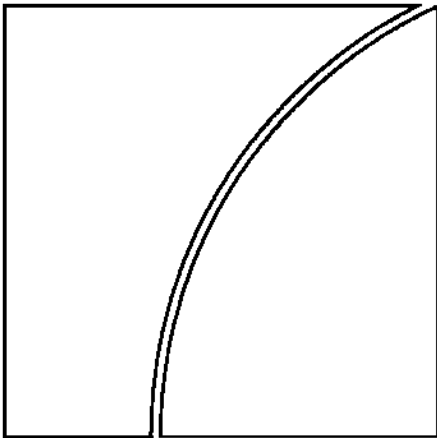


# Basel Committee on Banking Supervision



## Basel III counterparty credit risk and exposures to central counterparties - Frequently asked questions

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# Basel III counterparty credit risk and exposures to central counterparties - Frequently asked questions

The Basel Committee on Banking Supervision has received a number of interpretation questions related to the December 2010 publication of the Basel III regulatory frameworks for capital and liquidity as well as the July 2012 publication of the interim framework for determining capital requirements for bank exposures to central counterparties (CCPs). To help ensure consistent global implementation of those publications, the Committee has agreed to periodically review frequently asked questions and publish answers along with any technical elaboration of the rules text and interpretative guidance that may be necessary.

This document sets out the fourth set of frequently asked questions that relate to the counterparty credit risk sections of the Basel III rules text and includes a set of FAQs related to the interim framework for bank exposures to CCPs.<sup>1</sup> The questions and answers are grouped according to different relevant areas.

FAQs that have been added since the publication of the previous version of this document are shaded **yellow**.

## 1. Default counterparty credit risk charge

- 1.1 **With respect to identifying eligible hedges to the CVA risk capital charge, the Basel III provisions state that “tranching or nth-to-default CDSs are not eligible CVA hedges” (Basel III document, paragraph 99 - inserting paragraph 103 in Annex 4 of the Basel framework). Can the Basel Committee confirm that this does not refer to tranching CDS referencing a firm’s actual counterparty exposures and refers only to tranching index CDS hedges?**

**Also, can the Committee clarify that Risk Protection Agreements, credit linked notes (CLN), short bond positions as credit valuation adjustment (CVA) hedges, and First Loss on single or baskets of entities can be included as eligible hedges?**

All tranching or nth-to-default credit default swaps (CDS) are not eligible. In particular, credit linked notes and first loss are also not eligible. Single name short bond positions may be eligible hedges if the basis risk is captured. When further clarifications are needed, banks should consult with supervisors.

### 1a. Effective Expected Positive Exposure (EPE) with stressed parameters

- 1a.1 **To determine the counterparty credit risk capital charge as defined in the Basel III document, paragraph 99 - inserting paragraph 105 in Annex 4 of the Basel framework, banks must use as the default risk capital charge the greater of the portfolio-level capital charge (excluding the CVA charge as per**

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<sup>1</sup> The Basel III document is available at [www.bis.org/publ/bcbs189.pdf](http://www.bis.org/publ/bcbs189.pdf). The interim framework for bank exposures to CCPs is available at [www.bis.org/publ/bcbs227.pdf](http://www.bis.org/publ/bcbs227.pdf).

paragraph 96-104), based on Effective EPE using current market data, and the portfolio-level capital charge based on Effective EPE using a stress calibration. The stress calibration should be a single consistent stress calibration for the whole portfolio of counterparties. The greater of Effective EPE using current market data and the stress calibration should not be applied on a counterparty by counterparty basis, but on a total portfolio level. We seek clarity on:

- How often is Effective EPE using current market data to be compared with Effective EPE using a stress calibration? and
- How this requirement is to be applied to the use test in the context of credit risk management and CVA (eg can a multiplier to the Effective EPE be used between comparisons)?

The frequency of calculation should be discussed with your national supervisor.

The use test only applies to the Effective EPE calculated using current market data.

**1a.2 The Basel III standards (Basel III document, paragraph 98) introduce amendments to Annex 4, paragraph 61 of the Basel II framework,<sup>2</sup> indicating that when an Effective EPE model is calibrated using historic market data, the bank must employ current market data to compute current exposures and that alternatively, market implied data may be used to estimate parameters of the model.**

**We seek confirmation that banks that use market implied data do not need to employ current market data to compute current exposures for either normal or stressed EPE, but can instead rely respectively on market implied and stressed market implied calibrations.**

This will depend on the specifics of the modelling framework, but current exposure should be based on current market valuations. However, in any case, current exposure has to be based on current market data, be they directly observed or implied by other observable prices which also need to be as of the valuation date.

**1a.3 From the Basel III document, paragraph 99 - introducing paragraph 100 in Annex 4 of the Basel II framework, our understanding is that the periods involved in the calculation of stressed Effective EPE and the CVA charge, according to paragraph 100 (ii), are as follows:**

- A period of stress to the credit default spreads of a bank's counterparties. The length of this period is not defined (in the revision to paragraph 61 of Annex 4);
- A three-year period containing period (1). This three-year period is used for calibration when calculating stressed Effective EPE;
- The one-year period of most severe stress to credit spreads within period (2). This one-year period is used when calculating stressed VaR, as described in new paragraph 100 (ii) in Annex 4. In general, period (3) will be different from the one-year period used to calculate stressed VaR, as described in paragraph

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<sup>2</sup> The Basel II framework is available at [www.bis.org/publ/bcbs128.htm](http://www.bis.org/publ/bcbs128.htm).



**718 (Lxxvi) (i) in the Revisions to the Basel II Market Risk Framework. The difference is due to period (3) being a period of stress to credit spreads, whereas the Market Risk one-year period is a period of stress to the bank's portfolio and therefore to all types of market risk factor that affect the portfolio.**

- **Please confirm our understanding of the above.**

Yes, this is correct.

The one-year period of stress used for the stressed CVA VaR calculation is the most severe year within the three-year period used for the stressed Effective EPE calculation. This one-year period may, and will probably, be different to the one-year period used for market risk calculations.

- 1a.4 Our assumption from paragraph 98 of the Basel III document, which revises paragraph 61 of the Basel framework, is that the stressed three year data period will be centred on the credit spread stress point, ie there will be equal history used before and after that point. Where the stress period occurs in the current three year data set, a separate stress data set would only be required once the stress point is more than 18 months in the past, ie before that the stress and current period will be the same.**

**Please confirm this assumption.**

There is no explicit requirement that the three-year data period needs to be centred on the credit spread stress period. The determination and review of the stress period should be discussed with your national supervisor.

- 1b. Collateralised counterparties and margin period of risk**

- 1b.1 Our reading of paragraph 103 of the Basel III document, revising paragraph 41 (i) of the Basel framework, is that the margin period of risk is netting set dependent and not on an aggregated basis across a counterparty. The rationale is that different netting sets may contain very different transactions and impact different markets, so this level of granularity is appropriate.**

The margin period of risk (MPOR) applies to a netting set. This extends only to a counterparty if all transactions with this counterparty are in one margined netting set.

- 1b.2 Our interpretation of paragraph 103 of the Basel III document, revising paragraph 41 (i) of the Basel framework, is that where there is illiquidity of transactions or collateral, our understanding is that the margin period of risk immediately changes, as opposed to the criteria for number of trades in a netting set or collateral dispute which has a lag effect. Please confirm this is the intention.**

That is correct.

- 1b.3 Paragraph 103 of the Basel III document revises paragraph 41 (i) of the Basel framework. Where the margin period of risk is increased above the minimum, for instance due to the inclusion of an illiquid trade, when the Expected Exposure is calculated should the margin period of risk be reduced to the minimum for tenors beyond the expected expiry of the event (the expected maturity of the illiquid trade, in this example).**

The extension of the margin period of risk (MPOR) is ruled by market liquidity considerations. That means liquidation of respective positions might take more time than the standard MPOR. In very rare cases market liquidity horizons are as long as the maturity of these positions.

**1b.4 The Basel III standards introduce a qualitative requirement indicating that probability of default (PD) estimates for highly leveraged counterparties should reflect the performance of their assets based on a stress period (Basel III document, paragraph 112, which introduces a new paragraph 415(i) in the Basel framework). We seek clarity on:**

- **How highly leveraged counterparties are to be defined (eg will non-financial entities be included in the definition);**
- **How PDs of highly leveraged non-financial counterparties are to be estimated if there are no underlying traded assets or other assets with observable prices.**

(1) Paragraph 112 is intended for hedge funds or any other equivalently highly leveraged counterparties that are financial entities.

(2) The new paragraph 415 (i) introduced in the Basel framework is elaborating on the sentence in paragraph 415 that states "...a bank may take into account borrower characteristics that are reflective of the borrower's vulnerability to adverse economic conditions or unexpected events...". This means that in the case of highly leveraged counterparties where there is likely a significant vulnerability to market risk, the bank must assess the potential impact on the counterparty's ability to perform that arises from "periods of stressed volatilities" when assigning a rating and corresponding PD to that counterparty under the IRB framework.

**1b.5 The Basel III standards include an amendment to the Basel II standards that implements the supervisory haircuts for non-cash OTC collateral (Basel III document, paragraph 108).**

**We seek clarity on how the FX haircut is to be applied for mixed currency exposures.**

The FX haircut should be applied to each element of collateral that is provided in a different currency to the exposure.

**1b.6 With regard to paragraph 111 of the Basel III document: Does the prohibition to recognise re-securitisations as financial collateral also apply to repo-style transactions in the trading book? Paragraph 703 of the Basel framework says that: "In the trading book, for repo-style transactions, all instruments, which are included in the trading book, may be used as eligible collateral." This seems to include re-securitisations.**

Re-securitisations are not eligible financial collateral for repo-style transactions in the trading book.

**1b.7 With respect to firms that use both IMM and CEM approaches in capitalising counterparty credit risk, can the BCBS provide clarity on how collateral posted by a counterparty should be allocated across IMM and CEM netting sets belonging to that counterparty?**

Firstly, by applying two different methods, the original netting set is split into two new netting sets. In the standardised approach, collateral enters into the CEM, whereas in IRB it enters into the LGD calculation. Assuming that the IMM is calculated by using the Shortcut Method of Basel III, collateral also enters directly at exposure level (for both, held and posted). The bank needs to split the available collateral into two separate parts, one dedicated to IMM and the other dedicated to CEM. No double-counting is allowed. Currently, there is no rule on how to split the collateral.

**1b.8 Basel III sets forth the revisions to the paragraph 41(ii) of Annex 4 of the Basel II rules text in that if a bank has experienced more than two margin call disputes on a particular netting set over the previous two quarters that have lasted longer than the applicable margin period of risk, the bank is required to reflect this history appropriately by using a margin period of risk that is at least double the supervisory floor for that netting set for the subsequent two quarters. In this regard, industry seeks clarifications as to whether all margin disputes be counted even for those where the disputed amount was very small, or if there is any threshold amount that can be applied here.**

Every instance of a margin call being disputed must be counted, irrespective of the amount.

**1c. Specific wrong-way risk**

**1c.1 Please clarify exactly what needs to be done with respect to CDSs with specific wrong-way Risk. Can you provide an example?**

Assume you hold a single name CDS with no WWR. Then, the EAD of that exposure would be equal to alpha times the effective EPE of the CDS contract, whilst the LGD assigned to the counterparty would be that of the corresponding netting set of the counterparty from whom the CDS was bought.

Now assume that this single name CDS has Specific WWR. First, the CDS is taken out of its netting set. Second, the EAD should be equal to the expected loss on the underlying reference asset, conditional on default of the issuer of the underlying, ie assuming that the reference asset has a PD of 100%. If a non-zero recovery is assumed for the underlying asset, then the LGD for the netting set assigned to the single name CDS exposure in the RWA calculation is set to 100%.

## **2. Credit Valuation Adjustment (CVA) risk capital charge**

**2.1. Can the BCBS clarify whether the 1.06 scaling factor applied to risk weighted assets for credit risk (paragraph 14 of the Introduction of Basel II Comprehensive Version – June 2006) will apply to the new CVA RWA category? Our expectation is that the calculation of CVA RWA is a market risk calculation and the 1.06 scaling factor should not be applied.**

The 1.06 scaling factor does not apply.

The CVA volatility formula multiplied with the factor 3 (under the quantitative standards described in paragraph 718(Lxxvi)) produces a capital number directly, rather than an RWA. Multiplying the CVA volatility charge by 12.5 to get an RWA equivalent would then not involve the 1.06 scalar.

**2.2 The revised CCR rules in the Basel III document include a number of areas that have not previously received regulatory scrutiny. Does the Basel Committee consider that supervisory approvals will be required for Basel III, specifically in the areas of:**

- **Proxy models in respect of CDS spread used where no direct CDS available;**
- **Applicability of index hedges to obtain the base 50% offset of the new CVA charge;**
- **If the basis risk requirement for index hedges is sufficient to satisfy the supervisor, will this automatically enable a 100% offset or is it intended to be a sliding scale between 50% and 100%;**
- **Overall system and process infrastructure to deliver the Basel III changes, even if covered by existing approved models and processes;**
- **Choice of stress periods to ensure industry consistency. In this regard, for VaR calculation purposes how should the one year period within the three year stress period be identified;**
- **The fundamental review of the Trading Book will include further analysis of the new CVA volatility charge. Is there any indication as to implementation date and, in the meantime, should CVA market risk sensitivities be included in the firm's VAR calculation.**

The use of an advanced or standardised CVA risk capital charge method depends on whether banks have existing regulatory approvals for both IMM and specific risk VaR model. Supervisors will review each element of banks' CVA risk capital charge framework based on each national supervisor's normal supervisory review process.

**2.3 How should purchased credit derivative protection against a banking book exposure that is subject to the double default framework (paragraph 307(i)) or the substitution approach (paragraphs 140-142) be treated in the context of the CVA capital charge?**

Purchased credit derivative protection against a banking book exposure that is subject to the double default framework [paragraph 307(i)] or the substitution approach (paragraphs 140-142) and where the banking book exposure itself is not subject to the CVA charge, will also not enter the CVA charge. This purchased credit derivative protection may not be recognised as hedge for any other exposure.

(This is consistent with Annex 4 paragraph 7 that says that the EAD for counterparty credit risk from such instruments is zero. It is also consistent in the sense that hedging should not increase the capital charge.)

**2.4 How should purchased credit derivative protection against a counterparty credit risk exposure that is subject to the double default framework (paragraph 307(i)) or the substitution approach (paragraphs 140-142) be treated in the context of the CVA capital-charge?**

For purchased protection against a counterparty credit risk exposure that is itself subject to the CVA charge, the procedure is analogous to the substitution approach. That is:

- (a) In the advanced CVA-charge, the exposure time-profile ( $EE_i$ ) of the original counterparty credit risk gets reduced by the protected amount and the exposure profile to the protection seller gets increased by the amount for which it has sold protection. This substitution is done for time buckets whose valuation time ( $t_i$ ) is

smaller than the maturity of the purchased protection but not for the buckets with larger valuation times.

- (b) in the standardised CVA charge, the protected amount times the residual maturity of the protection gets deducted from the  $M \times EAD$  of the original counterparty credit risk and added to the  $M \times EAD$  of the protection seller.

Alternatively, if the purchased protection is an eligible hedge within the CVA charge (Annex 4 new paragraph 103), then the credit protection may be recognized as a CDS hedge as specified in the rules for the CVA charge. In the latter case, the CVA capital charge must also reflect the CVA-risk of the credit protection. That is, despite Annex 4 paragraph 7 which still applies in the context of the default-risk charge, the counterparty credit risk exposure towards the protection seller may not be set to zero in the context of the CVA capital charge.

## **2a. Standardised CVA capital charge**

**2a.1 Paragraph 99 of the Basel III document, inserting paragraph 104 in Annex 4 of the Basel framework, states that in the case of index CDSs, the following restrictions apply: ‘ $M_i$  is the effective maturity of the transactions with counterparty ‘i’. For IMM-banks,  $M_i$  is to be calculated as per Annex 4, paragraph 38 of the Basel Accord. For non-IMM banks,  $M_i$  is the notional weighted average maturity as referred to in the third bullet point of paragraph 320’. The introduction to paragraph 320 of the Basel II document includes in it a cap which means that  $M$  will not be greater than 5 years.**

**Can the BCBS provide clarity on whether this cap still applies for the purpose of calculating  $M_i$  above?**

For CVA purposes, the 5-year cap of the effective maturity will not be applied. This applies to all transactions with the counterparty, not only to index CDSs.

Maturity will be capped at the longest contractual remaining maturity in the netting set.

**2a.2 Paragraph 104 inserted in Annex 4 of the Basel framework (paragraph 99 of the Basel III document) talks about effective maturity (bullet 7) at a counterparty level. In rolling up EM from netting sets to counterparty, do we apply the 1 year floor first and then do a weighted average by notional, or do we calculate the weighted average by notional at counterparty level and then apply the floor?**

The 1-year floor applies at a netting set level.

If there is more than one netting set to the same counterparty, an effective maturity ( $M$ ) should be determined separately for each netting set, the EAD of each netting set should be discounted according to its individual maturity and the quantities  $M \times EAD$  should be summed.

**2a.3 Question on new paragraph 104 inserted in Annex 4 of the Basel framework (paragraph 99 of the Basel III document): If a bank has more than one CDS contract on the same counterparty, the instructions for the standardised CVA charge demand a different discounting than in the case of several index-CDS. For single-name CDS, each contract gets discounted using its individual maturity and the quantities  $M \times B$  are to be summed. In contrast, for index-CDS, the full notional (summed over all index contracts) must be discounted**

**using the average maturity. Is there a reason for this difference in the treatment of single-name vs index hedges?**

For index-CDS, the same treatment should be applied as described for single-name CDS. That is, each index contract gets discounted using its individual maturity and the quantities  $M \times B$  are to be added.

**2a.4 In the Standardised CVA charge formula, there are “weights” for individual counterparties ( $w_i$ ) and for credit indexes ( $w_{ind}$ ). “Weights”  $w_i$  are uniquely determined by the counterparty’s rating from the table in paragraph 104. How should one determine “weights”  $w_{ind}$ ?**

Banks should first look through index constituents’ ratings so as to determine the corresponding weight for each constituent, which then should be weight-averaged for determining the weight for the index.

**2b. Advanced CVA capital charge**

**2b.1 Paragraph 99 of the Basel III document, introducing paragraph 98 in Annex 4 of the Basel framework, permits the use of proxy CDS spreads. As the majority of banks have portfolios that extend well beyond the scope of bond issuers, proxying a CDS spread will be the norm rather than the exception. We consider this approach to be acceptable given an appropriate model. Is this correct?**

Yes, that is correct. To the extent that single name CDS spread data is not available, banks should use a proxy spread, the methodology for determining the proxy being part of the approved Internal Model for specific interest rate risk.

**2b.2 For banks using the short cut method for collateralised OTC derivatives, under the advanced CVA risk capital charge the Effective EPE is set to a maturity equal to the maximum of (i) half of the longest maturity occurring in the netting set and (ii) the notional weighted average maturity of all transactions inside the netting set. We assume that this maturity is applied only to the CVA risk capital calculation and not to the calculation of Effective EPE itself under the short cut method.**

**(a) Please confirm whether this is the case (in reference to paragraph 99 of the Basel III document, introducing the new paragraph 99 in Annex 4 of the Basel framework).**

**(b) Please also confirm if an acceptable alternative to this approach is to use the Standardised CVA charge for CEM exposures, even for IMM banks using the Advanced Method for EPE exposures.**

(a) Correct. The new paragraph 99 in Annex 4 refers to a maturity that is only applied to the CVA risk capital calculation. It has nothing to do with the Effective EPE calculation for the short cut method.

(b) This is not an acceptable alternative. Firms should use the EAD produced for the purposes of default risk capital.

For clarity, paragraph 99 stipulates that banks using the short cut method for collateralised OTC derivatives must compute the CVA risk capital charge based on the advanced CVA risk capital charge. Further, banks with IMM approval for the majority of their businesses, but which use CEM (Current Exposure Method) or SM (Standardised Method) for certain smaller

portfolios, and which have approval to use the market risk internal models approach for the specific interest rate risk of bonds, will include these non-IMM netting sets into the CVA risk capital charge, according to the advanced CVA method, unless the national supervisor decides that paragraph 104 in Annex 4 (for standardised CVA risk capital charge) should apply for these portfolios.

**2b.3 The Basel standards, for the purpose of capitalising the risk of CVA charges (paragraph 99 of the Basel III document), introduces a new section VII to Annex 4 of the Basel II framework (paragraphs 97 to 105 under Annex 4). The new paragraph 100 in Annex 4 requires a period of stress for credit spread parameters to be used in determining future counterparty EE profiles under the stressed VaR capital component of the advanced CVA risk capital charge.**

**We seek confirmation that the credit spread of the counterparty input into the CVA and regulatory CS01 formulae (ie 's<sub>i</sub>') is not impacted by this. That is, the s<sub>i</sub> inputs remain the same for both the VaR and stressed VaR capital calculations of the CVA risk capital charge.**

It depends on the specific risk VaR model. If the VaR model uses a sensitivity (or Greek) based approach, the credit spread values in the 1st and 2nd-order sensitivities (as in paragraph 99) are the current levels ("as of valuation date") for both unstressed VaR and stressed VaR. In contrast, if the VaR model uses a full-revaluation approach using the CVA formula as in paragraph 98, the credit spread inputs should be based on the relevant stress scenarios.

**2b.4 A strict interpretation of the Advanced CVA standards (new paragraph 102 in Annex 4 introduced by paragraph 99 of the Basel III document) suggests that market LGDs (based on bond recovery rates) should be used instead of LGDs that reflect internal experience, potential security packages or other credit enhancement that could be available in the CSA or the trade confirmation.**

**Is this strict interpretation intended by the Committee?**

Yes, market LGDs (LGD<sub>mkt</sub>) based on market recovery rates are used as inputs into the CVA risk capital charge calculation.

LGD<sub>mkt</sub> is a market assessment of LGD that is used for pricing the CVA, which might be different from the LGD that is internally determined for the IRB and CCR default risk charge.

In other words, LGD<sub>mkt</sub> needs to be consistent with the derivation of the hazard rates – and therefore must reflect market expectations of recovery rather than mitigants or experience specific to the firm.

**2b.5 We seek clarification of the calculation of LGD for the purposes of the new paragraph 98 in Annex 4 of the Basel framework, introduced by paragraph 99 of the Basel III document, where market instruments or proxy market information is not available). For example, for Sovereign entities the identification of a market spread or a proxy spread is often not possible other than in distressed scenarios.**

**Also, we seek clarity on how to take into account potential security packages or other credit enhancement provisions that could be available in the CSA or the trade confirmation.**

While the Committee recognises that there is often limited market information of LGDmkt (or equivalently the market implied recovery rate), the use of LGDmkt for CVA purposes is deemed most appropriate given the market convention of CVA. As it is also the market convention to use a fixed recovery rate for CDS pricing purposes, firms may use that information for purposes of the CVA risk capital charge in the absence of other information.

In cases where a netting set of derivatives has a different seniority than those derivative instruments that trade in the market from which LGDmkt is inferred, a bank may adjust LGDmkt to reflect this difference in seniority.

Note that firm specific risk mitigants are not used for this calculation.

**2b.6 Does a specific backtesting on the CVA VaR need to be conducted or is the backtesting of the market VaR considered as relevant also for the CVA VaR? In particular, Footnote 37 of the Basel III text in paragraph 100 says that “the three-times multiplier inherent in the calculation of a bond VaR and a stressed VaR will apply to these calculations.” Does it mean that the multipliers applied to the CVA VaR have to be the same as the multipliers applied to the market risk VaR (ie at least 3 + backtesting of market risk VaR) or does a specific multiplier for the CVA charge need to be calculated depending on the results of the backtesting of the CVA VaR?**

Banks are not required to conduct a separate VaR backtesting for purposes of the CVA capital charge. Footnote 37 of paragraph 100 of the Basel III text was intended to require banks to apply at least a three-times multiplier and a potentially higher multiplier for CVA purposes where appropriate.

**2b.7 Is a bank required to calculate the CVA capital charge daily?**

Banks should discuss the frequency with which the CVA capital charge needs to be computed with their national supervisor. To receive regulatory approval to use the advanced CVA approach, banks are generally expected to have the systems capability to calculate the CVA capital charge on a daily basis, but would not be expected or required to calculate it on a daily basis.

Instead, banks are required to calculate the CVA capital charge at least on a monthly basis in which expected exposure is also required to be calculated. In this case, banks are to calculate VaR and stress VaR by taking the average over a quarter.

**2b.8 Paragraph 98 of Basel III states: “Whenever such a CDS spread is not available, the bank must use a proxy spread that is appropriate based on the rating, industry and region of the counterparty.” For counterparties (eg SME) where no market data is available, neither CDS spreads nor traded debt, VaR modelling based on proxy index spreads is hard to validate. Is it left to the national supervisor to decide whether these may be modelled in ACVA or should SCVA be compulsory? The recognition of index hedges is very different in ACVA and SCVA, so this could lead to material differences in implementation.**

Yes, it is left to national supervisors to decide. A related matter is addressed in Question 2b.1 above.

**2b.9 The regulatory CVA formula contains the terms  $EE_i$  and  $Di$  which assume in the case of IR related exposures (eg IR swaps) that the discount factor and IR**



**exposures are independent. Is the bank allowed to replace the terms  $EE_i \times D_i$  by  $E[\text{discount factor} \times \max(0, V(t))]$ ?**

No, the regulatory formula is not to be changed.

## **2c. Eligible hedges**

**2c.1 We seek clarity on the treatment of internal trades and CVA VaR. There is a concern that if a CVA desk buys protection from another desk (within the firm) which faces 'the street' it would not get CVA credit although the CVA VAR would be flat (paragraph 102 in Annex 4 of the Basel II framework, introduced by paragraph 99 of the Basel III document).**

Only hedges that are with external counterparties are eligible to reduce CVA. A hedge that is only with an internal desk cannot be used to reduce CVA.

**2c.2 From paragraph 99 of the Basel III document, introducing the new paragraph 103 in Annex 4 of the Basel framework, we would like clarification in terms of eligibility of hedges: (i) Is a CDS indirectly referencing a counterparty (eg a related entity) an eligible hedge?; (ii) can you confirm inclusion of sovereigns in the CVA charge and ability to use sovereign CDS as hedges?**

Any instrument of which the associated payment depends on cross default (such as a related entity hedged with a reference entity CDS and CDS triggers) is not considered as an eligible hedge.

When restructuring is not included as a credit event in the CDS contract, for the purposes of calculating the Advanced CVA charge, the CDS will be recognised as in the market risk framework for VaR. For the purposes of the Standardised CVA charge, the recognition of the CDS hedge will be done according to the Standard Measurement Method (SMM) in the market risk framework.

The Committee confirms that sovereigns are included in the CVA charge, and sovereign CDS is recognised as an eligible hedge.

**2c.3 With regard to paragraph 99 of the Basel III document, introducing paragraph 98 in Annex 4 of the Basel framework: we seek confirmation as to whether the risk mitigation available for Expected Exposure profiles remains unchanged. Specifically, please confirm our understanding that the post risk mitigated exposure values are used in the CVA charge, whilst the additional mitigation is also allowed for the CVA charge itself, via eligible CVA hedges, which is undertaken post any Expected Exposure mitigation available.**

The expected exposures (EEs) or the exposures at default (EADs) used as inputs in the advanced and standardised CVA risk capital charge must not have been subject to any adjustments arising from credit protection that a firm intends to include as an eligible hedge in the CVA risk capital charge (see Basel III document, Annex 4, paragraphs 102 and 103). However, the use of other types of credit risk mitigation (eg collateral and/or netting) reducing the EE or the EAD amounts in the CCR framework can be maintained when these EE or EAD feed the CVA risk capital charge.

**2c.4 Industry seeks clarification as to whether (i) CDS swaptions are eligible CVA hedge instruments; and if so, (ii) whether both single name and index CDS swaptions are eligible.**

A CDS swaption can be considered as an equivalent hedging instrument, and therefore CDS swaptions are eligible hedge instruments, in both single-name and index CDS cases, insofar as the contract does not contain a knock-out clause, ie the option contract is not terminated following a credit event.

As per banks applying the Advanced CVA risk capital charge (see Annex 4, paragraphs 98 to 103, as inserted by Basel III), their VaR model should properly capture the non-linear risk of swaptions. As regards banks that use the Standardised CVA approach, they may apply the delta-adjusted notional to reflect the moneyness of the option into the SCVA formula.

**2c.5 Industry seeks further clarifications as to how the following two cases of different risk characteristics associated with CVA hedge providers should be treated for CVA capital charge purposes.**

- (i) Is a single name CDS (or a basket of CDS that is not tranching) an eligible CVA hedge if the entity that provides protection is any kind of special purpose entity (SPE), private equity fund, pension fund, or any other non-bank financial entity?**
- (ii) Does the answer to question (i) change if the bank is providing a liquidity facility or another kind of credit enhancement to the protection provider, whereby the bank is effectively exposed to a certain tranche of the underlying default risk? (That is, a bank buys CDS protection, while an additional transaction or facility is transferring a tranche of the default risk back to the bank.) The liquidity facility or credit enhancement would be on accrual accounting so that no CVA risk is transferred back to the bank via that facility.**

There are no specific restrictions on the protection provider for the purposes of the CVA hedges. Eligible CVA hedges can be bought from SPEs, private equity funds, pension funds, or other non-bank financial entities as long as the general eligibility criteria set by the Basel framework (see in particular paragraph 195) are met.

If the bank remains effectively exposed to a tranche of the underlying default risk by providing any form of credit enhancement to the protection provider, then the CDS is not an eligible CVA hedge because, in economic substance, the transaction becomes a tranching CDS protection, regardless of whether the credit enhancement is on accrual accounting. All kinds of engagement between the bank and the protection provider need to be taken into account in order to determine whether the protection is effectively tranching.

**2c.6 What are the eligible hedges for the CVA volatility charge when a transaction has securitisations as underlying and the firm is not allowed to use a VaR model to calculate market risk capital for securitisations?**

While it is true that banks are not allowed to use a specific risk VaR model for securitised products, this is not applicable for CVA capital charge purposes. Different product types of derivatives (including securitised products) form expected exposures underpinning CVA to a certain counterparty, whereas the eligible hedge instruments apply to those credit hedges referencing a bank's counterparties (via either single-name or index).

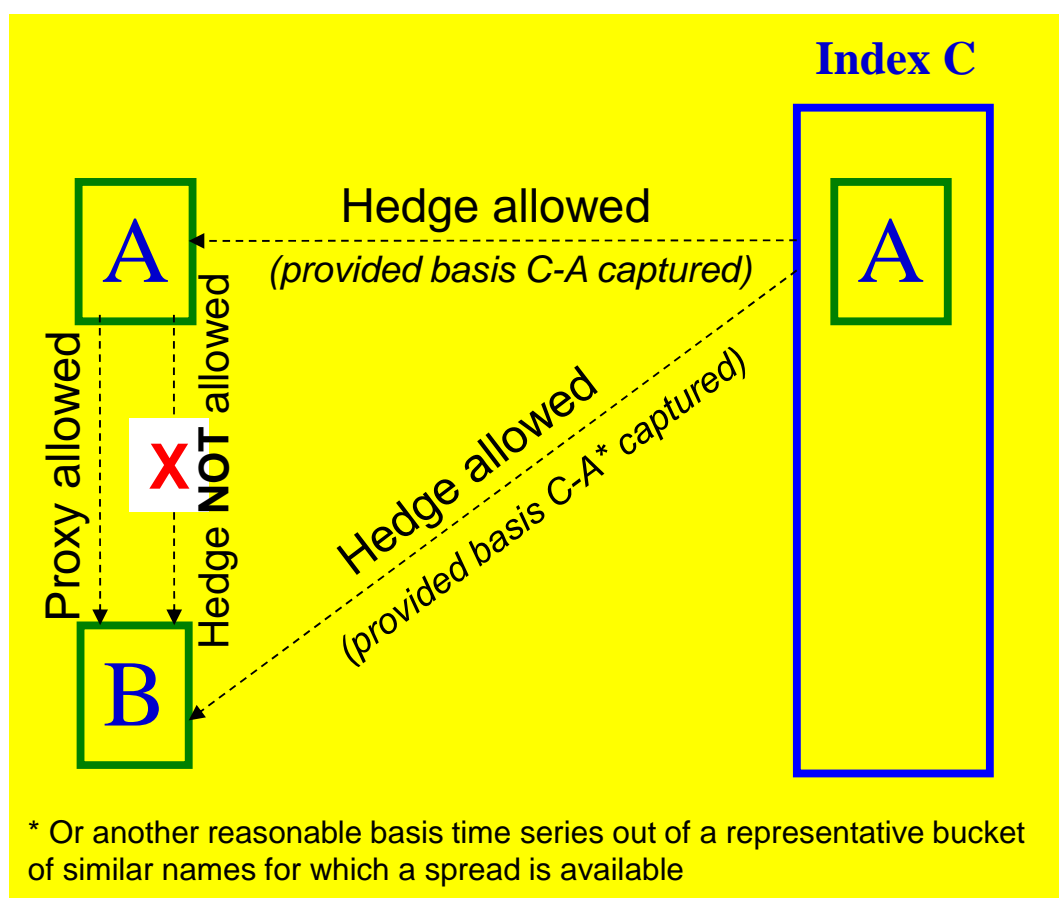
The supervisory approval of the market risk VaR model for Advanced CVA (ACVA) risk capital charge purposes should apply to specific interest risk VaR, ie a VaR model for debt instruments. This VaR can be used to reflect the risk of credit spread changes for single name CDS products, including those referencing debt instruments issued by the

counterparty. Hence, banks should not encounter any issues of calculating the ACVA even if the regulatory approval for specific risk VaR model for securitised products is not available.

**2c.7 Industry seeks further clarification as to whether a single name CDS for which the bank uses proxies can also be considered as eligible hedges. The answer to Question 2c.2 states: “Any instrument of which the associated payment depends on cross default (such as a related entity hedged with a reference entity CDS and CDS triggers) is not considered as an eligible hedge.” A question has arisen whether this means that a single name CDS cannot be recognised against an exposure to a related counterparty (for example a sovereign CDS against a province in the same country) even if the VaR model captures the basis risk between the exposure and the hedge, or was this clause aimed at instruments other than single-name CDS, that pay out only if there is more than one default event.**

Single name proxy hedges cannot be recognised in the advanced CVA capital charge, irrespective of whether the basis risk between the exposure and the hedge is appropriately captured in the model. In fact, new paragraph 103 of Annex 4 (as introduced by paragraph 99 of BCBS 189) admits as eligible hedges only instruments (such as CDSs and CCDs) referencing the counterparty directly or index CDSs.

As an example, consider an exposure to counterparty B with no CDS traded on its name (eg a province within a country) whose spread is approximated by that of counterparty A (eg the central government of that country). The only eligible hedge of the exposure to counterparty B would be an index C containing counterparty A, provided the bank can incorporate the basis between C and A into its VaR model to the satisfaction of its supervisor.



Further, to the extent that single name proxy hedges are not to be recognised in the advanced CVA capital charge on one hand, but a proxy spread is required to be used whenever the relevant CDS spread is not available on the other hand, banks should be further noted that they are prohibited from, or should derecognise, over hedging on a single-name level.

To illustrate this, in the above example, whenever the bank over hedges its exposure to A, these hedges on A will effectively act as a proxy hedge for the exposure to B; this is true irrespective of whether B is mapped to the CDS spread of A or not. Therefore, the firm should set a cap on the recognition of all single name hedges.

**2c.8 When hedging CVA, given the underlying derivatives portfolio (netting sets) is changing over time, excess CDS hedges bought cannot always be unwound and are sometimes “cancelled” by selling protection (ie the CVA desk is selling protection). The eligible CVA over-hedge is the hedge to this protection sold. How is this to be recognised under Basel III?**

Since the dedication of CDS bought protection for the purpose of CVA hedging needs to be done explicitly, the same process, documentation and controls can be and are expected to be applied for bought protection as well by partial unwinding the excess CDS hedges by making use of the same instrument via the opposite position; this being based on approval of the national supervisor.

If the national supervisor does not agree to recognise the inclusion of sold protection in the framework (standalone portfolio) of CVA calculation and CVA hedging, respective trades are treated as any other derivative or any CDS that is not part of CVA hedging.

## **2d. Treatment of incurred CVA**

**2d.1 Whilst acknowledging that there may be changes to the capital treatment of incurred CVA, we seek clarification of whether the reduction in EAD by incurred CVA extends to the calculation of expected loss amounts for firms applying IRB risk weights. We would expect the reduction in EAD to be extended to expected loss but this would necessitate amendments to other paragraphs of the Basel II document (eg paragraph 375) which do not appear to have been amended under changes already identified in the Basel III document (paragraph 99) introducing a new paragraph after paragraph 9 in Annex 4.**

**Could the Committee confirm that amendments to the calculation of CVA risk and default risk capital will be clarified to refer to expected loss capital deduction as well as RWAs?**

The Committee confirms that, after the quantitative impact study undertaken after the release of the Basel III Accord, incurred CVA will be recognised as a reduction in EAD when calculating the default risk capital.

Incurred CVA is not permitted to be counted as eligible provisions under paragraph 43 of the Basel framework, ie banks that are currently recognising CVA as general provisions to offset expected loss in the IRB framework should no longer count CVAs as provisions.

Nevertheless, expected losses (EL) can be calculated based on the reduced “outstanding EAD” which reflects incurred CVA (see Basel III document, new paragraph inserted after

paragraph 9 in Annex 4). That is, for derivatives, the EL is calculated as  $PD \cdot LGD \cdot (\text{outstanding EAD})$ .

**2d.2 Could the treatment of defaulted exposures in terms of CVA capital charge, and incurred CVA be clarified?**

Banks are not required to calculate the CVA capital charge for defaulted counterparties, where the loss due to default has been recognised for accounting and reporting purposes and provided that, as a result of the default, the derivative contracts have been transformed into a simple claim and no longer have the characteristics of a derivative.

**2e. Other CVA risk capital charge questions**

**2e.1 Is an intercompany transaction with a zero risk weight subject to a CVA charge?**

As per the group consolidated reporting, no regulatory capital charge (including a CVA charge) applies to intercompany transactions. This should include the relevant CVA hedge that is only with an internal desk; internal hedges are not recognised for regulatory capital purposes because they are eliminated in consolidation.

**2e.2 Industry members would like confirmation on a technical note that, as with the downgrade-and-default charge within the Basel II framework, the CVA-variability charge associated with affiliate exposures will net out under group consolidated reporting.**

See answer to Question 2e.1 above.

**3. Asset value correlations**

**3.1 Can the BCBS clarify the definition of unregulated financial institutions (paragraph 102 of the Basel III document)? Does this could include “real” money funds such as mutual and pension funds which are, in some cases, regulated but not “supervised by a regulator that imposes prudential requirements consistent with international norms”?**

For the sole purpose of applying the IRB approach in paragraph 272 of the Basel framework (paragraph 102 in the Basel III document), “unregulated financial institution” can include a financial institution or leveraged fund that is not subject to prudential solvency regulation.

**4. Other questions**

**4.1 With regard to operational requirements for credit derivatives, Basel II rules text sets forth the operational requirements for credit derivatives. Specifically, the conditions outlined in paragraph 191 (f) indicates that, in order for a credit derivative contract to be recognised, the identity of the parties responsible for determining whether a credit event has occurred must be clearly defined (the so-called “Determinations Committee”); this determination must not be the sole responsibility of the protection seller; the protection buyer must have the**

**right/ability to inform the protection provider of the occurrence of a credit event. Given the recently developed market practice of the Big Bang Protocol which all in the credit derivatives industry have signed, and that industry seeks clarifications as to whether and how this protocol impact the recognition of credit derivatives.**

Credit derivatives under the Big Bang Protocol can still be recognised. Paragraph 191 is still satisfied by:

- the protection buyer having the right/ability to request a ruling from the Determinations Committee, so the buyer is not powerless; and
- the Determinations Committee being independent of the protection seller.

This means that the roles and identities are clearly defined in the protocol, and the determination of a credit event is not the sole responsibility of the protection seller.

**4.2 Basel II paragraph 145 sets forth a list of eligible financial collateral that includes gold, with a supervisory haircut set to 15% in paragraph 151. To the extent that gold is not included in the revised paragraph 151 under Basel III, industry seeks clarifications in this regard.**

Paragraph 145 has not been modified by Basel III and so, gold remains as eligible collateral. It was an oversight not to include gold in the headings of paragraph 151. Gold is still eligible collateral and it retains the haircut it previously had of 15%.

## **5. Capitalisation framework for bank exposures to CCPs**

**5.1 Does a firm with internal model method permission for a specific product require a further permission from competent authorities to use the internal model method for the centrally cleared version of the product covered by the existing permission?**

Usually, national supervisors have a well-defined model approval/change process by which IMM firms can extend the products covered within their IMM scope. The introduction of a centrally cleared version of a product within the existing IMM scope should be considered as part of such a model change process, as opposed to a natural extension.

**5.2 In the case of bankruptcy remoteness, is the overcollateralisation 0% risk weighted or the posted collateral?**

Under paragraph 118, collateral which is bankruptcy remote from the CCP does not need to be capitalised for credit risk towards the bankruptcy remote custodian (ie, related risk weight or EAD = 0).

**5.3 Does the trade exposure used on both sides of the formula include 0 risk weight for bankruptcy remote collateral?**

Bankruptcy remote collateral receives a 0 risk weight if the conditions of paragraph 118 apply.

**5.4 To those banks that apply IMM for trade exposure calculation, is initial margin posted to CCP an EAD component that is not subject to the alpha multiplier?**

According to the IMM approach, the alpha multiplier should apply to initial margin for determining the EAD.

**5.5 Paragraph 114(b) of the interim rules states: “Relevant laws, regulation, rules, contractual, or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent clearing member are highly likely to continue to be indirectly transacted through the CCP, or by the CCP, should the clearing member default or become insolvent.” Without further guidance, it is difficult to determine what “highly likely” portability would mean in practice.**

Banks should refer to the criteria listed in paragraph 114(b). That is, if relevant laws, regulations, rules, contractual or administrative agreements provide that trades are highly likely to be ported, this condition is met. If there is a clear precedent for transactions being ported at a CCP and industry intent for this practice to continue, then these factors should be considered when assessing if trades are highly likely to be ported.

The fact that CCP documentation does not prohibit client trades from being ported is not sufficient to say they are highly likely to be ported. Other evidence such as the criteria in paragraph 114(b) is necessary to make this claim.

**5.6 Industry would like to seek clarification as to 1) who will determine whether a CCP is qualifying; and 2) If it is the national supervisors, when will the list be available?**

If a CCP regulator has provided a public statement on the status of a CCP (QCCP or non-qualifying), then banks will treat exposures to this CCP accordingly. Otherwise, the bank will determine whether a CCP is qualifying based on the criteria in the definition of a QCCP in Annex 4, Section 1.

During 2013, if a CCP regulator has not yet implemented the CPSS-IOSCO *Principles for Financial Market Infrastructures* (PFMIs), but has publicly stated that it is working towards implementing these principles, the CCPs that are regulated by the CCP regulator may be treated as QCCPs. However, a CCP regulator may still declare a specific CCP non-qualifying.

After 2013, if a CCP regulator has yet to implement the PFMIs, then the bank will determine whether a CCP subject to such a CCP regulator’s jurisdiction is qualifying on the basis of the criteria outlined in the definition of a QCCP in Annex 4, Section 1. The bank will provide its supervisor with a list of CCPs that it has exposure to, including its evaluation of the relevant criteria. An important consideration for this purpose is whether a CCP is subject to domestic rules and regulations that are consistent with the CPSS-IOSCO *Principles for Financial Market Infrastructures*.

**5.7 Industry would like to seek clarification as to whether 1) Method 1 vs. Method 2 can be selected for each CCP separately; 2) In Method 2, does the minimum operator apply by each CCP separately or for all CCP exposures combined; and 3) Is the decision to use Method 1 or 2 a single, one-time process for each individual CCP, or may it be re-considered if supported by a clear rationale to change from one to the other?**

(1) Method 1 or Method 2 can be selected for each CCP separately.

(2) Within Method 2, the computation should be applied per CCP. If a given CCP has a "segregated" default fund (as in paragraph 120), it should be applied per default fund contribution.

(3) The decision to use Method 1 or Method 2 can be re-considered at any time by a bank.

**5.8 Who will be ensuring that the CCP calculation methodologies are consistent? What happens when the “k” factor is not provided?**

CCPs have been provided with a template and accompanying instructions (published on 21 November 2012) to perform the necessary calculations for Method 1. This should help ensure consistent implementation of the rules.

The definition of QCCP in the Basel rules text states that to be considered a QCCP, a CCP must be able to perform the calculations  $K_{ccp}$ ,  $DF_{cm}$  and  $DF_{ccp}$  and provide them to clearing members and other parties listed in paragraph 124. Therefore, if a CCP cannot calculate these amounts, it is not a QCCP.

If a QCCP becomes non-qualifying as a result of being unable to perform these calculations, then clearing members may treat it as qualifying for purposes of capital requirements for a period of no longer than 3 months. After 3 months, if the CCP still cannot perform the calculations, then it is to be treated as a non-qualifying CCP under paragraphs 126 and 127.

Notwithstanding the above, during 2013, national supervisors may provide a grace period for exposures to CCPs that cannot provide the information described above, but that are working to implement such capability. This grace period should not be longer than one year.

**5.9 Should the default fund capital calculation be implemented as a capital deduction or as a RWA calculation?**

Both Method 1 and Method 2 should be treated as producing risk weighted assets. For Method 1, the  $K_{cmi}$  amount should be multiplied by 1250% to determine the RWA. For Method 2, the formula produces RWA.

**5.10 Paragraph 115 of Basel III outlines amendments to paragraph 56, Annex 4 of the Basel II text, regarding the stress testing of counterparty credit risk calculations in the internal models method. Should these amendments be incorporated immediately for the calculation of bank exposures to CCPs, or will they only take effect when Basel III is fully adopted in a given jurisdiction?**

The Basel III standards do not apply until the rules are adopted in a given jurisdiction.

**5.11 It appears to be the case that, if a bank hedges loan exposure with cleared CDS, the bank may use the 2% risk weight for the loan. We seek guidance regarding how substitution and double-default treatments operate for risk-weighting the loan under the interim framework.**

Banks may substitute the applicable risk weight of a CCP exposure (2% or 4%) if the CDS cleared to hedge a loan exposure is eligible for the treatment in the substitution approach of the Basel framework. CCP exposures are not eligible to be treated under the double default framework, since banks do not calculate PDs or LGDs for CCP exposures.

**5.12 Existing futures and OTC clearing documentation give clearing members second-lien on client money held at an exchange or CCP. According to BCBS 227, this does not meet the hurdle to offset the client leg of the risk, and generates large RWA. In reality, the second-lien does not generate the same concern as it would in a bilateral trade, since the exchange or CCP uses its lien to close out the client position, ie to perform the operation that the CM would perform were it to have had first-lien itself. In our experience,**



renegotiating documentation to achieve first-lien has been unsuccessful because the quid pro quo for achieving first-lien involves giving up other credit terms that increase the overall risk required for CMs to achieve capital optimisation.

If a clearing member collects collateral from a client for client cleared trades and this collateral is passed on to the CCP, the clearing member may recognise this collateral for both the CCP-clearing member leg and the clearing member-client leg of the client cleared trade. Therefore, IMs as posted by clients to CMs mitigate the exposure the CM has against these clients.

**5.13 Paragraph 117 states: “In all cases, any assets or collateral posted must, from the perspective of the bank posting such collateral, receive the risk weights that otherwise applies to such assets or collateral under the capital adequacy framework, regardless of the fact that such assets have been posted as collateral. Where assets or collateral of a clearing member or client are posted with a CCP or a clearing member and are not held in a bankruptcy remote manner, the bank posting such assets or collateral must also recognise credit risk based upon the assets or collateral being exposed to risk of loss based on the creditworthiness of the entity holding such assets or collateral.”**

By using the term “risk weight” the text appears to presuppose that the collateral will always be held in the banking book and subject to the credit risk framework. It is however conceivable that the “securities placed” could be trading book, and subject to market risk treatment.

It is unclear what exposure measure is to be used in respect of counterparty risk; specifically, whether a haircut is required.

Collateral posted should receive the banking book or trading book treatment it would receive if it had not been posted to the CCP. In addition, this collateral would be subject to the CCR framework of the Basel rules, regardless of whether it is in the banking or trading book. This includes the increase due to haircuts under either the standardised supervisory haircuts or the own estimates.