

Credit Valuation Adjustment in Europe – Implications for Pension Plans



Introduction

The Capital Requirements Directive IV ('CRD IV') is the mechanism through which the European Union will implement the proposed Basel III standards on capital and liquidity for the international banking system operating within its jurisdiction. The Basel III rules seek to raise both the quality and quantity of the regulatory capital base and incentivize clearing through higher capital requirements on un-cleared positions.

Although the capital requirements do not apply directly to pension plans and investments managers, the increased cost imposed on investment banks for their derivatives business is likely to be, at least in part, passed on to end users through higher transaction costs.

Credit Valuation Adjustment

Under the current Basel II standards, banks are subject to a capital charge primarily to cover the losses arising from the actual default of a counterparty of an over-the-counter ('OTC') derivative contract.

Under the proposed Basel III framework, the capital charge will be enhanced by a new charge, called the Credit Valuation Adjustment ('CVA') Risk Capital Charge. This is a capital charge, whereby the bank is required to hold additional capital when entering an OTC trade. The charge is designed to cover losses arising from the fact that as the counterparty's financial position worsens, the market value of its derivatives obligation declines¹, even though there might not necessarily be an actual default. The charge incentivizes hedging, a failure of the Basel II standards observed during the 2008 financial crisis as well as encouraging market participants to use central clearing.

As currently drafted, the CVA risk capital charge when using OTC derivatives will be greater for trades with any of the following characteristics:

1. **Long dated derivatives:** CVA considers the entire life of the derivatives exposure.
2. **Directional risk profiles:** CVA is based on the net exposure to a given counterparty.

In Brief

- ▶ In Europe, the Capital Requirements Directive IV (CRD IV) seeks to implement the Basel III regulation to create an efficient, safe derivatives market.
- ▶ The effect on investment banks will be to increase the capital they have to keep as a provision for the deterioration of the credit worthiness of trading counterparties.
- ▶ The charge that is levied, the Credit Value Adjustment (CVA) Risk Capital Charge, may be largely passed on to end users via higher transaction costs
- ▶ In general these costs will probably be higher for bilateral, long-dated, uncollateralized derivatives.
- ▶ It is not yet clear how much of this cost will be passed on to the clients of an investment bank, and therefore the implicit cost of this extra capital for a particular trade is still uncertain at this time.
- ▶ Trades with a pension plan counterparty are likely to be given an exemption from the CVA Risk Capital Charge similar to the exemption from central clearing which is for three to six years.

3. **Uncollateralized exposures:** An input to the CVA calculation is the size of the expected uncollateralized mark to market values. Posting daily collateral reduces the charge substantially.
4. **Low rated counterparties:** Higher probability of default results in a higher CVA charge.
5. **Counterparties with no liquid CDS market:** A capital charge reduction is allowed where counterparty exposure is reduced through use of a CDS contract.

Given this list of characteristics, it is clear that the typical trades that are transacted by pension plan investors may attract particularly large CVA risk capital charges.

1. At a high and simplified level, the CVA Risk Capital Charge is calculated by considering the change in value of a derivative in a two standard deviation move in credit spreads.

Table 1: CVA - Summary

What is changing?	Comments	How it may impact you
An additional risk based capital charge ('CVA') for non-centrally cleared/bilateral trades - capital charge is intended to cover risk associated with the deterioration in the creditworthiness of a counterparty	<ul style="list-style-type: none"> ▶ An additional capital charge will make bilateral derivative trading more capital intensive for banks. ▶ The impact on capital requirements will be greater for exposures that are: uncollateralized, with low rated counterparties, long maturity and directional. ▶ Bilateral derivative trades will require counterparties to post variation margin and may require counterparties to post initial margin. ▶ Pension plans may have an exemption from CRD IV charges. 	<ul style="list-style-type: none"> ▶ Some or all of this cost incurred by banks is likely to be passed on to pension plans. ▶ Potentially significant impact for pension plans with long-dated interest rate and inflation exposures. ▶ Bilateral derivative trades will be more capital intensive than they are today. ▶ Reduce the costs incurred by banks and passed on to pension plans.

Central Clearing

Trades that are cleared through a central counterparty ('CCP') will be collateralized daily, reducing any potential CVA charge².

In a centrally cleared model, counterparty risk is reduced by each end investor facing a clearing broker, that clearing broker then facing the CCP. The exposure that the clearing broker has to the client is identical to the exposure it has to the CCP, effectively 'passing through' the client's counterparty risk to the CCP.

Under current proposals, this structure may be treated as a bilateral trade between the end investor and clearing broker, and a centrally cleared trade between the clearing broker and CCP. The 'end investor to clearing broker' leg would attract a higher risk weighted capital charge and the 'clearing broker to CCP' leg would attract an additional lower risk weighted capital charge. The charge for entering into a centrally cleared trade may therefore be higher than a bilateral trade alone, the opposite of the desired effect.

BlackRock is actively engaging with policy makers for this to be recognized and negated at least partly, such that the benefits of central clearing to clients are fully recognized.

Costs

The CVA charge is levied directly in relation to an investment bank's balance sheet and it is expected that at least some (if not all) of this cost will be passed on to end investors. Due to the fact that the charge is levied on a net basis, it is difficult to estimate the impact of an additional trade without prior knowledge of the risks already on the balance sheet.

When a trade is added to the balance sheet of the bank, a capital provision will be made, effectively 'locking up' this amount of capital. The charge that could be passed onto the pension plan (in the form of increased transaction cost) will be related to the

'opportunity cost' of that inactive capital; the size of the provision and the bank's target return on capital.

The details of how investment banks will pass the CVA charge on to end investors is uncertain, with many reluctant to specify their charging policy ahead of time.

Timeline

The planned implementation date for CRD IV is January 1, 2013, however, some of the requirements are still being drafted, meaning a detailed analysis of the resulting costs to banks is difficult at this point.

Pension plans are likely to also be given an exemption to the new capital charges. At the time of this writing (July 2012) there are no details about the possible exemption, but it is expected to be in line with the exemption from central clearing. For central clearing, pension plans have been granted a grace period of three years after the implementation of mandated clearing. This three year exemption can potentially be extended a further three years meaning that qualifying pension plans may not be required to centrally clear until 2018.

As the charge is levied on the bank for the life of the trade it is not clear how this exemption may be treated by banks. Either the trades executed between now and (for example) 2018 may be exempted from CVA charging for the life of the trade, or they may be exempted until 2018. If the latter, the long maturity of many of the derivatives traded by pension plans means that they will attract the charge for a large proportion of the life of the trade, therefore attracting similar additional transaction costs as if the exemption did not exist.

Conclusions

By implementing Basel III, CRD IV seeks to create a safer derivatives market for all participants by reducing systemic risk.

2. See the accompanying ViewPoint "Central Clearing" in Europe - An Investor's Perspective", July 2012.

Investment banks will be required to hold capital as a provision against losses caused when their trading counterparty's credit worthiness deteriorates. The opportunity costs incurred by the banks due to this provisioning may be passed on to the end users of derivatives.

Both the absolute level of the cost to banks as well as the extent to which these costs are passed on to end users is currently unclear, but the costs will be higher for the long dated and directional trades typically transacted by pension plans.

The details of the directive are still being discussed, but a three to six year exemption for pension plans is likely.

BlackRock is currently working with European regulators and market participants to both fully understand the implications and influence the outcomes for pension plan investors.

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