Counterparty Credit Risk

The counterparty credit risk (CCR) capital framework seeks to ensure that institutions hold sufficient capital against losses associated with the risk of default or variation in the credit quality of counterparties.

Basel III makes a number of significant changes to the CCR capital regime, including:

- The introduction of a new capital charge designed to capture potential mark-to-market losses associated with the deterioration in the creditworthiness of a counterparty in relation to OTC derivatives (capital for credit value adjustment ('CVA') risk).

- A number of changes to the capitalization of CCR under the internal model method including the introduction of a stressed effective expected positive exposure (stressed EEPE) capital charge.

- Draft proposals for revising the capitalization of exposures to central counterparties. These proposals are likely to be subject to change as they currently may dis-incentivise acting as a clearing member. Currently all clearing charges are in addition to the pre-existing Basel 3 OTC charges. Given these proposals are subject to change they have been included in an annex rather than the main body of the document.

1. Why it Matters

1.1 It is essential that regulatory capital charges are aligned proportionately to the underlying risks, rewards and commercial rationale for counterparty credit risk to support incentives for effective risk management and to safeguard the potential for causing market distortions and/or other undesirable consequences.

2. Summary of the Associations' Position

2.1 We support the need to strengthen the CCR capital framework and welcome the BCBS's initiative in this area. Any changes to the CCR capital framework should ensure that the level of capital requirements are conservative but equitable and aligned to the underlying risks faced by institutions given their business models.

2.2 The Associations have a number of concerns regarding the Basel III approach to capitalising CVA risk. We are aware that the treatment of CVA is being discussed as part of the wider trading book review being undertaken through the Committee’s working groups, and we are seeking clarification as to the process for implementing any changes and for taking into account the cumulative impact of the trading book review. Moreover there are areas of the CVA risk capital charge that the associations believe should be amended as part of the current calibration exercise. These relate to the use of stressed regulatory exposure profiles in the charge, the
absence of recognition of market risk hedges, and the stand-alone nature of the CVA charge. We also have concerns regarding other areas of the counterparty credit risk framework.

2.3 We consider that it vital that the development of a capital regime around exposures to central counterparties is part of an overall consistent and coherent framework around central clearing. The associations also encourage the BCBS to ensure that any changes to the capitalisation of exposures to central counterparties is appropriately calibrated through suitably designed impact studies. The approach to capitalising these types of exposure should be commensurate with the underlying risk and should be consistent with the FSB stated aim of encouraging a move to central clearing rather than the OTC Market. In particular we have serious concerns regarding the proposals for the capitalisation of default fund exposures.

3. **What is CVA Risk?**

3.1 CVA risk is the risk of loss to an institution from a deterioration in the creditworthiness of a counterparty. CVA is a measure of expected loss from counterparty default and thus provides against losses from future counterparty default but must be accounted for as an adjustment to OTC derivative valuation.

3.2 There are many approaches that institutions adopt for inputs to the CVA calculation but broadly these can be categorised into internal ratings based and market implied approaches. The former uses a probability of default (PD) implied from an internal assessment of the counterparty rating and the latter uses a PD implied from market risk factors (typically some form of market credit spread).

4. **Regulatory Context**

4.1 The design of the Basel II framework for capitalising CCR covers two risks: (1) the risk of loss from a counterparty default and (2) the risk of loss from potential changes in amount of expected loss provisions as a result of credit rating downgrades.

4.2 Basel II broadly requires that for credit risk in general expected loss is covered by provisions and unexpected loss is covered by capital. The capital charge is designed to cover default risk within one year. The IRB framework in particular is calibrated to a 99.9% 1 year standard, with the maturity adjustment covering changes in provisions.

4.3 This framework was designed primarily for the banking book, i.e. for historic cost accounted items. In particular this means that the pertinent return distribution is that of realised losses and banking book provision variation.
a Counterparty credit risk in Basel II

4.4 The Basel II credit risk framework dealt with counterparty credit risk for advanced institutions via the use of an alpha factor. This included counterparty credit risk into the default-and-credit-migration capital framework, and used alpha (set equal to 1.4) to adjust for the future variation of exposure.

b The varieties of CVA

4.5 There are two main approaches to CVA calculation in banks. In the first it is treated as akin to an expected loss provision in the banking book sense as outlined above, and calculated using similar technology (e.g. internal ratings). In the second, a market consistent CVA is calculated from market credit spreads (e.g. CDS spreads).

4.6 For institutions that calculate market consistent CVA, the risk of loss from changes in the CVA was not adequately capitalised under Basel II.

4.7 The Basel III CCR capital framework looks to address this by capitalising this risk through a market based CVA risk capital charge, albeit introducing a number of fundamental issues some of which are highlighted in this briefing note.

5. Overview of the CVA Risk Capital Charge Approaches

5.1 The Basel III provisions set out two approaches for calculating the CVA risk capital charge: an advanced methodology is available to those institutions that have the prerequisite internal risk model approvals, otherwise the capital requirement must be calculated according to prescribed standardised rules.

a Advanced CVA Risk Capital Charge

5.2 The advanced CVA risk capital charge may be used by institutions that have regulatory approval to use the internal model method for counterparty credit risk capital and specific risk VaR model approval for market risk capital purposes (since the advanced approach makes use of these risk models).

5.3 Under the advanced approach, the CVA risk is represented as credit sensitivities to a counterparty and subject to a stand alone market risk capital charge based on VaR, stressed VaR and a multiplier. The credit sensitivities are determined according to prescribed formulae including the use of regulatory expected exposure and stressed expected exposure from the institution’s approved IMM model.

5.4 Eligible credit hedges may be used to reduce the CVA sensitivity, and these can be removed from the market risk capital calculation. Eligible hedges
are limited to single name and contingent single name credit default swaps (CDS) (or equivalent hedging instruments directly referencing the counterparty) and index CDS hedges. Only 50% of index CDS hedges may be recognised unless basis risk is adequately accounted for in VaR.

b **Standardised CVA Risk Capital Charge**

5.5 The standardised CVA risk capital charge is determined according to a prescribed formula and is based on the exposure at default (EAD) of CCR exposures and the effective maturity of the transactions. Weights are applied in the calculation and are based on the external credit rating of the counterparty.

5.6 Eligible hedges (as for the advanced approach) may also be used to reduce exposure as in the standardised approach.

5.7 For a single, unhedged CCR exposure, the standardised CVA risk capital charge is given by $2.33 \times \text{weight} \times \text{discounted EAD} \times \text{effective maturity}$.

6. **Issues and commentary**

6.1 Below is a link to the Table of Issues that AFME has sent to BCBS on behalf of its members.

   [Table of Issues](#)

6.2 Our main concerns can be summarised as follows.

a **Design of the Basel III CCR Capital Framework**

**Capitalisation of Potential Changes to Incurred CVA**

6.3 As noted under the earlier section on regulatory context, the basic structure of the Basel II credit risk capital requirements is to (1) capture the risk of loss from counterparty default and (2) capture the risk of loss from changes to related provisions (i.e. the expected loss provisions – or incurred CVA).

6.4 Under Basel II, (1) is captured through (a) a capital deduction against any excess of regulatory expected losses over incurred CVA and (b) capital requirements against unexpected losses in excess of the expected loss. Expected loss provisions are assumed to be measured using a PD based on the credit rating of the counterparty.

6.5 Although there is a misconception that Basel II did not capture (2), in actual fact this was capitalized through the implementation of a maturity adjustment applied to the unexpected loss capital requirement. The key issue with Basel II was that the maturity adjustment could not adequately capture the risks of potential changes to incurred CVA where this was measured on a market consistent basis.

6.6 The Basel III regime attempts to remedy the issue by treating potential changes to CVA as a traded risk via the CVA risk capital charge. The CVA risk capital charge, in capitalizing the risks in (2) above ought to have
replaced the maturity adjustment rather than have been an additional charge to reflect the capital attributable to unexpected loss over the 1 year capital horizon. Moreover, Basel III still incorporates expected loss determined as a banking style measure contrary to the base assumption that it is a traded risk amount.

6.7 It is the associations’ view that the structure of the CCR capital requirement should be linked to the risk associated with the measure of incurred CVA. That is, incurred CVA measured against market risk factors should be based on a (properly implemented) Basel III approach; other approaches to measuring incurred CVA (where P&L volatility is not linked to moves in market risk factor) would be better capitalized under a Basel II approach.

6.8 In the associations’ view, the Basel III approach to capitalizing CCR risk should (1) capture default risk through comparing the capital requirements of total potential losses from default against incurred CVA and (2) capture potential losses from changes to incurred CVA through a properly designed and calibrated CVA risk capital charge. Any maturity adjustment should be removed to avoid double counting of the migration risk capital charge.

6.9 We recognize that, although relatively simple to implement, that changes of the nature described in this section may need to wait until the fundamental review, irrespective of their appropriateness. In this case, AFME encourages the Commission and BCBS to consider alternative, simpler approaches to providing relief for the inequalities of the current Basel III structure of CCR capital.

b CVA

Summary of CVA Issues

6.10 The associations set out below a number of fundamental and material issues in relation to the current proposals for the new CVA risk capital charge, covering many aspects of the design of the capital charge:

i. The CVA risk capital charge is inappropriate for CCR exposures where the CVA provision is not calculated using a market consistent approach.

ii. In conjunction with the issue above, the lack of available credit hedges for SMEs and medium sized corporates results in a significant increase in capital against exposures to such firms that may result in unintended and undesirable consequences. The ability to model and gain recognition of hedges which may introduce basis risk is key.

iii. The EU Short Selling Regulation may prohibit or discourage the use of EU sovereign CDS as a hedge against CCR exposure to EU sovereigns which may result in higher costs of trades with these counterparts. (Note that a CVA must be calculated against all counterparties, including sovereigns, and that sovereigns have historically been reluctant to post collateral, resulting in large CVA exposures.)
iv. Unlike a fixed exposure, the potential change to CVA provisions is affected by changes to a number of market risk factors but the CVA capital charge only incorporates exposure to credit spreads thus not capturing all appropriate risks.

v. The narrowness of what is considered eligible hedges for CVA capital purposes means that institutions will attract higher capital for reducing CVA risk as ineligible hedges are subject to market risk capital as naked exposures. In particular any hedges to the market risk sensitivities of the CVA will increase rather than reduce capital.

vi. Even following the June 2011 BCBS update, the standardised CVA risk capital charge can lead to highly punitive capital requirements with the reduction in CCC rating weight from 18% to 10% being offset by the increase in the effective maturity input through eliminating the 5-year cap. Indeed, the capital required can still exceed any maximum loss associated with the exposure.

vii. Unlike Basel II, Basel III does not adequately recognise the role of incurred CVA as providing an amount of capital already set aside by institutions to cover potential losses from counterparty default.

CVA Risk Capital is Independent of Institutions’ Measure of Incurred CVA

6.11 As described above, the CVA risk capital charge capitalizes CVA risks according to a market consistent approach. In trying to better align capital adequacy to underlying risks, there is a basic assumption that all banks and all CCR exposures are risk managed and accounted for under a market implied basis (and hence profit and loss volatility associated with CVA is linked to changes in market risk factors).

6.12 This is a particular concern to firms that do not trade their CVA risk owing to their business model or because for many corporate counterparties (particularly in the EU), there is no liquid market for such credit protection. In this case, a punitive CVA risk capital charge will still apply even though the underlying profit and loss risk is associated with changes in internal rating assessments not market risk factors.

6.13 In line with the associations’ view on the structure of CCR capital requirements, our members believe that the capitalization of potential losses from changes to incurred CVA should be aligned to the approach used to measure incurred CVA and hence to the P&L risk.

Unintended Consequences for SMEs

6.14 Under the Basel III approach to capitalizing CVA risk, the only effective approach to managing the capital requirements is through obtaining eligible collateral or purchase of a single name CDS directly referencing the counterparty. Index CDS hedges may also be used but are less effective at managing the risk. [Note: They become more effective if 100% offset is
permitted where the basis risk in the proxy model is considered acceptable.]

6.15 For mid-size corporates and SMEs, the credit market tends to be illiquid and the possibility of using hedges that are eligible for CVA risk capital is small. Consequently the cost of hedging market and credit risks from the normal course of business to mid-size corporates and SMEs becomes more expensive either through (1) a requirement to post greater collateral or (2) institutions passing on additional capital costs.

6.16 Alternatively such companies may choose to retain some or all of these risks leading to an increase in risks across the economy since institutions are better able to manage these risks.

6.17 The consequence of the CVA risk capital charge for mid-sized corporates and SMEs may be therefore be in direct contradiction to the relief offered by the exemption under European Market Infrastructure Regulation (EMIR) from the requirement to centrally clear standard derivative transactions.

6.18 The associations suggest that an exemption from the CVA risk capital charge along similar lines to the scope of the EMIR exemption would help alleviate unintended and undesirable consequences of the new provisions. An alternative solution might be to apply the current expected loss deduction to CCR exposures to mid-sized corporates and SMEs and exclude such exposures from the CVA risk capital charge. This is consistent with suggestions made above on previous points, ensuring capitalization of CVA risks and alleviating the impact to mid-sized corporates and SMEs.

Sovereign CDS and the Short Selling Regulation

6.19 The Short Selling Regulation (SSR) that is currently nearing finalisation on may result either in an outright prohibition of naked CDS referencing EU sovereigns or contain provisions that discourage such trading. Since EU sovereigns are currently unwilling to post collateral to cover their exposures with institutions and an EU sovereign CDS hedge against CVA exposure may be deemed to be a naked position, it leaves institutions with little recourse for managing the CVA risk capital charge.

6.20 Consequently this may result in increased costs to sovereigns in order to hedge their market and credit risks and/or a build up of system wide risk in the same way as described in the previous point.

6.21 The associations encourage the Commission to ensure that the SSR fairly reflects the risk reducing nature of EU sovereign CDS positions used to risk manage CVA exposure.

Limited Modelling of CVA Sensitivities

6.22 Although much progress has been made since the original December 2009 BCBS proposals for capitalising CVA risks, the associations would like to re-
iterate its position that institutions should be able to capitalise CVA risk according to a full modelling of all material CVA sensitivities. The advanced approach to capitalising CVA risks under Basel III only incorporates credit sensitivities and ignores other market risk sensitivities, such as interest rate risks, and only recognises a limited type of effective hedge.

6.23 We understand that an integrated approach to capitalising CVA risks will form part of the forthcoming BCBS fundamental review of the trading book.

Penalization of Effective CVA Hedges

6.24 CCR exposures may vary according to changes in a range of market risk factors such as interest rates and credit spreads. Accordingly, institutions may use a range of hedging instruments to risk manage these exposures not limited to credit hedges. In addition to index CDS hedges, institutions may make use of proxy CDS hedges to risk manage CCR exposures, particularly where there the credit market is not liquid or simply does not exist.

6.25 The narrowness of the scope of eligible CVA hedges not only results in higher CVA risk capital requirements than is appropriate but also may result in increased market risk capital requirements.

6.26 Ineligible CVA hedges would continue to attract market risk capital charges through the VaR and stressed VaR model whilst the CVA exposure itself is not treated as a market risk exposure but as a separate charge with the result that the hedges are effectively capitalized as naked market risk exposures.

6.27 A consequence of this approach is that institutions who use effective hedges for exposure to reduce exposure volatility but that are not considered eligible for CVA risk capital are subject to higher capital requirements compared to institutions who choose not to hedge their CVA risk. This may result in institutions choosing to carry higher risk in order to avoid penal capital requirements.

6.28 The associations hope that the forthcoming BCBS fundamental review of the trading book will incorporate a full review of the eligibility criteria of CVA hedges.

Calibration of Standardised CVA Risk Capital

6.29 The associations are concerned that the current calibration of weights applied to the calculation of the standardised CVA risk capital charge results in capital requirements that are excessive in comparison to the underlying risks. Although the BCBS reduced the weight of CCC rating band from 18% to 10% in June 2011, this was offset by the elimination of the 5-year cap that had been applied to the effective maturity input.

6.30 It is also noted that there remains a significant increase in weight between the B-rating band at 3% and the CCC-rating band at 10% albeit at a reduced
level than the December 2010 BCBS provisions; this cliff effect is highly undesirable as it can result in potentially significant increases in capital requirements as a result of an external rating downgrade and hence introduces inappropriate instability to the capital requirements. Indeed, this may have a particularly detrimental impact to the cost of capital for exposures to SMEs. The associations propose that this discontinuity still merits further review.

6.31 The associations suggest also that for institutions that have approval to use the internal ratings based (IRB) approach but do not have the relevant VaR approval, an alternative methodology be made available for determining the weights used to calculate the standardised CVA risk capital charge that makes use of the regulatory approved probability of default and loss given default information.

Capital Treatment of Incurred CVA

6.32 Incurred CVA is simply the reference to CVA or expected loss provisions which, as discussed in earlier sections, is an integral part of the design of the capitalization of CCR exposures.

6.33 Incurred CVA is a reduction to an institution's net assets against expected losses (in the appropriate setting) arising from counterparty default and therefore represents a direct reduction to capital resources against this risk and is recognized as such in the Basel II CCR capital framework. We refer to the joint association’s comments on the EU commission’s proposals on incurred CVA for further detail.

c Exposures to Central Counterparties (refer to Annex 1 also)

6.34 This is an area that remains under discussion with the RMMG and the views expressed on this area in more detail in Annex 1 are therefore subject to revision in the light of any changes made/clarifications obtained. For the time being, however, our main concerns in this area are focussed around the design and calibration of the capital framework, the proposed approach to the capitalisation of default fund contributions, interactions with the large exposures regime and the capitalisation of cleared derivatives.

d General Issues

Maximum loss cap

6.35 One of the principles adopted in Basel 2.5 / CRD 3 in respect of the market risk capital of securitisation and credit correlation trades is that the capital requirement for each net position may be capped to the maximum default related loss.

6.36 In order to ensure that counterparty credit risk capital requirements cannot exceed the maximum loss on the default of a counterparty, AFME proposes that a similar maximum loss cap be implemented. This cap would apply to
the total counterparty credit risk capital requirement for each netting set such that the total capital requirement does not exceed the losses incurred in the event of default or credit migration.

6.37 We would therefore suggest that, at a minimum, where the standardised CVA risk capital charge applied on a stand-alone basis at a netting set level results in a capital requirement higher than the maximum loss associated with that netting set, it should be removed from the normal counterparty credit risk capital requirement approaches and instead the counterparty credit risk capital requirement set to the maximum loss.

7. **Transitional Regime**

7.1 Unlike the phasing arrangements applying to some of the other Basel III standards, it is the aim of the BCBS that the counterparty credit risk reforms become effective from 1 January 2013.
Annex 1

Exposures to Central Counterparties [Note: This remains under discussion with the RMMG and the views below are therefore subject to revision in the light of any changes made/clarifications obtained.]

Design and Calibration of Capital Framework

1.1. The associations believe that it is crucial that the development of the capital treatment of exposures to central counterparties is fully integrated with parallel work on central clearing by the Committee on Payment and Settlement Systems (CPSS) and the Technical Committee on the International Organization of Securities Commission (IOSCO), national and supra-national authorities and in full consultation with industry. This will help establish a consistent and coherent framework around central clearing of derivatives, avoid regulatory arbitrage and mitigate systemic risk and adverse spill-over across countries.

1.2. The associations encourage also the BCBS to ensure that the level of capital required to be held against exposures to central counterparties is appropriate through a suitably designed impact study exercise. Such an exercise should be based on expected future clearing volumes which would be significantly higher post EMIR and DFA. Any impact study based on current volume of cleared OTC trades is misleading as the market is fundamentally shifting. Furthermore, it is important that the level of capitalization maintains incentives to move OTC derivative contracts to central counterparties. Such incentives need to be realized by both end users and also clearing members to ensure adequate migration to central clearing.

1.3. It may be appropriate to implement the CCP rules with a suitable observation period. Precedents for this include the liquidity and leverage rules. The rationale is that we are fundamentally changing both the capital rules and the underlying market dynamics and an observation period allowing recalibration (if necessary) would help avoid unintended real economy consequences.

1.4. It should be noted that these requirements apply equally to cleared OTC derivatives, cleared Repo type trades and also to existing exchange traded derivatives.

Capitalization of Default Fund Contributions

1.5. The BCBS proposals for capitalizing default fund contribution exposures to central counterparties is based on a hypothetical capital approach that compares a measure of the central counterparty's CCR capital against capital resources that comprise the central counterparty's own financial resources and the clearing members' prepaid default fund contributions.
1.6. The associations are concerned that the proposed hypothetical capital approach results in inappropriate and inequitable capital requirements in that (1) the measure of the central counterparty's CCR capital is insensitive to the underlying risks under the suggested current exposure method and (2) doesn't adequately account for the waterfall of losses particular to each central counterparty. The associations believe that an approach based on the existing default fund methodologies, enhanced by the work of IOSCO/CPSS will produce risk sensitive and adequate levels of capitalization. The associations are unaware of members having made losses on default fund contributions based on such methodologies.

1.7. Furthermore, the charge for default fund contributions at 1250% risk weight is significantly higher than that of an investment in the equity of the CCP at 400% (under the simple AIRB approach to unlisted equity). This generates a perverse incentive to minimise the default fund and instead equity capitalise.

1.8. As stated in our response to BCBS164, the default fund is not a first loss but a third loss position. The waterfall of losses is, defaulting member’s IA, defaulting member’s default fund contribution and only thereafter are losses socialised to other clearing members. When both Enron and Lehman failed losses did not even erode their own default fund contributions. As such, we believe that an equity risk weight as suggested above in 1.6 should be a cap on the risk weight of default fund contributions and consideration should be given to a more risk sensitive approach.

Interaction with the Large Exposure Regime

1.9. The associations seek clarification on the interaction of the proposals for capitalizing exposures to central counterparties and the existing capital treatment of large exposures.

1.10. The associations believe that institutions’ concentrated exposures to qualifying central counterparties should be permanently exempt from the large exposure limit. If such exposures were not exempt, this would undermine the strong incentives that are being developed to expand the use of central clearing, particularly for firms reporting OTC exposures on a CEM basis rather than an IMM basis. The mutualization of losses is considered to be a strong mitigant for the apparent concentration risk for CCPs.

Capitalization of Client Cleared Derivatives

1.11. The associations seek clarification on the capital treatment of derivative trades that are centrally cleared by clearing members on behalf of clients. The associations believe that the level of capital for such exposures should be commensurate with the underlying risks and consistent with the public policy direction of encouraging greater use of central counterparties. The consultation paper is silent on the clearing member’s treatment but implies a bilateral OTC treatment on the client facing leg.
1.12. The existing capital regime adopted under FSA capital adequacy is that capital requirements are based on any shortfall of margin posted by the client compared against the margin required by the central counterparty, effectively there is symmetry between the cleared and client legs. Recognising the change to the cleared leg the client leg should be on an equivalent basis albeit using the client risk weighting (i.e. without a CVA charge).

1.13. Another disincentive is that as trades are cleared they will be taken out of the ISDA master and put on the various CCP document suites. As such there is likely to be less netting available due to an inability to net across these document suites to the level of confidence required for regulatory reporting under CRD. This will increase EEPE, Stress EEPE and CVA.

**Capitalization of Cleared Derivatives**

1.14. The proposed treatment of cleared derivatives, e.g. IMM exposure with a 2% risk weight for qualifying central counterparties ignores protections available to cleared counterparties. For example it will take less than 10 days to close out trades on the event of a default and hence the EAD will not be calibrated appropriately. Furthermore, if there is a large portfolio (>5000 trades) the IMM close out period increases to 20 days. Given the general desire to increase clearing (Basel 3, EMIR, Dodd-Frank) this threshold is likely to be breached resulting in an increasingly inappropriate close out period being used. A more appropriate MPOR should be applied for example the close out period of the CCP or 3 days (whichever is higher).