Consultation Paper

Draft Regulatory Technical Standards on gross JTD amounts under Article 325w(8) of Regulation (EU) No 575/2013
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1. Responding to this consultation

The EBA invites comments on all proposals put forward in this paper and in particular on the specific questions summarised in 5.2.

Comments are most helpful if they:

- respond to the question stated;
- indicate the specific point to which a comment relates;
- contain a clear rationale;
- provide evidence to support the views expressed / rationale proposed; and
- describe any alternative regulatory choices the EBA should consider.

Submission of responses

To submit your comments, click on the ‘send your comments’ button on the consultation page by 12 June 2021. Please note that comments submitted after this deadline, or submitted via other means may not be processed.

Publication of responses

Please clearly indicate in the consultation form if you wish your comments to be disclosed or to be treated as confidential. A confidential response may be requested from us in accordance with the EBA’s rules on public access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by the EBA’s Board of Appeal and the European Ombudsman.

Data protection

The protection of individuals with regard to the processing of personal data by the EBA is based on Regulation (EU) 1725/2018 of the European Parliament and of the Council of 23 October 2018. Further information on data protection can be found under the Legal notice section of the EBA website.
2. Executive Summary

Regulation (EU) No 575/2013 (the Capital Requirements Regulation – CRR) as amended by Regulation (EU) 2019/876 implements in EU legislation, inter alia, the revised framework to compute own funds requirements for market risk. One component of these requirements is the Default Risk Charge (DRC), which is a capital requirement intended to capitalise default risks in the trading book.

To determine the DRC under the alternative standardised approach for market risk under the CRR, the gross jump-to-default (JTD) amount of exposures are to be calculated.

The draft regulatory technical standards (RTS) set out in this consultation paper specify how gross JTD amounts are to be determined for institutions’ exposures in the trading book under the alternative standardised approach for market risk in scope of the DRC for non-securitisations. In this regard, the draft RTS represent a contribution for the harmonised implementation in the EU of rules for the calculation of capital requirements for default risk of trading book positions under the alternative standardised approach for market risk, being gross JTD amounts a key element needed for those calculations.

The draft RTS are intended to address the three mandates set out in Article 325w(8) of the CRR, and specify respectively:

(a) How the components P&L_{long}, P&L_{short}, Adjustment_{long} and Adjustment_{short} are to be determined for the purposes of calculating gross JTD amounts of exposures to debt and equity instruments with the formulae in Article 325w(1), (2) and (5) of the CRR.

(b) Which alternative methodologies institutions are to use for estimating gross JTD amounts of exposures referred to in Article 325w(7) of the CRR.

(c) How to determine the notional amount of instruments other than the ones referred to in Article 325w(4) of the CRR.

The draft RTS set out in this consultation paper represent a deliverable of the third phase of the EBA roadmap for the new market and counterparty credit risk approaches published on 27 June 2019\(^1\). They constitute a further contribution to a smooth and harmonised implementation of the Fundamental Review of the Trading Book (FRTB) international standards in the EU.

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3. Background and rationale

1. Regulation (EU) No 575/2013 (the Capital Requirements Regulation – CRR) as amended by Regulation (EU) 2019/876 implements in EU legislation, inter alia, the revised framework to compute own funds requirements for market risk. One component of these requirements is the DRC, which is a capital requirement intended to capitalise default risks in the trading book.

2. To determine the DRC under the alternative standardised approach for market risk, the gross JTD amounts of exposures are to be calculated. In this regard, Article 325w of the CRR sets out requirements specifying how gross JTD amounts shall be determined for the purposes of the DRC for non-securitisations.

3. In particular, Article 325w(1), (2) and (5) outline formulae for calculating gross JTD amounts of exposures to debt and equity instruments, together with requirements for the identification of the components of the formulae. In addition, Article 325w(7) specifies that institutions shall use alternative methodologies to estimate gross JTD amounts in the case of exposures to default risk arising from derivative instruments whose pay-offs in the event of default of the obligor are not related to the notional amount of a specific instrument issued by that obligor or to the LGD of the obligor or an instrument issued by that obligor.

4. The EBA is then mandated, in Article 325w(8) of the CRR, to develop draft RTS to specify:

(a) how institutions are to determine the components $P&L_{\text{long}}$, $P&L_{\text{short}}$, $\text{Adjustment}_{\text{long}}$ and $\text{Adjustment}_{\text{short}}$ when calculating the JTD amounts for different types of instruments in accordance with this Article;

(b) which alternative methodologies institutions are to use for the purposes of the estimation of gross JTD amounts referred to in paragraph 7.

(c) the notional amounts of instruments other than the ones referred to in points (a) and (b) of paragraph 4.

The EBA is requested to submit these draft RTS to the Commission by 28 June 2021.

5. It should be noted that this consultation paper, including the mandates in Article 325w(8) of the CRR on which the draft RTS have been developed, are based on Article 325w of the CRR as amended by the Corrigendum of Regulation (EU) 2019/876. Consequently, readers of this consultation paper are invited to refer to Article 325w of the CRR as amended by the Corrigendum of Regulation (EU) 2019/876 when considering the proposals put forward in this document.

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2 https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_2021.065.01.0061.01.ENG&toc=OJ%3AL%3A2021%3A065%3ATOC
6. The mandate gives to the EBA the task to specify in the draft RTS how the components of the CRR formulae for the quantification of gross JTD amounts of exposures to debt and equity instruments are to be determined, and which alternative methodologies institutions are to use to estimate gross JTD amounts for those exposures mentioned in Article 325w(7) of the CRR. Accordingly, via these draft RTS the EBA has the task to clarify in practice how gross JTD amounts of exposures in scope of the mandate are to be calculated, so long this would fit with the requirements – and thus also the formulae – outlined in Article 325w of the CRR.

7. In terms of scope, the draft RTS are intended to cover exposures included in the DRC for non-securitisations, as the mandate is specified in Subsection 1, Section 5, Chapter 1a, Title IV, Part Three of the CRR, which concerns own funds requirements for the default risk of non-securitisations. Instead, Subsection 2 and Subsection 3 in section 5 specify respectively how to determine own funds requirements for the default risk for securitisations not included in the alternative correlation trading portfolio (ACTP), and own funds requirements for the default risk for securitisations included in the ACTP. Accordingly, these draft RTS cover trading book positions under the alternative standardised approach for market risk in scope of the DRC for non-securitisations.

8. It should also be noted that the DRC is intended to capture the default risk of trading book positions, but not the counterparty credit risk arising from the transactions mentioned in Article 92(3)(f) of the CRR, as this is instead capitalised separately in the distinct capital charge for counterparty credit risk in the trading book. Consequently, for derivative instruments the draft RTS play a role for the purposes of capitalising the default risk of their underlying debt and equity instruments, or the default risk of an obligor, which affects the value of the derivative instrument, but not the default risk of the counterparty of the derivative instrument.

3.1 Mandate in point (a) of Article 325w(8) of the CRR

9. The mandate in point (a) of Article 325w(8) of the CRR requires the EBA to specify how to determine the components P&L\text{long}, P&L\text{short}, Adjustment\text{long} and Adjustment\text{short} of the CRR formulae for calculating gross JTD amounts of exposures to debt and equity instruments.

10. The EBA notes that the CRR formulae for the calculation of gross JTD amounts under the CRR are different from those employed under the FRTB international standards. Notably, the CRR formulae introduce the additional terms Adjustment\text{long} and Adjustment\text{short}, which are not present in the FRTB formulae for the calculation of gross JTD amounts as specified in MAR22.11³. This also implies that the P&L term under the CRR and FRTB formulae will be associated to different concepts, and thus will generally result in different values.

11. Nevertheless, regardless of the different formulae for gross JTD amounts under the CRR and the FRTB, their output for equivalent exposures should be equal to ensure alignment with international standards. In this regard, the draft RTS set out in this consultation paper propose

³ https://www.bis.org/basel_framework/chapter/MAR/22.htm?inforce=20230101&published=20200327
a specification for the determination of gross JTD amounts under the CRR that is intended to result in outcomes equivalent to those under the FRTB for equivalent positions.

12. Against this background, the draft RTS set out in this consultation paper propose to determine the components $P&I_{long}$, $P&I_{short}$, $Adj_{long}$ and $Adj_{short}$ for the purposes of the mandate in point (a) of Article 325w(8) of the CRR as follows:

\[
P&I_{long} = V_A - V_{notional}
\]

\[
P&I_{short} = V_A - V_{notional}
\]

\[
Adj_{long} = -V_F
\]

\[
Adj_{short} = -V_F
\]

Where:

- $V_A$ is the market value of the instrument from which the exposure arises for the institution at the time of the calculation.

- $V_F$ is the market value of the instrument from which the exposure arises for the institution calculated under the assumption that, at the time of the calculation, the equity instrument experienced a full loss in value, or the debt instrument defaulted and experienced a zero recovery rate (i.e. a full loss in value).

- $V_{notional}$ is equal to this same term in the CRR formula.

13. In accordance with the above specification, together with the proposed specification for the notional amount of instruments that is discussed below for the purposes of the mandate in point (c) of Article 325w(8) of the CRR, it can be derived that the CRR formulae for the calculation of gross JTD amounts can be written in accordance with this representation:

\[
JTD_{long} = \max\{V_A - V_D, 0\}
\]

\[
JTD_{short} = \min\{V_A - V_D, 0\}
\]

Under this representation, the gross JTD amount of an exposure to a debt or equity instrument is the difference between the market value of the instrument from which the exposure arises for the institution at the time of the calculation, and the market value of the instrument from which the exposure arises calculated under the assumption that, at the time of the calculation, the equity instrument experienced a full loss in value, or the debt instrument defaulted and experienced a prefixed (regulatory) recovery rate calculated with respect to the face value of the debt instrument.
14. To calculate gross JTD amounts in accordance with the draft RTS, the terms $V_A$, $V_D$ and $V_F$ need to be determined. In this regard $V_A$ should be readily available to institutions as it represents the market value of the instrument constituting the exposure at the time of the calculation. On the contrary $V_D$ and $V_F$ represent hypothetical market values that the instrument would have at the time of the calculation under their respective default events for the debt or the equity instrument, and therefore require to perform a specific calculation for their determination.

15. For the purposes of this section and the mandate in point (a) of Article 325w(8), the “instrument from which the exposure arises” is meant to be the instrument from which the exposure arises as a consequence of the default risk of a debt or equity instrument. This means that the “instrument from which the exposure arises” could be a debt or equity instrument, but also a derivative instrument whose value is affected by the value of a debt or equity instrument (e.g. bond and equity options, etc.), as such derivative instrument would effectively constitute – and would consequently be considered as – an exposure to a debt or equity instrument.

16. The representation proposed above is consistent with what the concept of gross JTD amount should quantify in accordance with the specifications under the CRR and FRTB. In this regard, it is also noted that Article 325v(1)(c) defines “gross jump-to-default (gross JTD) amount” as “the estimated size of the loss or gain that the default of the obligor would produce for a specific exposure”, while MAR10.19 of the Basel framework defines JTD as “the risk of a sudden default. JTD exposure refers to the loss that could be incurred from a JTD event.”

17. In accordance with the proposal, the quantification of the components $\text{P&L}_{\text{long}}$ and $\text{P&L}_{\text{short}}$ depends also on the specification of $V_{\text{notional}}$, which is based on the concept of notional amount set out below in this document for the purposes of the mandate in point (c) of Article 325w(8) of the CRR. At the same time the specification of $V_{\text{notional}}$ should also take into account the specifications of the other components of the CRR formulae. In this regard, all the components of the gross JTD amount formulae – and thus the mandates in points (a) and (c) of Article 325w(8) of the CRR – are closely interconnected.

### 3.2 Mandate in point (b) of Article 325w(8) of the CRR

18. The mandate in point (b) of Article 325w(8) of the CRR requires the EBA to specify which alternative methodologies institutions are to use for the purposes of estimating gross JTD amounts of those exposures mentioned in Article 325w(7) of the CRR, i.e. exposures to default risk arising from derivative instruments whose pay-offs in the event of default of the obligor are not related to the notional amount of a specific instrument issued by that obligor or to the LGD of the obligor or an instrument issued by that obligor.

19. To ensure that those alternative methodologies are based on the same approach for calculating gross JTD amounts as for other exposures, the draft RTS set out in this consultation paper

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4 It should be noted that the market value of the instrument is expected to be always available to institutions. In this regard, if marking to market is not possible, a marking to model should be performed to determine the market value of the instrument.

5 https://www.bis.org/basel_framework/chapter/MAR/10.htm?inforce=20230101&published=20200327
propose that the alternative methodologies should consist in estimating the gross JTD amount of an exposure as the difference between the market value of the instrument from which the exposure arises for the institution at the time of the calculation, and the market value of the instrument from which the exposure arises calculated under the assumption that the obligor defaulted at that time.

20. If the obligor was already defaulted at the time of the calculation, and the market value of the instrument from which the exposure arises for the institution at that time already reflects the gain or loss resulting from the default of the obligor, an institution should set a value of zero to the gross JTD amount of the exposure, as the instrument would no longer be considered to constitute an exposure.

3.3 Mandate in point (c) of Article 325w(8) of the CRR

21. The mandate in point (c) of Article 325w(8) of the CRR requires the EBA to specify the notional amount of instruments other than the ones referred to in points (a) and (b) of Article 325w(4) of the CRR.

22. The specifications relative to the notional amount under Article 325w(4) of the CRR transpose some of the FRTB specifications under MAR22.14. They specify that:

- In the case of a bond, the notional amount is the face value of the bond.
- In the case of a sold put option on a bond, the notional amount is the notional amount of the option.
- In the case of a bought call option on a bond, the notional amount is 0.

For other types of instruments, the mandate in point (c) of Article 325w(8) of the CRR requires the EBA to specify in the draft RTS how the notional amount has to be determined.

23. Article 325w(5) of the CRR, which refers to exposures to equity instruments, specifies that:

- The notional amount is the fair value of the equity for cash equity instruments.

The cash equity instruments mentioned by this requirement are understood to be non-derivative instruments, and this requirement is understood to specify that the notional amount of a direct holding of an equity instrument, or of a short sale of an equity instrument, is the fair value of the equity instrument. However, for derivative instruments on equity instruments, Article 325w(5) of the CRR would not clarify how the notional amount should be determined. As a consequence of this, the mandate in point (c) of Article 325w(8) of the CRR is understood to also require the specification of the notional amount of instruments other than cash equity instruments for the purposes of Article 325w(5) of the CRR.

24. In addition, it is considered that the mandate in point (c) of Article 325w(8) of the CRR only concerns the specification of the notional amount of instruments to be treated under Article
325w(1), (2) and (5) of the CRR. On the contrary, for the exposures to be treated under Article 325w(7) of the CRR, the alternative methodologies therein mentioned would be employed, and these should not require the determination of the notional amount.

25. It should be noted that the concept of notional amount is different from the concept associated to the component $V_{\text{notional}}$ of the formulae in Article 325w(1), (2) and (5) of the CRR. The concept of notional amount is associated to an instrument, whereas the concept of $V_{\text{notional}}$ is associated to an exposure. In this regard, the same instrument could generate either a long or short exposure – depending on whether it is bought or sold\(^6\) – and each of these exposures are associated a $V_{\text{notional}}$. The definitions of long exposure and short exposure are specified in Article 325w(1) of the CRR.

26. In accordance with the requirements in Article 325w of the CRR, the notional amount of an instrument should enter into the component $V_{\text{notional}}$ of CRR formulae with a negative sign in case of short exposures. This understanding reflects the requirement in MAR22.13 of the FRTB standards according to which, when calculating the JTD as set out in MAR22.11, the notional amount of an instrument that gives rise to a long (short) exposure is recorded as a positive (negative) value.

27. The identification of the component $V_{\text{notional}}$ is needed to determine the components $P&L_{\text{long}}$ and $P&L_{\text{short}}$ in accordance with the their specifications proposed in the draft RTS for the purposes of the mandate in point (a) of Article 325w(8) of the CRR. At the same time, the draft RTS set out in this consultation paper aim at aligning with the FRTB international standards for the determination of gross JTD amounts.

28. The FRTB formulae for the determination of gross JTD amounts can be expressed in accordance with the following representation:

$$JTD_{\text{long}} = \max\{ (\text{LGD} - 1) \cdot N + \text{BEMV}, 0 \}$$

$$JTD_{\text{short}} = \min\{ (\text{LGD} - 1) \cdot N + \text{BEMV}, 0 \}$$

The term $N$ is the “notional amount” concept, and the term BEMV is the “bond-equivalent market value” concept, mentioned in the FRTB standards. In this regard BEMV is understood to be quantified as $\text{BEMV} = V_A - V_F$, where $V_A$ and $V_F$ are specified as above in this document, that is:

- $V_A$ is the market value of the instrument from which the exposure arises for the institution at the time of the calculation.
- $V_F$ is the market value of the instrument from which the exposure arises for the institution calculated under the assumption that, at the time of the calculation, the equity instrument

\(^6\) Or vice versa, depending on the features of the instrument.
experienced a full loss in value, or the debt instrument defaulted and experienced a zero recovery rate (i.e. a full loss in value).

29. At the same time, it is considered that in accordance with international standards the gross JTD amount of an exposures to a debt or equity instrument may be expressed in accordance with the following representation:

\[
\begin{align*}
JTD_{\text{long}} &= \max\{V_A - V_D, 0\} \\
JTD_{\text{short}} &= \min\{V_A - V_D, 0\}
\end{align*}
\]

Where:

- \(V_A\) is specified as above in this document.
- \(V_D\) is the market value of the instrument from which the exposure arises for the institution, calculated under the assumption that, at the time of the calculation, the equity instrument experienced a full loss in value, or the debt instrument defaulted and experienced a prefixed (regulatory) recovery rate, calculated with respect to the face value of the debt instrument, set to be:
  - For non-senior debt instruments, to zero.
  - For senior debt instruments, to 25%.
  - For covered bonds, to 75%.

It should be noted that in accordance with this specification, for exposures to non-senior debt instruments and for exposures to equity instruments, \(V_D\) corresponds to \(V_F\).

30. Given this understanding for the determination of the term BEMV and of gross JTD amounts of exposures to debt and equity instruments under the international standards, to ensure that gross JTD amounts calculated under the CRR are aligned with those calculated under the international standards, the term \(V_{\text{notional}}\) under the CRR formula should be specified as follows:

\[
V_{\text{notional}} = \frac{V_D - V_F}{1 - LGD}
\]

31. At the same time, as noted above, \(V_{\text{notional}}\) of an exposure arising from an instrument should be the notional amount of the instrument for a long exposure, or the notional amount taken with a negative sign for a short exposure. Consequently the notional amount of the instrument from which the exposure arises should be specified as follows, and this specification is set out in the draft RTS proposed in this consultation paper:
The notional amount of the instrument (long exposure) is given by:
\[ \text{Notional amount (long exposure)} = \frac{V_D - V_F}{1 - LGD} \]

The notional amount of the instrument (short exposure) is given by:
\[ \text{Notional amount (short exposure)} = \frac{V_F - V_D}{1 - LGD} \]

32. It should be noted that in accordance with the formulae specified in the previous paragraph, the notional amount of an instrument is the same (and has the same sign) irrespective of whether the institution has a long or short exposure arising from that instrument. However, the notional amount of the instrument should enter the component \( V_{\text{notional}} \) with a negative sign for a short exposure arising from the instrument in accordance with Article 325w of the CRR. \( V_{\text{notional}} \) of a short exposure arising from an instrument should be equal to \( V_{\text{notional}} \) of a long exposure arising from the same instrument taken with the opposite sign.

33. In addition, the term \( N \) under the FRTB and CRR formulae should be relevant exclusively for exposures to covered bonds and senior debt instruments, since LGD is set to be 100% for exposures to non-senior debt instruments and exposures to equity instruments. Consistent with this, the draft RTS set out in this consultation paper propose that the notional amount of instruments that constitute exposures to non-senior debt instruments and exposures to equity instruments shall be zero, which will imply that the term \( V_{\text{notional}} \) of exposures to non-senior debt instruments and equity instruments will be zero.

3.4 Treatment of exposures arising from instruments with multiple underlyings, indices, and collective investment undertakings

34. The specifications for the determination of gross JTD amounts proposed in the draft RTS are intended to be applicable for all exposures to debt and equity instruments, or to exposures to the default risk of an obligor, falling in the scope of the DRC for non-securitisations. Moreover, they are intended to be applicable both in the case of exposures arising from instruments referencing a single debt or equity instrument, or obligor, and to exposures arising from instruments referencing multiple debt or equity instruments, or obligors, including when these are embedded in structures - such as indices and collective investment undertakings (CIUs).

35. Article 325ab(2) of the CRR specifies that “for traded non-securitisation credit and equity derivatives, JTD amounts by individual constituents shall be determined by applying a look-through approach.” Despite Article 325ab(2) has been included in Subsection 3 of Section 5 referring to own funds requirements for the default risk for securitisations included in the ACTP, the EBA considers that this requirement is applicable for the purposes of Subsection 1 of Section 5, i.e. for the DRC for non-securitisations positions.

36. That requirement is meant to transpose the equivalent FRTB requirement under MAR22.5. FAQ1 of MAR22.5 further clarifies that the JTD equivalent when decomposing multiple underlying positions of a single security or product (e.g. index options), this is defined as the difference

\[^{7}\text{With the exception of cash equity instruments, for which Article 325w(5) of the CRR specifies that their notional amount is the fair value of the equity.}\]
between the value of the security or product assuming that each single name referenced by the security or product defaulted, separately from the others, and the value of the security or product assuming that none of the names referenced by the security or product defaulted.

37. Accordingly, it follows that for exposures arising from instruments with multiple underlyings (e.g. basket options), including when these are embedded in credit and equity indices (e.g. index options), a look through approach should be employed to identify the underlying debt and equity instruments that expose the institution to default risks, and a gross JTD amount should be calculated for each underlying in accordance with the specifications set out in the draft RTS. This is in particular consistent with the fact that in accordance with Article 325w(1), (2) and (5) of the CRR a gross JTD amount is calculated for each exposure to a debt instrument or to an equity instrument.

38. For exposure to instruments that reference CIUs, Article 325j of the CRR as set out in the Commission Delegated Act\(^8\) under Article 461a of the CRR includes requirements that are considered to apply also for the purposes of the DRC. As a consequence, those rules impact the way the draft RTS should be employed for calculating gross JTD amounts. In particular Article 325j(1)(a) specifies that an institution shall calculate the own funds requirements for market risk of a position in a CIU with one of the approaches therein specified. In this regard, since own funds requirements for market risk also include the DRC, those requirements should also apply for calculating capital requirements in accordance with the draft RTS. This interpretation is further substantiated by the fact that Article 325j(4)(b) explicitly includes rules for the purposes of the DRC under the alternative standardised approach.

39. Article 325j(1)(a) of the CRR specifies that “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”. It would follow that for those CIUs where the institution is able to look through, the look through approach should be employed and a gross JTD amount should be calculated for each underlying of the CIU that falls in the scope of the DRC. This treatment is consistent with that employed under the sensitivities-based method for CIUs where the institution is able to look through, where also in this case a look through approach should be employed for the purposes of calculating the capital requirements.

40. For CIUs where the institutions is not able to look through, Article 325j(4)(b) of the CRR specifies that “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”. Once the exposures of the CIU have been determined in accordance

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\(^8\) Commission Delegated Regulation (EU) 2021/424

with this requirement, a gross JTD amount would be calculated for each of them in accordance with the specifications proposed in the draft RTS.

41. However, if in accordance with Article 325j(2) of the CRR the 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, and regardless of whether the institution is able or not to look through the CIU, the institution may treat the position in the CIU as a position in the tracked index benchmark. In such a case, for the purposes of the DRC under the alternative standardised approach, this would mean that the treatment for exposures arising from instruments referencing indices should be used, which as described above would envisage to look through the index and calculate a gross JTD amount for each component of the index falling in scope of the DRC.

42. Against this background, the draft RTS set out in this consultation paper do not include specific requirements for the determination of gross JTD amounts of exposures arising from instruments with multiple underlyings, or referencing indices, and CIUs. This is because the above mentioned requirements in the CRR and Commission Delegated Act already specify how those exposures should be considered for determining gross JTD amounts – i.e. calculate a gross JTD amount for each underlying debt or equity instrument, or obligor, the default risk of which generates an exposure to the institution – while the draft RTS clarify how gross JTD amounts should be quantified once those debt and equity instruments, and obligors, have been identified.
4. Draft regulatory technical standards on gross JTD amounts under Article 325w(8) of Regulation (EU) No 575/2013

In between the text of the draft RTS that follows, further explanations on specific aspects of the proposed text are occasionally provided, which either offer examples or provide the rationale behind a provision, or set out specific questions for the consultation process. Where this is the case, this explanatory text appears in a framed text box.
COMMISSION DELEGATED REGULATION (EU) [.../...]

of XXX


(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 26/06/2013 on on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, and in particular the third subparagraph of Article 325w(8) thereof,

Whereas:

(1) Alignment with international standards in the determination of gross JTD amounts is necessary to ensure that own funds requirements for default risk under the alternative standardised approach for market risk are calculated in a way consistent with that for which they are designed. Therefore, the components $P&L_{long}$, $P&L_{short}$, $Adjustment_{long}$, $Adjustment_{short}$ of the formulae in Article 325w of Regulation (EU) No 575/2013, the notional amount of instruments for the determination of the component $V_{notional}$ of those formulae, and the alternative methodologies for the estimation of gross JTD amounts of exposures referred to in Article 325w(7) of that Regulation, should be determined in a way such that the gross JTD amounts calculated with those formulae, and methodologies, are consistent with the gross JTD amounts calculated in accordance with international standards.

(2) This Regulation is based on the draft regulatory technical standards submitted by the European Supervisor Authority (European Banking Authority) (EBA) to the Commission.

(3) EBA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Banking Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1093/2010,

HAS ADOPTED THIS REGULATION:

Article 1

**Determination of the components $P&L_{long}$, $P&L_{short}$, $Adjustment_{long}$ and $Adjustment_{short}$ for the calculation of gross JTD amounts for exposures to debt or equity instruments**

1. Where calculating the gross JTD amounts for exposures to debt instruments in accordance with Article 325w(1) and (2) of Regulation (EU) No 575/2013, or where calculating the gross JTD amounts for exposures to equity instruments in accordance with Article 325w(5) of that Regulation, the components $P&L_{long}$ and $P&L_{short}$ shall be determined as follows:

$$P&L_{long} = V_A - V_{notional}$$
$$P&L_{short} = V_A - V_{notional}$$

where:

$V_A$ is the market value of the instrument from which the exposure arises for the institution at the time of the calculation.

2. For exposures to debt instruments, the components $Adjustment_{long}$ and $Adjustment_{short}$ referred to in Article 325w(1) and (2) of Regulation (EU) No 575/2013 shall be determined as follows:

$$Adjustment_{long} = -V_F$$
$$Adjustment_{short} = -V_F$$

where:
$V_F$ is the market value of the instrument from which the exposure arises for the institution calculated under the assumption that at the time of the calculation the debt instrument defaulted and experienced a zero recovery rate.

3. For exposures to equity instruments, the components $\text{Adjustment}_\text{long}$ and $\text{Adjustment}_\text{short}$ referred to in Article 325w(5) of Regulation (EU) No 575/2013 shall be determined as follows:

\[
\begin{align*}
\text{Adjustment}_\text{long} &= -V_F \\
\text{Adjustment}_\text{short} &= -V_F
\end{align*}
\]

where:

$V_F$ is the market value of the instrument from which the exposure arises for the institution calculated under the assumption that at the time of the calculation the equity instrument experienced a full loss in value.

**Explanatory text for consultation purposes**

This Article is intended to address the mandate in point (a) of Article 325w(8) of the CRR, and specifies how to determine the components $\text{P&L}_\text{long}$, $\text{P&L}_\text{short}$, $\text{Adjustment}_\text{long}$ and $\text{Adjustment}_\text{short}$ of the CRR formulae for the calculation of gross JTD amounts.

With regard to the determination of $V_A$ and $V_F$, $V_A$ should be readily available to institutions as it represents the market value of the instrument constituting the exposure at the time of the calculation. On the contrary $V_F$ represents a hypothetical market value that the instrument would have at the time of the calculation following an instantaneous default event for the debt or equity instrument leading to its full loss in value, and therefore a specific calculation is required for its determination.

**Q1.** Do you agree with the proposed specification for the determination of the components $\text{P&L}_\text{long}$, $\text{P&L}_\text{short}$, $\text{Adjustment}_\text{long}$ and $\text{Adjustment}_\text{short}$ of the CRR formulae for the calculation of gross JTD amounts? If not, please explain why and how you would determine those components for the exposures in scope of the mandate in point (a) of Article 325w(8) of the CRR, including the rationale for your proposal.

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**Article 2**

**Estimation of gross JTD amounts for exposures referred to in Article 325w(7) of Regulation (EU) No 575/2013**

1. The alternative methodology to estimate the gross JTD amount of an exposure referred to in Article 325w(7) of Regulation (EU) No 575/2013 shall consist in calculating the difference between the market value of the instrument from which the exposure arises for the institution at the time of the calculation and the market value of the instrument from which the exposure arises calculated under the assumption that the obligor defaulted at that time.
2. If the obligor was already defaulted at the time of the calculation, and the market value of the instrument from which the exposure arises for the institution at that time already reflects the gain or loss resulting from the default of the obligor, the alternative methodology referred to in Article 325w(7) of Regulation (EU) No 575/2013 shall consist in regarding the gross JTD amount of the exposure to be zero.

Explanatory text for consultation purposes

This Article is intended to address the mandate in point (b) of Article 325w(8) of the CRR and specifies how to determine the gross JTD amounts of those exposures falling under Article 325w(7) of the CRR.

This Article covers the exposures mentioned in point (4) of MAR22.12 of the FRTB standards, such as the example transaction mentioned therein of a foreign exchange-credit hybrid option where the cash flows are swap of cash flows, long EUR coupons and short USD coupons with a knockout feature that ends cash flows on an event of default of a particular obligor.

Q2. Do you agree with the proposed specification for the estimation of gross JTD amounts of exposures in scope of Article 325w(7) of the CRR? If not, please explain why and how you would determine gross JTD amounts for those exposures, including the rationale for your proposal.

Article 3

Notional amounts of instruments

1. For the purposes of Article 325w(1) and (2) of Regulation (EU) No 575/2013, the notional amounts of instruments other than those referred to in points (a) and (b) of Article 325w(4) of that Regulation shall be determined as follows:

   (a) for exposures to debt instruments classified as senior debt instruments or covered bonds, the notional amount of the instrument from which the exposure arises shall be:

   In case of a long exposure:

   \[
   \text{Notional amount} = \frac{V_D - V_F}{1 - \text{LGD}}
   \]

   In case of a short exposure:

   \[
   \text{Notional amount} = \frac{V_F - V_D}{1 - \text{LGD}}
   \]

   where:

   *\(V_D\) is the market value of the instrument from which the exposure arises for the institution calculated under the assumption that at the time of the calculation the debt instrument defaulted and experienced a recovery rate, calculated with respect to the face value of the debt instrument, equal to \((1 - \text{LGD})\) where \(\text{LGD}\) is LGD as assigned to the debt instrument in accordance with Article 325w(3) of Regulation (EU) No 575/2013.

   *\(V_F\) is \(V_F\) as specified in accordance with Article 1(2) of this Regulation.
LGD is LGD as assigned to the debt instrument in accordance with Article 325w(3) of Regulation (EU) No 575/2013.

(b) for exposures to debt instruments classified as non-senior debt instruments, the notional amount of the instrument from which the exposure arises shall be zero.

2. For the purposes of Article 325w(5) of Regulation (EU) No 575/2013, the notional amount of the instrument from which the exposure arises and that is not a cash equity instrument shall be zero.

**Explanatory text for consultation purposes**

This Article is intended to address the mandate in point (c) of Article 325w(8) of the CRR, and specifies how to determine the notional amount of instruments falling under Article 325w(1), (2) and (5) of the CRR.

With regard to $V_D$, similarly to $V_F$ it represents a hypothetical market value that the instrument would have at the time of the calculation following an instantaneous default of the debt instrument leading it, however, to experience a positive regulatory recovery rate calculated with respect to its face value.

With regard to the second paragraph of the Article, this specifies that the notional amount of instruments falling under Article 325w(5) of the CRR that are not cash equity instruments shall be zero. For cash equity instruments Article 325w(5) of the CRR specifies instead that their notional amount is the fair value of the equity.

**Q3.** Do you agree with the proposed specification of the notional amount of instruments for the purposes of the mandate in point (c) of Article 325w(8) of the CRR? If not, please explain why and how you would determine the notional amount of instruments falling in scope of the mandate, including the rationale for your proposal.

**Q4.** Do you have any other comments that you wish to highlight on these draft RTS?

**Article 4**

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

This Regulation shall be binding in its entirety and directly applicable in all Member States.
Done at Brussels,

For the Commission
The President

[For the Commission
On behalf of the President

[Position]
5. Accompanying documents

5.1 Draft cost-benefit analysis / impact assessment

43. Article 325w(8) of the CRR mandates the EBA to develop draft RTS to specify (a) how institutions are to calculate the components $P\&L_{\text{long}}$, $P\&L_{\text{short}}$, $\text{Adjustment}_{\text{long}}$ and $\text{Adjustment}_{\text{short}}$ when calculating the gross JTD amounts for different types of instruments, (b) which alternative methodologies institutions are to use for the purposes of the estimation of gross JTD amounts of exposures referred to in Article 325w(7) of the CRR, and (c) the notional amounts of instruments other than the ones referred to in Article 325w(4) of the CRR.

44. Article 10(1) of Regulation (EU) No 1093/2010 (EBA Regulation) provides that any RTS developed by the EBA should be accompanied by an analysis of ‘the potential related costs and benefits’. This analysis should provide an overview of the findings regarding the problem to be dealt with, the options proposed and the potential impact of these options.

45. This section presents the cost-benefit analysis of the main policy options included in the draft RTS described in this consultation paper. The analysis is high level and of qualitative nature.

A. Problem identification

46. The capital requirements for market risk under the alternative standardised approach are calculated as the sum of three components: (a) the capital requirements under the sensitivities-based method (SbM); (b) the capital requirements for default risk (the default risk charge – DRC), and (c) the capital requirements for residual risks (the residual risk add-on – RRAO).

47. According to Article 325v(2) of the CRR, institutions shall calculate default risk requirements separately for each of the following types of instruments: non-securitisations, securitisations that are not included in the ACTP, and securitisations that are included in the ACTP.

48. The calculation of default risk requirements for non-securitisations consists of the following steps. First, institutions shall calculate the gross JTD amounts for each long and short exposure in scope of the DRC for non-securitisations. Second, they shall calculate net JTD amounts by offsetting the gross JTD amounts of short exposures and long exposures to a same obligor. Third, they shall multiply the net JTD amounts by regulatory risk weights. Fourth, they shall aggregate the risk weighted long net JTD amounts with risk weighted short net JTD amounts within buckets. When performing the aggregation within buckets, a so-called “hedge benefit ratio” (i.e. the term $\text{WtS}$ in Article 325y(4) of the CRR) recognises some hedging effects within a bucket. The fifth and ultimate step consists in the simple sum of the capital requirements calculated for each bucket.
49. The EBA is mandated to develop draft RTS specifying how institutions shall calculate gross JTD amounts for non-securitisations. The lack of common specification could result in an inconsistent application of the standardised DRC across institutions, undermining the implementation of the alternative standardised approach in the EU.

50. Based on the EBA QIS 2018 Q4 data, a sizeable share of the market risk capital requirements under the alternative standardised approach is attributed to the DRC.9 On average, the overall contribution of the DRC to total market risk capital requirements under the alternative standardised approach stands at around 22.4% (see Figure 1).

Figure 1. Composition of FRTB-SA RWA, by bank size

B. Policy objectives

51. The specific objective of these draft RTS is to establish a common specification for calculating gross JTD amounts for non-securitisations. In this way, these draft RTS contribute to ensure a consistent implementation of the DRC framework under the alternative standardised approach across EU institutions.

52. Generally, these draft RTS aim to create a level playing field, promote convergence of institutions practices and enhance comparability of own funds requirements across the EU. Overall, these draft RTS are expected to promote the effective and efficient functioning of the EU banking sector.

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9 These figures do not take into account the provisions put forward in this consultation paper.
C. Options considered, cost-benefit analysis, preferred options

Determination of the components $P&L_{\text{long}}$, $P&L_{\text{short}}$, $\text{Adjustment}_{\text{long}}$, $\text{Adjustment}_{\text{short}}$, and of notional amount of instruments

53. For the purposes of addressing the mandates in points (a) and (c) of Article 325w(8) of the CRR, the following options are available:

   **Option 1a:** specify in the draft RTS requirements intended to ensure that gross JTD amounts calculated with the formulae in Article 325w of the CRR are equivalent to those calculated with the formulae in the Basel standards.

   **Option 1b:** specify in the draft RTS requirements according to which the gross JTD amounts calculated with the formulae in Article 325w of the CRR would be different than those calculated with the formulae in the Basel standards.

54. Under option 1b the capital requirements for default risk of trading book positions under the alternative standardised approach would be associated to a different calibration than the one for which they have been designed for prudential purposes, and there would not be alignment to international standards. This would not occur under option 1a.

55. It should be noted that the formulae in Article 325w of the CRR are different from the formulae of the Basel standards for calculating gross JTD amounts. Article 325w sets out specific requirements for the identification of the components $P&L_{\text{long}}$, $P&L_{\text{short}}$, $\text{Adjustment}_{\text{long}}$, and $\text{Adjustment}_{\text{short}}$ which are only relevant for the formulae in the CRR. To achieve the objective under option 1a, the requirements in the Basel standards for calculating gross JTD amounts were reformulated to fit with the CRR formulae and requirements.

56. Option 1a is preferred.

Estimation of gross JTD amounts for exposures under Article 325w(7) of the CRR

57. For the purposes of addressing the mandates in points (b) of Article 325w(8) of the CRR, the following options were considered:

   **Option 2a:** the alternative methodologies for estimating gross JTD amounts of exposures under Article 325w(7) of the CRR should be based on the same approach for calculating gross JTD amounts as for other exposures.

   **Option 2b:** the alternative methodologies for estimating gross JTD amounts of exposures under Article 325w(7) of the CRR should be based on a different approach for calculating gross JTD amounts than for other exposures.

58. Option 2a ensures consistency in the approach used for determining gross JTD amounts of exposures under Article 325w of the CRR, which consists in quantifying the gross JTD amount as
the profit and loss (P&L) resulting from a change in the market value of the instrument from which the exposure arises following an instantaneous default event of the debt or equity instrument, or of the obligor.

59. Option 2a is preferred.
5.2 Overview of questions for consultation

**Q1.** Do you agree with the proposed specification for the determination of the components P&L\textsubscript{long}, P&L\textsubscript{short}, Adjustment\textsubscript{long} and Adjustment\textsubscript{short} of the CRR formulae for the calculation of gross JTD amounts? If not, please explain why and how you would determine those components for the exposures in scope of the mandate in point (a) of Article 325w(8) of the CRR, including the rationale for your proposal.

**Q2.** Do you agree with the proposed specification for the estimation of gross JTD amounts of exposures in scope of Article 325w(7) of the CRR? If not, please explain why and how you would determine gross JTD amounts for those exposures, including the rationale for your proposal.

**Q3.** Do you agree with the proposed specification of the notional amount of instruments for the purposes of the mandate in point (c) of Article 325w(8) of the CRR? If not, please explain why and how you would determine the notional amount of instruments falling in scope of the mandate, including the rationale for your proposal.

**Q4.** Do you have any other comments that you wish to highlight on these draft RTS?
5.3 Annex: Examples

The following examples outline how the specifications in the draft RTS are intended to be applied for the calculation of gross JTD amounts of selected exposures to debt and equity instruments.

For the purpose of this table, the market value of an instrument should be intended as the market value of the instrument for the counterparty that bought the instrument in accordance with the first columns of the table.

<table>
<thead>
<tr>
<th>Exposure type</th>
<th>$V_A$</th>
<th>$V_D$</th>
<th>$V_F$</th>
<th>$V_{\text{notional}}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long exposure</td>
<td>Market value of equity</td>
<td>0</td>
<td>0</td>
<td>Fair value of equity(^{10})</td>
</tr>
<tr>
<td>Short equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short exposure</td>
<td>Market value of equity</td>
<td>0</td>
<td>0</td>
<td>$-\text{Fair value of equity}^{10}$</td>
</tr>
<tr>
<td>Long bond</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long exposure</td>
<td>Market value of bond (1–LGD)·Face value of bond</td>
<td>0</td>
<td>Face value of bond</td>
<td></td>
</tr>
<tr>
<td>Short bond</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short exposure</td>
<td>Market value of bond (1–LGD)·Face value of bond</td>
<td>0</td>
<td>$-\text{Face value of bond}$</td>
<td></td>
</tr>
<tr>
<td>Bought call option on equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long exposure</td>
<td>Market value of the call option</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sold call option on equity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short exposure</td>
<td>Market value of the call option</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^{10}\) Article 325w(5) of the CRR specifies that for cash equity instruments the notional amount is the fair value of the equity. For all other instruments that constitute exposures to equity instruments – including those in this table – Article 3(2) of the draft RTS set out in this consultation paper specify that the notional amount of the instrument should be zero, which will imply a $V_{\text{notional}}$ equal to zero.
<table>
<thead>
<tr>
<th>Bought put option on equity</th>
<th>Short exposure</th>
<th>Market value of the put option</th>
<th>Strike price</th>
<th>Strike price</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sold put option on equity</td>
<td>Long exposure</td>
<td>– Market value of the put option</td>
<td>– Strike price</td>
<td>– Strike price</td>
<td>0</td>
</tr>
<tr>
<td>Bought call option on bond</td>
<td>Long exposure</td>
<td>Market value of the call option</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sold call option on bond</td>
<td>Short exposure</td>
<td>– Market value of the call option</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bought put option on bond</td>
<td>Short exposure</td>
<td>Market value of the put option</td>
<td>Strike price – (1–LGD) · Notional of the option</td>
<td>Strike price</td>
<td>– Notional of the option(^{11})</td>
</tr>
<tr>
<td>Sold put option on bond</td>
<td>Long exposure</td>
<td>– Market value of the put option</td>
<td>– Strike price + (1–LGD) · Notional of the option</td>
<td>– Strike price</td>
<td>Notional of the option(^{11})</td>
</tr>
<tr>
<td>Sold CDS</td>
<td>Long exposure</td>
<td>– Market value of the CDS</td>
<td>–LGD · Notional of CDS</td>
<td>– Notional of CDS</td>
<td>Notional of CDS</td>
</tr>
<tr>
<td>Bought CDS</td>
<td>Short exposure</td>
<td>Market value of the CDS</td>
<td>LGD · Notional of CDS</td>
<td>Notional of CDS</td>
<td>– Notional of CDS</td>
</tr>
</tbody>
</table>

\(^{11}\) The notional of the option of a put option on a bond is the face value of the bond underlying the option.