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## **CRR3 - Credit Valuation Adjustment (CVA) Risk: Risk weight granularity, index hedges and alignment with accounting CVA**

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### **Executive Summary**

In July 2020, the BCBS published targeted revisions to the Credit Valuation Adjustment (CVA) framework, bringing final changes to the initial revised framework published in 2017, as part of the Basel III agreement. CVA refers to a measure of market risk incurred in the context of transactions or contracts involving counterparties (such as sovereign banks, other financial institutions, non-financial companies, etc.). In other words, as banks enter into derivatives contracts, they face the risk of incurring losses due to changes in the market value of those transactions and the deterioration of the creditworthiness of their counterparties.

Capital requirements for CVA risk are meant to require banks to hold aside capital to account for these losses. While the 2020 revisions attempted to solve some of the identified issues with the current CVA framework, further calibration is necessary to ensure that end-users, who typically use derivatives to hedge risk, are still able to access them at a reasonable cost. Particularly in the context of the recovery from the COVID-19 pandemic, it is crucial for banks to continue to support the real economy through the provision of these services and to not be constrained from doing so by an undue increase in the capital held against CVA risk.

### **CVA: A Brief Primer**

Banks that undertake derivatives are subject to the risk of incurring mark-to-market losses because of the deterioration in the creditworthiness of their counterparties. This potential source of loss, due primarily to changes in counterparty credit spreads, but also other market risk factors, is known as CVA (Credit Valuation Adjustment) risk. CVA is thus viewed as the “price” of counterparty credit risk (CCR).

In December 2017, the BCBS published an initial revision of the CVA framework<sup>1</sup> to better capture CVA risk and provide better recognition of CVA hedges. Further revisions were introduced on July 8<sup>th</sup> 2020<sup>2</sup> when the BCBS released its final rule for the CVA framework to ensure, amongst other provisions, further alignment between the market risk and CVA rules, as well as address calibration issues within the framework.

This finalized standard is a significant development that is expected to have material implications for the industry, as it replaces the current CVA standardized approach and removes the ability to use internal models.

The main changes introduced by the BCBS in this framework include a re-calibrated standardized approach (SA-CVA) and basic approach (BA-CVA), adjustments in some of the previously-determined risk weights

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<sup>1</sup> <https://www.bis.org/bcbs/publ/d424.pdf>

<sup>2</sup> <https://www.bis.org/bcbs/publ/d507.htm>

(RWs) in both these approaches, an adjustment to the scope of transactions that are subject to CVA-linked capital requirements, as well as the introduction of “index buckets”, whereby banks can calculate their capital requirements by referring to certain set credit or equity indices, instead of relying on the credit-worthiness of the underlying counterparty. Finally, the BCBS has recommended setting the mCVA multiplier, meant to account for model risk, to 1 – to address calibration issues in the framework. This also takes into account the fact that there is no advanced approach available for the calculation of the CVA capital requirements.

**The main changes introduced in the final revision of the BCBS CVA framework:**

- a reduction of the SA-CVA multiplier (mCVA) to 1 from 1.25, originally intended to account for model risk.
- the introduction of a scalar to BA-CVA of 0.65 to ensure an appropriate relative calibration to SA-CVA.
- the recognition of hedges is improved through the introduction of index buckets, allowing banks to calculate their capital requirements by referring to certain set credit or equity indices, instead of relying on the creditworthiness of the underlying counterparty.
- a revision to the aggregation formula used to calculate the capital requirements and revisions to a number of risk weights downwards to align the requirement closer to the finalised market risk framework.
- a reduction in the gap between regulatory and accounting CVA through the revision of the floor to margin period of risk (MPOR<sup>3</sup>) as it relates to client cleared transactions (CCTs) and removing securities financing transactions (SFTs); and
- the exemption of some SFTs from CVA risk capital requirements.

These latest revisions have allowed for greater sensitivity in the determination of the CVA risk linked to specific exposures and are positive. Nonetheless, further changes to the framework are necessary to ensure that the rules are commensurate with the underlying risk.

### **Designing an effective and proportionate CVA Framework for the European Union**

While analysis of the impact of the 2020 revisions is not yet available at this time, in December 2019, the European Banking Authority’s (EBA) published a report<sup>4</sup> showing that the impact of the 2017 CVA framework for European banks is significant:

- +558% on CVA RWA under the central scenario assuming the re-integration of the CRR exemptions.
- +140% under the alternative scenario (assuming the current CRR exemption framework is maintained).

While the removal of the mCVA multiplier and other enhancements in the Final Basel 2020 standards will likely improve the capital impact of CVA, even with these changes there is likely to still be a substantial increase in CVA Capital.

As the EU prepares to implement the finalised CVA framework, it will be important to monitor its impact. CVA risk represents a significant driver of risk-weighted assets (RWAs) for derivatives and capital market activities, and deficiencies in the framework have an impact on banks’ ability to provide key financing, liquidity and hedging services and products to end-users. As a result, it is very important that the design and calibration

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<sup>3</sup> The MPOR is defined as the time period from the most recent exchange of collateral covering a netting set of transactions with a potentially defaulting counterparty, until the transactions are closed out and the resulting market risk is re-hedged.

<sup>4</sup> This analysis is based [on the BCBS 2017 framework](#) and does not include the revisions introduced in July 2020. We note that its [updated call for advice to the EBA on the implementation of Basel III that](#) the Commission has asked for an updated analysis of the CVA to reflect these final adjustments.

issues be addressed appropriately to ensure that capital requirements are in line with real economic risk incurred by banks.

These increases in capital requirements can have a strong knock-off effect and potential cost implications for end users including pension funds, mutual funds, and commercial end users that use derivatives for hedging purposes. Any requirements that constrain the use of derivatives may affect the ability of end users to hedge their funding, currency, commercial and day-to-day risks, which would in turn weaken their balance sheets and make them less attractive as investment prospects.

In terms of more specific impacts, the industry would recommend further targeted revisions to the CVA framework on the following points:

1. Improve the calibration and granularity of risk weights (RWs) particularly for financial counterparties.
2. Improve the recognition of CVA Index hedges.
3. Misalignment between regulatory and accounting CVA

## **1. Improve the Calibration and granularity of risk weights (RWs) particularly for financial counterparties**

In the revised CVA framework, the risk weights allocated to exposures to financial sector entities are the same, regardless of the type of financial sector entity (i.e. all financial institutions are allocated to the same “bucket”). This means that a wide set of counterparty types all pivotal to the real economy including pension funds, insurance providers, covered bonds<sup>5</sup> and buy-side end-users are captured in the same bucket without any means to account for their specific risk profile.

The European Commission and co-legislators should improve the granularity of the counterparty credit spread (“CCS”) risk weights. At a minimum, recognize the differentiation in CVA risk profiles between financial counterparties.

## **2. Improve the recognitions of CVA Index hedges**

Credit-default-swaps (CDSs) are a type of insurance taken against the loss arising from the default of a counterparty. Banks can also use standard baskets of CDSs, called CDS indices (analogous to equity indices), which are more liquid than the over-the-counter CDSs and provide a useful tool to hedge systemic credit risk. These are especially useful for many small and mid-cap companies, as they do not have any direct “hedges” in response to counterparty credit risk– meaning that hedging has to occur at a more macro-level for the entire portfolio, using these indices as reference.

The July 2020 Basel revisions have introduced new ‘index buckets’ for these indices, namely for: (i) counterparty credit spread risk class; (ii) reference credit spread risk class; and (iii) equity risk class of the SA-CVA, in alignment with the Basel market risk framework (the Fundamental Review of the Trading Book).

The introduction of the counterparty credit spread index bucket is positive. The scope of eligible hedging instruments is limited to qualifying indices. The implied correlation between the CVA portfolio and the index bucket does not provide sufficient recognition to index hedges and does not reflect the observed historical correlation between the typical CVA portfolio and CDS index hedges.

This outcome does not incentivize prudent hedging practices and may lead to the under-hedging and inadequate protection against the real economic CVA risk. Treating the entire CVA portfolio as an index and

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<sup>5</sup> Counterparties within bond issuance structure buying market risk hedges *pari passu* with covered bond debt.

aligning its correlation with the index bucket to a level matching the calibration of SA-TB<sup>6</sup> is one approach to improve the hedge recognition.

### 3. Misalignment between regulatory and accounting CVA

There are significant mismatches between the regulatory CVA charges stipulated in Basel III, and the way those charges are treated from an accounting perspective, through IFRS rules. In order to ensure that CVA charge is not overstated, the CVA framework should be more closely aligned with market practices, specifically by introducing changes to the length of the Margin Period of Risk (MPoR<sup>7</sup>) – which accounts for lags in timing within which the nominal and market value of the contract can widen and by adding flexibility to the expected loss given default<sup>8</sup> (ELGD) used for specific exposures.

#### AFME and ISDA recommendations on CVA

We would recommend that the following changes be considered:

- A recognition of the different risk profiles of different financial institutions through the introduction of distinct risk weights per type of financial institutions, instead of their allocation a single bucket.
- A better recognition of indices used to hedge CVA risk, particularly in terms of their usage linked to the hedging of systemic credit risk, rather than specific sectoral or counterparty risk.
- A greater alignment of regulatory and accounting CVA. Namely, through:
  - making adjustments to the period stipulated by the MPoR. This could be done by adjusting the MPoR floor from 9+N days to 4+N days, which would make it more aligned with accounting market practices; and
  - the use of specific ELGD<sup>9</sup> for secured exposures (e.g. covered bonds, infrastructure or utilities specialized lending vehicles) or entities which by nature expose derivative counterparties to lower risks than bond holders (e.g. sovereigns).

Overall, it will be important for the EBA to produce an impact analysis of the final Basel CVA standard and to assess whether the calibration of the BCBS standard has reached a reasonable level. This would then inform the need for further changes in the EU.

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<sup>6</sup> As it relates to the correlation between to Credit Default Swap (CDS) indices: Under the revised market risk approach, the calculation of the sensitivities-based method under the standardised approach for market risk sets the correlation between two sensitivities within the same index bucket at 80%.

<sup>7</sup> See footnote 3 for a definition of MPOR.

<sup>8,9</sup> Expected loss given default is the average loss anticipated for a specific exposure in the event of the counterparty to the contract defaulting, taking into account the exposure and the probability of default.