Basel III Framework: The Credit Valuation Adjustment (CVA) Charge for OTC Derivative Trades

The credit valuation adjustment charge in Basel III appears, at first glance, to be the preserve of quantitative analysts and the like. However, while complex, the CVA charge requires more widespread attention as it materially increases the required capital for OTC derivative trading activities and is driving significant change in that sector. The divergence between the US and EU approaches to the adoption of the CVA charge highlights how the Basel standards have been interpreted differently in this important area, creating uncertainty and opportunities for arbitrage.

Two-thirds of counterparty credit losses in the financial crisis were suffered not as a result of actual defaults of the counterparty, but because credit market volatility negatively impacted bank earnings. In response, the Basel Committee on Banking Supervision (“Basel Committee”) introduced a new capital charge in Basel III, the credit valuation adjustment (the “CVA”) charge, aimed at improving banks’ resilience against potential mark-to-market losses associated with deterioration in the creditworthiness of counterparties to non-cleared derivatives trades.1 The CVA charge applies to non-cleared trades as exposures toward central counterparties (“CCP”) are exempt from the CVA charge.2

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2 Article 382 Capital Requirements Regulation (“CRR”) states that transactions with a “qualifying central counterparty” (i.e., a central counterparty which has been authorised in (in accordance with Article 14, EMIR (“Authorisation of a CCP”)) or recognised (in accordance with Article 25, EMIR (“Recognition of a third-country CCP”)) are, subject to certain conditions contained in Article 382 CRR, exempt from the own funds requirement for CVA risk.
As described in the following, banks face two key issues as a consequence of the CVA charge. Firstly, regulatory and accounting rules do not precisely mirror each other with respect to the meaning of “CVA” and its relationship to DVA, which poses challenges to banking models and strategies for managing CVA risk. Secondly, the US and EU have adopted the CVA charge differently which, as a result, is causing market uncertainty and creating potential opportunities for arbitrage.

**Divergent Accounting and Regulatory Standards for CVA Calculation**

**Background:** Accounting standards (including IFRS and US GAAP) require credit risk to be reflected in the fair value measurement of derivatives. The Basel Committee has described the CVA as the difference between the value of a derivative assuming the counterparty is default risk-free and the value of a derivative reflecting the default risk of the counterparty. The “flipside” of the CVA, the debt value adjustment (“DVA”), reflects the debit side of the transaction, i.e., the difference between the value of the derivative, assuming the bank itself is default-risk-free, and the value of a derivative reflecting the default risk of the bank. Additionally, some banks price further elements into the valuation of derivatives, including a funding valuation adjustment (“FVA”) to capture the impact of funding and liquidity on the cost of a trade that is uncollateralised by taking into account a banking organization’s own cost of funding collateral on a hedge where collateral is required to be posted. The FVA is seen by some banks as a means of ensuring that the cost of posting collateral to support the entry into any hedge in the interdealer market is appropriately accounted for (specifically where there is no collateral posted on the trade that is being hedged). The way in which banks manage the economics of CVA, DVA and FVA risk and the extent to which such methodologies can also be assimilated and appropriately calibrated within fair value accounting continues to attract industry and academic attention.

**Calculating the CVA charge:** Basel III specifies that the CVA may be calculated by using one of the following two methods: (i) the advanced approach; or (ii) the standardised approach. To the extent that banks have regulatory approval to use the Internal Model Method (“IMM”) for calculating counterparty credit risk capital and have specific interest rate risk value at risk model approval for bonds, then the advanced approach must be used. All other banks are required to use the standardised approach, which is based on the external credit rating of the counterparty.

**Hedging CVA Risk:** Banks are permitted under both the advanced and standardised approaches to reduce their CVA exposures by entering into certain defined credit default swaps (“CDS”). Specifically, banks may enter into single name CDS, single name contingent CDS, other equivalent hedging instruments which reference the counterparty directly and index CDS. Tranched or nth to default CDS are not, however, eligible CVA hedges. Other types of counterparty risk hedges must not be reflected within the CVA calculation and must be treated as any other instrument in the bank’s inventory for regulatory capital purposes. Although CCPs are considered to pose negligible credit risk and transactions with CCPs are excluded from the CVA capital charge, in practice, however, many banks

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currently view and seek to quantify their exposure to the default fund of a CCP as representing a complex CVA with regards to the CCP’s clearing members.

**Divergences in Meaning of CVA under Accounting and Regulatory Approaches:** Industry participants report a dissonance between the meaning of CVA under accounting and regulatory approaches which serves to increase uncertainty and the likelihood of losses as a result of miscalculations (e.g., by encouraging banks to take more risk by unusual hedging strategies, which may work from a regulatory perspective but not an accounting perspective, or vice-versa). One of the principal areas of divergence between accounting and regulatory approaches to CVA risk arises in respect of the treatment of own credit-related adjustments. Basel III no longer permits the offsetting of CVA with DVA although this prohibition is not mirrored in relevant accounting standards. The prohibition was effected by the amendment of paragraph 75 of the original Basel III text to require banks to “derecognize all accounting valuation adjustments arising from the bank’s own credit risk. The offsetting between valuation adjustments arising from the bank’s own credit risk and those arising from its counterparties’ credit risk is not allowed.” The adoption of the Basel III standards in the EU reflects the revised Basel III position.

**Divergent Approaches to US and EU CVA Adoption**

The CVA charge has been adopted differently in the US and EU, which compounds the uncertainty which exists between accounting and regulatory understandings of CVA.

**US CVA Adoption:** In July 2013, the Board of Governors of the Federal Reserve System and other bank regulatory agencies approved final rules (“Final US Rules”) that codify the US Federal regulatory agencies’ regulatory capital rules into a single, comprehensive regulatory framework, adopting Basel III as well as relevant provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The Final US Rules adopt the CVA in a way which is broadly consistent with Basel III.

**EU CVA Adoption:** The EU has adopted the Basel III standards through two legislative acts, the Capital Requirements Regulation (“CRR”) and Capital Requirements Directive (“CRD”) (together, “CRD IV”), published in the Official Journal of the European Union on 27 June, 2013. The CVA is defined in Article 381 CRR as: “an adjustment to the mid-market valuation of the portfolio of transactions with a counterparty [which] reflects the current market value of the credit risk of the counterparty to the institution, but does not reflect the current market value of the credit risk of the institution to the counterparty.”

Consistent with Basel III, institutions are required to calculate a capital requirement for CVA risk for all OTC derivative instruments in respect of all their business activities, other than credit derivatives recognised to reduce risk weighted exposure amounts for credit risk mitigation purposes. CRD IV contains additional provisions which give national regulators discretion in respect of the CVA charge to: (i) require an institution’s CVA risk exposures arising from material securities financing transactions to be included within the capital calculation; and/or (ii) require intragroup transactions to be included in capital requirements for CVA risk in the event that the relevant EU Member

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4 See for example: IFRS 13 - *Fair Value Measurement*.


6 Article 33, Article 273(6) CRR.
State undertakes bank structural separation measures. Various requirements relating to calculation of the CVA are to be “fleshed out” by the European Banking Authority (“EBA”) in the form of regulatory technical standards (“RTS”). Permitted hedges in Article 386 CRR broadly mirror the Basel III standards discussed above.

**The CVA Exemption in CRD IV:** The EU has diverged from Basel III (and the US adoption of Basel III) by adopting the CVA charge in a form which exempts transactions from the capital calculation for CVA risk where such transactions are between EU-based banks and a: (i) non-financial corporate; (ii) sovereign; or (iii), for a limited period, pension funds (“CVA-Exempted Entities”). Subject to meeting certain requirements, non-financial corporates are exempted under the European Market Infrastructure Regulation (“EMIR”) from the obligation to centrally clear derivative transactions which effectively allows such entities to enter into OTC derivatives trades without the cost of posting collateral. Trades with such non-financial corporates are exempted from the CVA charge to ensure that those entities are treated consistently with the approach under EMIR and that the benefits in terms of avoiding collateral costs is not undermined by the cost of the CVA charge. Further, transactions with pension funds are excluded for a limited period to encourage usage of private pension funds, and to ensure that existing funding shortfalls in the pensions sector are not further exacerbated. Transactions with sovereigns are excluded so as not to cause further disruption to an already volatile sovereign debt market.

Currently, there has been no indication at the EU level that the CVA exemption is to be significantly amended. The European Commission intends to conduct its first review of the calibration of the CVA at a general level by 1 January 2015, in light of international regulatory developments, although this review is likely to impact more on the way the CVA charge is calculated rather than to limit the scope of the exemption.

The EU CVA exemption has been criticised for a number of reasons:

- **Departure from Internationally Agreed Standards:** Basel III does not include a similar exemption to the EU for certain defined entities and the adoption of Basel III globally is largely consistent with this approach. Divergent approaches in adoption of measures to address counterparty credit risk are inconsistent with Basel Committee aims for a globally harmonised approach.

- **Unlevel Playing Field:** A key concern for non-EU banks is that banks in the EU are at a competitive advantage compared to non-EU entities which face a CVA requirement. For example, an Asian corporate, a CVA-Exempted Entity, may find it cheaper to hedge its interest rate risk with an EU dealer, than with a US dealer.

- **Potential for “Gaming” the CVA:** Concern exists that banks in the EU are able to evade the CVA charge by structuring a trade so that, for a fee, a CVA-exempt entity stands in the middle of an OTC derivative trade between the bank and a non-exempt bank. Such a concern would, however, be over-stated given that the volume of clearable

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7 Some EU Member States, including France and Germany, have passed legislation implementing legal separation measures for retail and investment banking operations within banking organizations, and similar proposals are being considered in the UK and other EU Member States.

8 The EBA has, to date, published draft RTS relating to the CVA in respect of: (i) determination of a “proxy” spread for the determination of capital requirements; and (ii) elements of the calculation of own funds requirements for calculation of CVA risk.

9 When such transactions do not exceed relevant thresholds specified in EMIR.

10 Regulation No 648/2012.

11 Transactions with pension funds are excluded from the own funds requirements for CVA risk until the “transitional provisions” in Article 89(1) EMIR cease to apply.

12 Art 382(5) CRR.
trades that a CVA-Exempted Entity could take on would be restricted, and potential returns therefore limited, by the clearing threshold under EMIR in relation to which both sides of the trades would be counted.

**CVA Exemption: Possible Capital “Add on”**: In light of various concerns relating to the CVA exemption, some EU Member States are reportedly considering imposing a capital “add on” in respect of under-capitalised risks to effectively circumvent the CVA exemption. This could, in theory, be achieved by using “Pillar 2” powers contained in the CRD which allow national supervisors to impose a wide range of measures topping up Pillar 1 requirements in order to ensure sound management and coverage of risks following a supervisory review and evaluation. The measures may be extended to types of institutions that, belonging to the same region or sector, face and/or pose similar risks. However, it is arguable that such a course of action could be difficult to reconcile with the European Commission’s clearly enunciated position that super-equivalence or “gold plating” of capital requirements under CRD IV is not permitted. EU Member States are not, for example, permitted to increase common equity Tier 1 capital requirements at a national level owing to concerns that this would foster regulatory arbitrage with risky activities migrating to EU Member States with the least stringent capital rules. A Pillar 2 capital “add-on” in this case has the potential to add to these concerns.

**Conclusion**

Addressing counterparty credit risk through the CVA has been elevated to the forefront of accounting and regulatory agendas following mark-to-market volatility and defaults during the global financial crisis. Differences in US and EU adoption of the CVA have created significant potential for arbitrage between US and EU banks in turn directly impacting profitability of existing OTC business lines within banks globally. Further, accounting and regulatory disparities in the meaning of CVA and its relationship to DVA currently compounds banks’ difficulty in understanding the scope of their obligations in the CVA context. Unclear at present is the extent to which a further layer of arbitrage will emerge within the EU, further complicating the Basel puzzle, if certain EU Member States interpret CRD IV to allow the imposition of a capital “add on” for CVA exempted trades under Pillar 2 rules.

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11 Several EU Member States have indicated that they intend to use Pillar 2 powers to address a range of risks not limited to the CVA exemption.