The BCBS Minimum capital requirements for market risk, however, gives institutions the option to subject all instruments, including those without optionality, to own funds requirements for curvature risk. That option can be helpful for institutions that manage and hedge positions with and without optionality together. However, to avoid that that option is used primarily for the purpose of reducing own funds requirements, an institution wishing to exercise that option should be required to notify its intention to use that option to its competent authority, which should have the possibility to refuse the use of that option. The same should apply where an institution no longer wishes to use that option.

⁽¹⁾ OJ L 176, 27.6.2013, p. 1.

⁽²⁾ Basel Committee on Banking Supervision, Minimum capital requirements for market risk. This publication is available on the website of the Bank for International Settlements (www.bis.org).

- (5) In relation to the treatment of positions in collective investment undertakings (CIUs), the look-through approach is the most accurate approach for the calculation of own funds requirements for positions in CIUs because that approach relies on the actual composition of the CIUs instead of a proxy composition. The availability of the look-through approach, however, requires certain strict conditions to be met. Institutions should therefore be allowed to use other approaches, provided they are aware of the content of the mandate of the CIU and can obtain daily price quotes. In that situation, institutions can set up a hypothetical portfolio to compute the own funds requirements for market risk of the position in the CIU. These institutions should also have the possibility to calculate the own funds requirements for credit valuation adjustment risk of derivative positions included in the CIU using a simplified approach where there is not sufficient information to calculate the own funds requirements for credit valuation adjustment risk based on the existing approaches. That possibility should be aligned with the simplified approach applicable to derivative positions included in the CIUs allocated to the non-trading book. Because of the number of assumptions that institutions need to make when using that approach, its use should be subject to the approval of the competent authority at the level of each individual CIU.
- (6) In addition, institutions should have the option to treat a CIU position that tracks an index as a direct position in that index for the purposes of calculating the own funds requirements for market risk. That approach should be allowed where the difference in annualised return between the CIU and the index it tracks remains below 1 % over a 12-month period. Where less than 12 months of data are available, institutions should seek the permission from their competent authority to use that approach.
- (7) In all other instances, positions in CIUs should be assigned to the non-trading book and treated accordingly for the purposes of calculating the own funds requirements of those positions.
- (8) The BCBS Minimum capital requirements for market risk propose a 'base currency' approach as an additional approach to determine the own funds requirements for delta and curvature risks of foreign exchange risk factors. In line with that approach, institutions should, when calculating the own funds requirements for market risk, be able to choose another currency than their reporting currency to express the foreign exchange risk factors. That approach should be allowed where the institution meets a number of conditions related to the institution's management of foreign exchange risk and should be subject to supervisory approval.
- (9) The BCBS Minimum capital requirements for market risk specify the risk weights applicable to the sensitivities of the risk-free rate risk factors, of inflation and to cross currency basis risk factors, to the credit spread risk factors for non-securitisations of bucket 11 in Table 4 of Article 325ah of Regulation (EU) No 575/2013, of covered bonds risk factors issued by credit institutions in third countries, of credit spread risk factors for securitisations included in the ACTP, of credit spread risk factors for securitisations not included in the ACTP, of equity risk factors and of commodity risk factors. The risk weights applicable to the sensitivities of those risk factors in the alternative standardised approach should be aligned with the BCBS Minimum capital requirements for market risk.
- (10) The BCBS Minimum capital requirements for market risk specify the intra-bucket correlations for covered bonds risk factors issued by credit institutions in third countries, the intra-bucket correlations for equity risk, and the correlations across buckets for equity risk. The correlations applicable in the alternative standardised approach should be aligned with the BCBS Minimum capital requirements for market risk.
- (11) Regulation (EU) No 575/2013 should therefore be amended accordingly.
- (12) Institutions should be given sufficient time to implement the changes to the alternative standardised approach for market risk introduced by this Delegated Regulation. The application of this Delegated Regulation should therefore be deferred,

HAS ADOPTED THIS REGULATION:

Article 1

Regulation (EU) No 575/2013 is amended as follows:

(1) Article 325e is amended as follows:

(a) in paragraph 2, points (a) and (b) are replaced by the following:

‘(a) all the positions of instruments with optionality shall be subject to the own funds requirements referred to in points (a), (b) and (c) of paragraph 1 for the risks other than exotic underlyings of the instruments as referred to in point (a) of Article 325u(2);

(b) all the positions of instruments without optionality shall be subject to the own funds requirements referred to in point (a) of paragraph 1 for the risks other than exotic underlyings of the instruments as referred to in point (a) of Article 325u(2).’;

(b) the following paragraph is added:

‘3. By way of derogation from point (b) of paragraph 2, an institution may choose to subject all the positions of instruments without optionality to the own funds requirements referred to in points (a) and (c) of paragraph 1.

An institution that chooses to use the approach set out in the first subparagraph shall notify its competent authority thereof at least three months before the first use. After those three months have elapsed and provided that the competent authority has not objected, the institution may use that approach until the competent authority informs the institution that it is no longer permitted to do so.

An institution that wishes to stop using the approach set out in the first subparagraph shall notify its competent authority thereof at least three months before stopping that use. The institution may stop applying that approach, unless the competent authority has objected within that three-month period.’;

(2) Article 325g is replaced by the following:

‘Article 325g

Own funds requirements for curvature risk

1. Institutions shall perform the calculations laid down in paragraph 2 for each risk factor of the instruments subject to the own funds requirement for curvature risk, except for the risk factors referred to in paragraph 3.

For a given risk factor, institutions shall perform those calculations on a net basis across all the positions of the instruments subject to the own funds requirement for curvature risk that contain that risk factor.

2. For a given risk factor k included in one or more instruments referred to in paragraph 1, institutions shall calculate the upward net curvature risk position of that risk factor (CVR_k^+) and the downward net curvature risk position of that risk factor (CVR_k^-) as follows:

$$CVR_k^+ = - \sum_i CVR_{ik}^+$$

$$CVR_k^- = - \sum_i CVR_{ik}^-$$

$$CVR_{ik}^+ = V_i \left(x_k^{RW(Curvature)^+} \right) - V_i(x_k) - RW_k^{Curvature} \times S_{ik}$$

$$CVR_{ik}^- = V_i \left(x_k^{RW(Curvature)^-} \right) - V_i(x_k) + RW_k^{Curvature} \times S_{ik}$$

where:

i = the index that denotes all the positions of instruments referred to in paragraph 1 and including risk factor k ;

x_k = the current value of risk factor k ;

$V_i(x_k)$ = the value of instrument i as estimated by the pricing model of the institution based on the current value of risk factor k ;

$V_i(x_k^{RW(Curvature)^+})$ = the value of instrument i as estimated by the pricing model of the institution based on an upward shift of the value of risk factor k ;

$V_i(x_k^{RW(Curvature)^-})$ = the value of instrument i as estimated by the pricing model of the institution based on a downward shift of the value of risk factor k ;

$RW_k^{Curvature}$ = the risk weight applicable to risk factor k determined in accordance with Section 6;

s_{ik} = the delta sensitivity of instrument i with respect to risk factor k , calculated in accordance with Article 325r.

3. By way of derogation from paragraph 2, for curves of risk factors that belong to the general interest rate risk (GIRR), credit spread risk (CSR) and commodity risk classes, institutions shall perform the calculations laid down in paragraph 6 at the level of the entire curve instead of at the level of each risk factor that belongs to the curve.

For the purposes of the calculation referred to in paragraph 2, where x_k is a curve of risk factors allocated to the GIRR, CSR and commodity risk classes, s_{ik} shall be the sum of the delta sensitivities to the risk factor of the curve across all tenors of the curve.

4. In order to determine a bucket-level own funds requirement for curvature risk, institutions shall aggregate, in accordance with the following formula the upward and downward net curvature risk positions, calculated in accordance with paragraph 2, of all the risk factors assigned to that bucket in accordance with Subsection 1 of Section 3:

$$K_b = \begin{cases} \max(K_b^+, K_b^-), & \text{where } K_b^+ \neq K_b^- \\ K_b^+, & \text{where } K_b^+ = K_b^- \text{ and } \sum_k CVR_k^+ > \sum_k CVR_k^- \\ K_b^-, & \text{otherwise} \end{cases}$$

where:

b = the index that denotes a bucket of a given risk class;

K_b = own funds requirements for curvature risk for bucket b ;

$$K_b^+ = \sqrt{\max(0, \sum_k \max(CVR_k^+, 0)^2 + \sum_{l \neq k} \sum_k p_{kl} CVR_k^+ CVR_l^+ \psi(CVR_k^+, CVR_l^+))};$$

$$K_b^- = \sqrt{\max(0, \sum_k \max(CVR_k^-, 0)^2 + \sum_{l \neq k} \sum_k p_{kl} CVR_k^- CVR_l^- \psi(CVR_k^-, CVR_l^-))};$$

$$\psi(x, y) = \begin{cases} 0, & \text{where } x < 0 \text{ and } y < 0, \\ 1, & \text{otherwise} \end{cases}$$

p_{kl} = the intra-bucket correlations between risk factors k and l as prescribed in Section 6;

k, l = the indices that denote all the risk factors of instruments referred to in paragraph 1 that are assigned to bucket b ;

(CVR_k^+) = the upward net curvature risk position;

(CVR_k^-) = the downward net curvature risk position.

5. By way of derogation from paragraph 4, for the bucket-level own funds requirements for curvature risk of bucket 18 of Article 325ah, of bucket 18 of Article 325ak, of bucket 25 of Article 325am and of bucket 11 of Article 325ap the following formula shall be used:

$$K_b = \max \left(\sum_k \max(CVR_k^+, 0), \sum_k \max(CVR_k^-, 0) \right)$$

6. Institutions shall calculate the risk-class own funds requirements for curvature risk (RCCR) by aggregating all the bucket-level own funds requirements for curvature risk within a given risk class as follows:

$$RCCR = \sqrt{\max \left(0, \sum_b K_b^2 + \sum_{c \neq b} \sum_b \gamma_{bc} S_b S_c \psi(S_b, S_c) \right)}$$

where:

b, c = the indices that denote all the buckets of a given risk class that corresponds to instruments referred to in paragraph 1;

K_b = own funds requirements for curvature risk for bucket b ;

$$S_b = \begin{cases} \sum_k CVR_k^+, & \text{where } K_b = K_b^+ \text{ in accordance with paragraph 4;} \\ \sum_k CVR_k^-, & \text{otherwise} \end{cases}$$

$$\psi(x, y) = \begin{cases} 0, & \text{where } x < 0 \text{ and } y < 0 \\ 1, & \text{otherwise;} \end{cases}$$

γ_{bc} = the inter-bucket correlations between buckets b and c as set out in Section 6.

7. The own funds requirement for curvature risk shall be the sum of the risk class own funds requirements for curvature risk calculated in accordance with paragraph 6 across all risk classes to which at least one risk factor of the instruments referred to in paragraph 1 belongs.;

(3) in Article 325h(2), point (c) is replaced by the following:

'(c) the "low correlations" scenario, whereby the correlation parameters ρ_{kl} and γ_{bc} that are specified in Section 6 shall be replaced by $\rho_{kl}^{low} = \max(2 \cdot \rho_{kl} - 100\%; 75\% \cdot \rho_{kl})$ and $\gamma_{bc}^{low} = \max(2 \cdot \gamma_{bc} - 100\%; 75\% \cdot \gamma_{bc})$, respectively.;

(4) Articles 325i and 325j are replaced by the following:

'Article 325i

Treatment of index instruments and other multi-underlying instruments

1. Institutions shall use a look-through approach for index and other multi-underlying instruments in accordance with the following:

- (a) for the purposes of calculating the own funds requirements for delta and curvature risk, institutions shall consider that they hold individual positions directly in the underlying constituents of the index or other multi-underlying instruments, except for a position in an index included in the ACP for which they shall calculate a single sensitivity to the index;
- (b) institutions are allowed to net the sensitivities to a risk factor of a given constituent of an index instrument or other multi-underlying instrument with the sensitivities to the same risk factor of the same constituent of single name instruments, except for positions included in the ACP;

- (c) for the purposes of calculating the own funds requirements for vega risk, institutions may either consider that they directly hold individual positions in the underlying constituents of the index or other multi-underlying instrument, or calculate a single sensitivity to the underlying of that instrument. In the latter case, institutions shall assign the single sensitivity to the relevant bucket as set out in Subsection 1 of Section 6 as follows:
- (i) where, taking into account the weightings of that index, more than 75 % of constituents in that index would be mapped to the same bucket, institutions shall assign the sensitivity to that bucket and treat it as a single-name sensitivity in that bucket;
 - (ii) in all other cases, institutions shall assign the sensitivity to the relevant index bucket.
2. By way of derogation from point (a) of paragraph 1, institutions may calculate a single sensitivity to a position in a listed equity or credit index for the purposes of calculating the own funds requirements for delta and curvature risks provided the listed equity or credit index meets the conditions set out in paragraph 3. In that case, institutions shall assign the single sensitivity to the relevant bucket as set out in Subsection 1 of Section 6 as follows:
- (a) where, taking into account the weightings of that listed index, more than 75 % of constituents in that listed index would be mapped to the same bucket, that sensitivity shall be assigned to that bucket and treated as a single-name sensitivity in that bucket;
 - (b) in all other cases, institutions shall assign the sensitivity to the relevant listed index bucket.
3. Institutions may use the approach set out in paragraph 2 for instruments referencing a listed equity or credit index where all of the following conditions are met:
- (a) the constituents of the listed index and their respective weightings in that index are known;
 - (b) the listed index contains at least 20 constituents;
 - (c) no single constituent contained within the listed index represents more than 25 % of the total market capitalisation of that index;
 - (d) no set comprising one tenth of the total number of constituents of the listed index, rounded up to the next integer, represents more than 60 % of the total market capitalisation of that index;
 - (e) the total market capitalisation of all the constituents of the listed index is no less than EUR 40 billion.
4. An institution shall use, consistently over time, only the approach set out in paragraph 1 or the approach set out in paragraph 2 for all the instruments that reference a listed equity or credit index that meets the conditions set out in paragraph 3. An institution shall require prior permission from the competent authority before switching from one approach to another.
5. For an index or other multi-underlying instrument, the sensitivity inputs for the calculation of delta and curvature risks shall be consistent, irrespective of the approaches used for that instrument.
6. Index or multi-underlying instruments which bear other residual risks as referred to in Article 325u(5) shall be subject to the residual risk add-on referred to in Section 4.

Article 325j

Treatment of collective investment undertakings

1. An institution shall calculate the own funds requirements for market risk of a position in a CIU using one of the following approaches:
- (a) where an institution is able to obtain sufficient information about the individual underlying exposures of the CIU, the institution shall calculate the own funds requirements for market risk of that CIU position by looking through to the underlying positions of the CIU as if those positions were directly held by the institution;

- (b) where the institution is not able to obtain sufficient information about the individual underlying exposures of the CIU, but the institution has knowledge of the content the mandate of the CIU and daily price quotes for the CIU can be obtained, the institution shall calculate the own funds requirements for market risk of that CIU position by using one of the following approaches:
 - (i) the institution may consider the position in the CIU as a single equity position allocated to the bucket “other sector” in Table 8 of Article 325ap(1);
 - (ii) upon permission from its competent authority, an institution may calculate the own funds requirements for market risk of the CIU in accordance with the limits set in the CIU’s mandate and relevant law;
- (c) where the institution meets neither the conditions in point (a) nor (b), the institution shall allocate the CIU to the non-trading book.

An institution that uses one of the approaches set out in point (b) shall apply the own funds requirement for the default risk set out in Section 5 of this Chapter and the residual risk add-on set out in Section 4 of this Chapter where the mandate of the CIU implies that some exposures in the CIU shall be subject to those own funds requirements.

An institution that uses the approach set out in point (ii) of point (b) may calculate the own funds requirements for counterparty credit risk and own funds requirements for credit valuation adjustment risk of derivative positions of the CIU, using the simplified approach set out in paragraph 3 of Article 132a.

2. By way of derogation from paragraph 1, where an institution has a position in a CIU that tracks an index benchmark so that the annualised return difference between the CIU and the tracked index benchmark over the last 12 months is below 1 % in absolute terms, ignoring fees and commissions, the institution may treat that position as a position in the tracked index benchmark. An institution shall verify compliance with that condition when the institution enters into the position and, after that, at least annually.

However, where data for the last 12 months are not fully available, an institution may, subject to permission from the institution’s competent authority, use an annualised return difference from a period shorter than 12 months.

3. An institution may use a combination of the approaches referred to in points (a), (b) and (c) of paragraph 1 for its positions in CIUs. However, an institution shall use only one of those approaches for all the positions in the same CIU.

4. For the purposes of point (b) of paragraph 1, an institution shall carry out the calculations under the following provisions:

- (a) for the purposes of calculating the own funds requirement under the sensitivities-based method set out in Section 2 of this Chapter, the CIU shall first take position to the maximum extent allowed under its mandate or relevant law in the exposures attracting the highest own funds requirements set out under that Section and shall then continue taking positions in descending order until the maximum total loss limit is reached;
- (b) for the purposes of the own fund requirements for the default risk set out in Section 5 of this Chapter, the CIU shall first take position to the maximum extent allowed under its mandate or relevant law in the exposures attracting the highest own funds requirements set out under that Section and shall then continue taking positions in descending order until the maximum total loss limit is reached;
- (c) the CIU shall apply leverage to the maximum extent allowed under its mandate or relevant law, where applicable.

The own funds requirements for all positions in the same CIU for which the calculations referred to in the first subparagraph are used shall be calculated on a stand-alone basis as a separate portfolio using the approach set out in this Chapter.

5. An institution may use the approaches referred to in point (a) or (b) of paragraph 1 only where the CIU meets all the conditions set out in Article 132(3) and point (a) of Article 132(4).;

(5) Article 325q is amended as follows:

(a) paragraph 1 is replaced by the following:

‘1. The foreign exchange delta risk factors to be applied by institutions to foreign exchange sensitive instruments shall be all the spot exchange rates between the currency in which an instrument is denominated and the institution’s reporting currency or the institution’s base currency where the institution is using a base currency in accordance with paragraph 7. There shall be one bucket per currency pair, containing a single risk factor and a single net sensitivity.’;

(b) paragraph 3 is replaced by the following:

‘3. The foreign exchange curvature risk factors to be applied by institutions to instruments with underlyings that are sensitive to foreign exchange shall be the foreign exchange delta risk factors referred to in paragraph 1.’;

(c) the following paragraphs 5, 6 and 7 are added:

‘5. Where a foreign exchange rate that is the underlying of an instrument i that is subject to own funds requirements for curvature risks neither refers to the institution’s reporting currency nor the institution’s base currency, the institution may divide by 1,5 the corresponding components CVR_{ik}^- and CVR_{ik}^+ set out in paragraph 2 of Article 325g for which x_k is the foreign exchange risk factor between one of the two currencies of the underlying and the institution’s reporting currency or the institution’s base currency, as applicable.

6. Subject to permission from its competent authority, an institution may divide by 1,5 the components CVR_k^- and CVR_k^+ set out in Article 325g(2) consistently for all the foreign exchange risk factors of instruments concerning foreign exchange and subject to own funds requirement for curvature risk, provided that any foreign exchange risk factors based on the institution’s reporting currency or the institution’s base currency, as applicable, that are included in the calculation of those components are shifted simultaneously.

7. By way of derogation from paragraphs 1 and 3, an institution may replace, subject to permission from its competent authority, its reporting currency by another currency (“the base currency”) in all the spot exchange rates to express the delta and curvature foreign exchange risk factors where all of the following conditions are met:

(a) the institution uses only one base currency;

(b) the institution applies the base currency consistently to all its trading book and non-trading book positions;

(c) the institution has demonstrated to the satisfaction of its competent authority that:

(i) using the chosen base currency provides an appropriate risk representation for the institution’s positions subject to foreign exchange risks;

(ii) the choice of base currency is compatible with the manner in which the institution manages those foreign exchange risks internally;

(iii) the choice of base currency is not driven primarily by the desire to reduce the institution’s own funds requirements;

(d) the institution takes into account the translation risk between the reporting currency and the base currency.

An institution that has been permitted to use a base currency as set out in the first subparagraph shall convert the resulting own funds requirements for foreign exchange risk into the reporting currency using the prevailing spot exchange rate between the base currency and the reporting currency.’;

(6) in Article 325ae, paragraphs 1 and 2 are replaced by the following:

‘1. For currencies not included in the most liquid currency sub-category as referred to in point (b) Article 325bd(7), the risk weights of the sensitivities to the risk-free rate risk factors shall be the following:

Table 3

Bucket	Maturity	Risk Weight
1	0,25 years	1,7 %
2	0,5 years	1,7 %

3	1 year	1,6 %
4	2 years	1,3 %
5	3 years	1,2 %
6	5 years	1,1 %
7	10 years	1,1 %
8	15 years	1,1 %
9	20 years	1,1 %
10	30 years	1,1 %

2. Institutions shall apply a risk weight of 1,6 % to all sensitivities of inflation and to cross currency basis risk factors.;

(7) in paragraph 1 of Article 325ah, Table 4 is replaced by the following:

Table 4

Bucket number	Credit quality	Sector	Risk weight
1	All	Central government, including central banks, of Member States	0,5 %
2	Credit quality step 1 to 3	Central government, including central banks, of a third country, multilateral development banks and international organisations referred to in Article 117(2) or Article 118	0,5 %
3		Regional or local authority and public sector entities	1,0 %
4		Financial sector entities including credit institutions incorporated or established by a central government, a regional government or a local authority and promotional lenders	5,0 %
5		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	3,0 %
6		Consumer goods and services, transportation and storage, administrative and support service activities	3,0 %
7		Technology, telecommunications	2,0 %
8		Health care, utilities, professional and technical activities	1,5 %
9			Covered bonds issued by credit institutions established in Member States
10	Credit quality step 1	Covered bonds issued by credit institutions in third countries	1,5 %
	Credit quality steps 2 to 3		2,5 %

11	Credit quality step 4 to 6 and unrated	Central government, including central banks, of a third country, multilateral development banks and international organisations referred to in Article 117(2) or Article 118	2 %
12		Regional or local authority and public sector entities	4,0 %
13		Financial sector entities including credit institutions incorporated or established by a central government, a regional government or a local authority and promotional lenders	12,0 %
14		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	7,0 %
15		Consumer goods and services, transportation and storage, administrative and support service activities	8,5 %
16		Technology, telecommunications	5,5 %
17		Health care, utilities, professional and technical activities	5,0 %
18	Other sector		12,0 %
19	Listed credit indices with a majority of its individual constituents being investment grade		1,5 %
20	Listed credit indices with a majority of its individual constituents being non-investment grade or unrated		5 %

(8) in Article 325aj, Table 5 is replaced by the following:

Table 5

Bucket	1, 2 and 11	3 and 12	4 and 13	5 and 14	6 and 15	7 and 16	8 and 17	9 and 10	18	19	20
1, 2 and 11		75 %	10 %	20 %	25 %	20 %	15 %	10 %	0 %	45 %	45 %
3 and 12			5 %	15 %	20 %	15 %	10 %	10 %	0 %	45 %	45 %
4 and 13				5 %	15 %	20 %	5 %	20 %	0 %	45 %	45 %
5 and 14					20 %	25 %	5 %	5 %	0 %	45 %	45 %
6 and 15						25 %	5 %	15 %	0 %	45 %	45 %
7 and 16							5 %	20 %	0 %	45 %	45 %
8 and 17								5 %	0 %	45 %	45 %
9 and 10									0 %	45 %	45 %
18										0 %	0 %
19											75 %
20'											

(9) in Article 325ak, Table 6 is replaced by the following:

Table 6

Bucket number	Credit quality	Sector	Risk weight
1	All	Central government, including central banks, of Member States	4,0 %
2	Credit quality step 1 to 3	Central government, including central banks, of a third country, multilateral development banks and international organisations referred to in Article 117(2) or Article 118	4,0 %
3		Regional or local authority and public sector entities	4,0 %

4		Financial sector entities including credit institutions incorporated or established by a central government, a regional government or a local authority and promotional lenders	8,0 %
5		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	5,0 %
6		Consumer goods and services, transportation and storage, administrative and support service activities	4,0 %
7		Technology, telecommunications	3,0 %
8		Health care, utilities, professional and technical activities	2,0 %
9		Covered bonds issued by credit institutions established in Member States	3,0 %
10		Covered bonds issued by credit institutions in third countries	6,0 %
11	Credit quality step 4 to 6 and unrated	Central government, including central banks, of a third country, multilateral development banks and international organisations referred to in Article 117(2) or Article 118	13,0 %
12		Regional or local authority and public sector entities	13,0 %
13		Financial sector entities including credit institutions incorporated or established by a central government, a regional government or a local authority and promotional lenders	16,0 %
14		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying	10,0 %
15		Consumer goods and services, transportation and storage, administrative and support service activities	12,0 %
16		Technology, telecommunications	12,0 %
17		Health care, utilities, professional and technical activities	12,0 %
18	Other sector		13,0 %

(10) in paragraph 1 of Article 325am, Table 7 is replaced by the following:

Table 7

Bucket number	Credit quality	Sector	Risk weight
1	Senior and Credit quality step 1 to 3	RMBS — Prime	0,9 %
2		RMBS — Mid-Prime	1,5 %
3		RMBS — Sub-Prime	2,0 %
4		CMBS	2,0 %
5		Asset backed securities (ABS) — Student loans	0,8 %
6		ABS — Credit cards	1,2 %
7		ABS — Auto	1,2 %
8		Collateralised loan obligations (CLO) non-ACTP	1,4 %
9	Non-senior and credit quality step 1 to 3	RMBS — Prime	1,125 %
10		RMBS — Mid-Prime	1,875 %
11		RMBS — Sub-Prime	2,5 %
12		CMBS	2,5 %
13		ABS — Student loans	1 %
14		ABS — Credit cards	1,5 %
15		ABS — Auto	1,5 %
16		CLO non-ACTP	1,75 %
17	Credit quality step 4 to 6 and unrated	RMBS — Prime	1,575 %
18		RMBS — Mid-Prime	2,625 %
19		RMBS — Sub-Prime	3,5 %
20		CMBS	3,5 %
21		ABS — Student loans	1,4 %
22		ABS — Credit cards	2,1 %
23		ABS — Auto	2,1 %
24		CLO non-ACTP	2,45 %
25	Other sector		3,5 %

(11) in paragraph 1 of Article 325ap, Table 8 is replaced by the following:

‘Table 8

Bucket number	Market capitalisation	Economy	Sector	Risk weight for equity spot price	Risk weight for equity repo rate
1	Large	Emerging market economy	Consumer goods and services, transportation and storage, administrative and support service activities, healthcare, utilities	55 %	0,55 %
2			Telecommunications, industrials	60 %	0,60 %
3			Basic materials, energy, agriculture, manufacturing, mining and quarrying	45 %	0,45 %
4			Financials including government-backed financials, real estate activities, technology	55 %	0,55 %
5		Advanced economy	Consumer goods and services, transportation and storage, administrative and support service activities, healthcare, utilities	30 %	0,30 %
6			Telecommunications, industrials	35 %	0,35 %
7			Basic materials, energy, agriculture, manufacturing, mining and quarrying	40 %	0,40 %
8			Financials including government-backed financials, real estate activities, technology	50 %	0,50 %
9	Small	Emerging market economy	All sectors described under bucket numbers 1, 2, 3 and 4	70 %	0,70 %
10		Advanced economy	All sectors described under bucket numbers 5, 6, 7 and 8	50 %	0,50 %
11	Other sector			70 %	0,70 %
12	Large market cap, advanced economy indices			15 %	0,15 %
13	Other indices			25 %	0,25 %

(12) Article 325aq is amended as follows

(a) paragraph 1 is replaced by the following:

‘1. The delta risk correlation parameter ρ_{kl} between two sensitivities WS_k and WS_l within the same bucket shall be set at 99,90 % where one is a sensitivity to an equity spot price and the other is a sensitivity to an equity repo rate and where both sensitivities are related to the same equity issuer name.’;

(b) in paragraph 2, the following point (e) is added:

'(e) 80 % between two sensitivities within the same bucket that fall under either index bucket (bucket number 12 or 13).';

(c) paragraph 3 is replaced by the following:

'3. The correlation parameter ρ_{ki} between two sensitivities WS_k and WS_i to equity repo rates within the same bucket shall be set in accordance with points (a) to (d) of paragraph 2.';

(13) Articles 325ar and 325as are replaced by the following:

'Article 325ar

Correlations across buckets for equity risk

The correlation parameter γ_{bc} shall apply to the aggregation of sensitivities between different buckets.

It shall be set in relation to the buckets of Table 8 in Article 325ap as follows:

- (a) 15 % where the two buckets fall within bucket numbers 1 to 10;
- (b) 0 % where either of the two buckets fall within bucket number 11;
- (c) 75 % where the two buckets fall within bucket number 12 and 13;
- (d) 45 % otherwise.

Article 325as

Risk weights for commodity risk

Risk weights for sensitivities to commodity risk factors shall be the following:

Table 9

Bucket number	Bucket name	Risk weight
1	Energy — solid combustibles	30 %
2	Energy — liquid combustibles	35 %
3	Energy — electricity and carbon trading	60 %
4	Freight	80 %
5	Metals — non-precious	40 %
6	Gaseous combustibles	45 %
7	Precious metals (including gold)	20 %
8	Grains and oilseed	35 %
9	Livestock and dairy	25 %
10	Softs and other agricultural commodities	35 %
11	Other commodities	50 %

(14) in Article 325av, paragraph 1 is replaced by the following:

‘1. A risk weight of 15 % shall be applied to all sensitivities of foreign exchange risk factors.’;

(15) in paragraph 3 of Article 325ax, Table 11 is replaced by the following:

Table 11

Risk class	LH _{risk class}	Risk weights
GIRR	60	100 %
CSR non-securitisations	120	100 %
CSR securitisations (ACTP)	120	100 %
CSR securitisations (non-ACTP)	120	100 %
Equity (large cap and indices)	20	77,78 %
Equity (small cap and other sector)	60	100 %
Commodity	120	100 %
Foreign exchange	40	100 %

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply from 30 September 2021.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 17 December 2019.

For the Commission
The President
 Ursula VON DER LEYEN