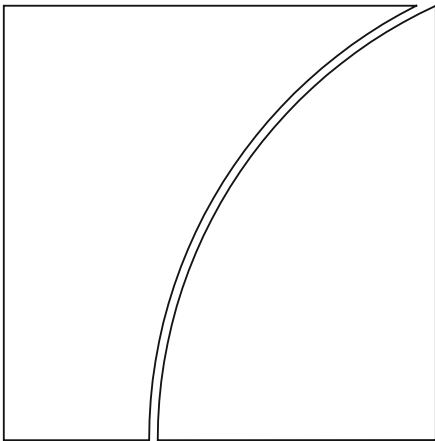


Basel Committee on Banking Supervision



Frequently asked
questions: Impact study
on the proposed
frameworks for market
risk and CVA risk

27 August 2015



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Contents

- 1. Introduction 1
- 2. General issues..... 1
- 3. The proposed standardised approach for market risk..... 2
 - 3.1 Instruments subject to delta, vega and curvature risks..... 2
 - 3.2 The linear risks: delta and vega risk 2
 - 3.3 The non-linear risk: curvature risk..... 3
 - 3.4 The residual risk add-on 3
 - 3.5 Risk factor definitions 4
 - 3.6 Definitions of the sensitivities..... 7
 - 3.7 Vega risk sensitivities 8
 - 3.8 Treatment of indices and multi-underlying options..... 9
 - 3.9 Prescribed delta risk weights and correlations10
 - 3.10 Prescribed vega risk weights and correlations12
 - 3.11 Prescribed curvature risk weights and correlations13
 - 3.12 The default risk charge13
- 4. The proposed internal models approach for market risk16
- 5. The proposed credit valuation adjustment (CVA) risk framework21

Frequently asked questions: Impact study on the proposed frameworks for market risk and CVA risk

1. Introduction

This document provides answers to technical and interpretive questions raised by supervisors and banks for the purposes of the Basel Committee's Impact study on the proposed frameworks for market risk and CVA risk. **The document intends to facilitate the completion of the monitoring questionnaire and is not to be construed as an official interpretation of other documents published by the Committee.**

Paragraph references in this document refer to *Instructions: Impact study on the proposed frameworks for market risk and CVA risk* ("QIS instructions"),¹ and to the July 2015 *Review of the Credit Valuation Adjustment (CVA) risk framework – consultative document*.²

2. General issues

1. Are FX and commodity positions held in the banking book to be regarded as covered instruments?

Answer: All FX and commodity risks should be included in capital requirements for market risk (no change from current market risk framework).

(added 27 August 2015)

2. Are FX and Commodity exposures capitalised under CVA to be removed from the bank's market risk capital charge calculation, just as for "eligible hedges that are included in the credit valuation adjustment (CVA) capital charge"?

Answer: According to paragraph 39 of the proposed market risk framework (Annex 1 of the QIS instructions), all eligible hedges that are included in the credit valuation adjustment (CVA) capital charge must be removed from the bank's market risk capital charge calculation. As the Committee is conducting a joint Quantitative Impact Study (QIS) on the proposed frameworks for market risk and CVA risk, the July 2015 *Review of the Credit Valuation Adjustment (CVA) risk framework – consultative document* should be used as a basis for the determination of eligible hedges for the purpose of this QIS.

(added 27 August 2015)

¹ Available at www.bis.org/bcbs/qis

² Available at www.bis.org/bcbs/publ/d325.htm

3. The proposed standardised approach for market risk

3.1 Instruments subject to delta, vega and curvature risks

1. If we are not able to perform curvature calculations on non-linear positions only due to system limitations, can we include curvature on our whole portfolio in our capital calculations?

Answer: Yes, this approximation is fine for the QIS purposes. In your QIS submission please provide details of what you have done in a separate Word document.

(added 27 August 2015)

2. Are instruments with prepayment options to be regarded as an option as per paragraph 49? Under what circumstances is such an instrument subject to the residual risk add-on as per paragraph 58?

Answer: An instrument with a prepayment option is a debt instrument which grants the debtor the right to repay part or the entire principal amount before the contractual maturity without having to compensate for any foregone interest. The debtor can exercise his option with a financial gain when he can obtain funding over the remaining maturity of the instrument at a lower rate in other ways in the market. An instrument with an embedded prepayment option is an instrument with optionality according to paragraph 49(a). Accordingly, the embedded option is subject to vega and curvature risk with respect to the general interest rate risk and credit spread risk (non-securitisation and securitisation) risk classes. When the prepayment option is a behavioural option (ie in particular when the debtor may not exercise the option not just for pure financial gain) the instrument is also subject to the residual risk add-on as per paragraph 58. The pricing model of the bank should reflect such behavioural patterns where relevant.

For securitisation tranches, instruments in the securitised portfolio may have embedded prepayment options as well. In this case the securitisation tranche is subject to the residual risk add-on. The phrase "prepayment rates volatility is ignored" in paragraph 62(b) should be disregarded.

(added 27 August 2015)

3. Paragraph 49 states that all instruments with optionality are subject to vega and curvature risk. However some non-linear products do not have vega risk. For example, credit tranches within the correlation trading portfolio (CTP) are deemed instruments with optionality (as their cash flows cannot be written as a linear function), but they do not have vega risk. Please confirm that the vega risk capital charge for these products should be zero?

Answer: As stated in paragraph 63(b), the vega risk factors for the CTP are defined as the implied volatilities of options that reference CTP credit spreads as underlyings (bond and CDS). For all instruments subject to vega and curvature risks for which either vega or curvature risk is zero, please report "0" in the reporting template.

(added 27 August 2015)

3.2 The linear risks: delta and vega risk

1. Please confirm if the quantity inside the square root function of paragraph 51(c) should be floored at zero?

Answer: Yes, it should be floored at zero.

(added 27 August 2015)

2. Please confirm that if the sum within the square root function of paragraph 51(d) is negative, the alternative specification for S_b is applicable to all buckets and not just S_b and S_c ?

Answer: Yes.

(added 27 August 2015)

3.3. The non-linear risk: curvature risk

1. Please confirm that in the formula for $CVR(k)$ in paragraph 53(b), the risk-weighted delta sensitivity for the down shock should be added rather than subtracted?

Answer: Yes. The formula in paragraph 53(b) should read as follows:

$$CVR_k = -\min \left[\begin{array}{l} \sum_i \{V_i(x_k^{(RW^{(curvature)+})}) - V_i(x_k) - RW_k^{(curvature)} \cdot S_{ik}\} \\ \sum_i \{V_i(x_k^{(RW^{(curvature)-})}) - V_i(x_k) + RW_k^{(curvature)} \cdot S_{ik}\} \end{array} \right]$$

(added 27 August 2015)

2. Please confirm that the max function inside the square root in paragraph 53(e) is to be removed?

Answer: Yes. The curvature risk capital charge for each risk class is to be computed using the following formula:

$$\text{Curvature risk} = \sqrt{\sum_b K_b^2 + \sum_b \sum_{c \neq b} \gamma_{bc} S_b S_c \psi(S_b, S_c)}$$

(added 27 August 2015)

3.4. The residual risk add-on

1. Paragraph 58(d) states that one of the two conditions for instruments that are within scope of the residual risk add-on as "pay-offs cannot be written as a linear combination of European or American plain vanilla put and call options with a single underlying equity price, commodity price, exchange rate, bond price, CDS price or interest rate swap." Nevertheless, the template requires the notionals of plain vanilla options as well as digital options (which we believe can be replicated by long call and a short call at different strikes) to be reported. Can you please confirm the following:

- (a) Should options whose payoffs cannot be perfectly replicated with vanilla instruments be excluded from the residual add-on calculation? For example, should the notional of digital options be excluded from the Gap Risk measure? There are instruments which are usually considered as being replicable by practitioners even though they are not perfectly replicable in theory.
- (b) In Panel K)1, should banks not include the notionals of any option which can be replicated? If this is the case, should cell F485 in the "FRTB-Revised SA" worksheet (ie notional for mono-underlying call/put European options) be left blank?

Answer: With regard to (a) in this question, digital options are within the scope of the residual risk add-on as they are options with payoffs that are not recognised as instruments that can be

prudently replicated using a linear combination of European or American plain vanilla put and call options with a single underlying.

With regard to (b) in this question, instruments which do not meet the two conditions set out in paragraph 58(d) are excluded from the residual risk add-on. Where a bank has no instrument related to a given cell in Panel K, it should enter "0" in this cell. Non-zero amounts related to cell F485 can be envisaged for a bank that trades exotic instruments (eg a call option on the squared price of a mono-underlying security).

(added 27 August 2015)

2. In Panel K of the "FRTB-Revised SA" worksheet, please clarify what value to enter in column F ("Notional") for a complex option where the payoff is two times LIBOR times the notional principal ($2 * LIBOR * Notional$)?

Answer: In this case, please report two times the notional principal ($2 * notional principal$) to the relevant cell within Panel K. This instrument should get the same residual risks add-on charge as another instrument paying LIBOR on a notional principal equal to two times the notional principal of the first instrument.

(added 27 August 2015)

3. In paragraph 58(e), bullet point on "Behavioural risk", please clarify the meaning of "due to other retail client decision"? Is a callable bond interpreted as having "behavioral risk"?

Answer: In the context of prepayment risk behavioural option risk refers to the risk of exercise of financial contracts due to factors other than interest rate risk such as demographics, social factors (such as death, divorce, or job transfers) and macroeconomic conditions. For the definition of "retail client" please refer to the "categorisation of customers" as specified in the July 2015 *Instructions for Basel III monitoring*, Section 7.2.4, page 115-116 (Available at www.bis.org/bcbs/qis/biiiimplmoninstr_jul15.pdf). A callable bond would not be interpreted as having behavioural risk provided the security is not issued by a retail client.

(added 27 August 2015)

3.5. Risk factor definitions

1. Please provide an example calculation of $\sum \rho$ and $\sum \rho(1-x)$ in the "FRTB-Revised SA" worksheet, Panel A (GIRR, Delta risk) in for instance columns L and M, where there is more than one curve within the same bucket?

Answer: An example for $\sum \rho$ would be a product of weighted sensitivities to {BOR1M; Tenor 0.25Yr} and {BOR1M; Tenor 0.5Yr}. An example for $\sum \rho(1-x)$ would be a product of sensitivities to {OIS; Tenor 0.25Y} and {BOR1M; Tenor 0.5Y}. "OIS" refers to a yield curve based on overnight indexed swaps. "BOR" refers to a yield curve based on swaps where the floating leg has a certain interbank-offered rate (e.g. LIBOR or EURIBOR) as floating leg.

(added 27 August 2015)

2. Please confirm how we should treat government bonds (Rates only or Rates + Credit) in SBA calculations. For example, if we have a position on a German Bund and its valuation is off a German Bund Curve, do we treat this as another IR curve within EUR (applying basis, etc) or do we need to decompose into EURIBOR + relevant credit spread curves?

Answer: Please refer to paragraph 59(a)(i) and 59(a)(ii) for detailed guidance. The draft Accord text should perform the decomposition $y=r+cs$ as per paragraph 59(a)(i)). When a bank cannot perform this decomposition owing to data limitations, it should apply the alternative method in paragraph 59(a)(ii). namely the sensitivity to y is allocated to GIRR and to CSR. It is

acknowledged that this alternative method would lead to a double-counting of risks. The baseline prescription is paragraph 59(a)(i).

(added 27 August 2015)

3. Please explain how to map delta risk factors for GIRR and CSR in cases where a sensitivity input relates to a tenor point between two neighbouring prescribed vertices (a.k.a. tenor points)?

Answer: There is no prescription to perform this method of mapping for GIRR or CSR delta risk. Banks may choose to follow the same linear interpolation method as set out for vega risk in paragraph 68, or another method which is consistent with their front office pricing models.

(added 27 August 2015)

4. Paragraph 59(c) appears to suggest that basis spread PV01s must be computed for both "over USD" and "over EUR". Please confirm that PV01s should only be computed to the relevant basis curve?

Answer: Yes, PV01s should only be computed to the relevant basis curve ("over USD" or "over EUR" but not both). For instance, a CH bank trading a JPY/USD cross currency basis swap would have a sensitivity to the JPY/USD basis but not to the JPY/EUR basis.

(added 27 August 2015)

5. Please confirm that: (a) term structure is not recognised as a cross currency basis risk factor in the GIRR risk class; and (b) all cross-currency basis risks for a currency (ie within a GIRR bucket) should be aggregated to one number via a simple sum of weighted sensitivities)?

Answer: The assertion in (a) is correct. With regard to (b), the cross-currency basis risk factor (ie "Curr/USD" and "Curr/EUR") for a currency (ie within a GIRR bucket) should be aggregated via a simple sum of weighted sensitivities. Notwithstanding the correlation specification in paragraph 80, banks are to still report the relevant cross sums in the relevant columns in the "FRTB-Revised SA" worksheet, Panel A, with the sub-header "Curr/USD" or "Curr/EUR".

(added 27 August 2015)

6. Please confirm that: (a) term structure is not recognised as an inflation risk factor in the GIRR risk class; and (b) all inflation risks for a currency (ie within a GIRR bucket) should be aggregated to one number via simple sum of weighted sensitivities?

Answer: With regard to (a) in this question, term structure is not recognised as an inflation risk factor in the GIRR risk class. With regard to (b) in this question, there is only one inflation risk factor per currency. The sensitivity to inflation risk should be aggregated to one number via a simple sum of weighted sensitivities. Note from paragraph 79 that the correlation between an inflation risk factor and other GIRR risk factors within a currency is 40%.

(added 27 August 2015)

7. For a common interest rate option instrument with caps/floors with multiple periods, how are the Vega risk factors to be assigned? For example, an option with a forward-starting 12-month cap on USD 3-month LIBOR starting in one year. This position will have four caplets with periods of three months each. How should Vega be mapped here with respect to option expiry and underlying maturity?

Answer: With regard to the example in this question, option maturity is 1 while the underlying maturity for each caplet should be .25, .5, .75 and 1 (expressed in years). These caplet vega contributions should therefore be mapped to the respective underlying maturity vertices 0.5 and 1 years. Vega contribution at each maturity/residual maturity vertex point is measured.

(added 27 August 2015)

8. For curvature risk treatment of CSR non-securitisations in paragraph 60(c), if a parallel shift of the credit spread curve results in negative forward spreads (ie bootstrapping failure), what should be done? As industry convention is to shock the hazard rates rather than the par spreads, would it be an acceptable alternative to shock the hazard rates (whether or not there is curve failure) by the equivalent amount corresponding to the par spread shock as this will never result in a bootstrapping failure?

Answer: Yes, this approximation is fine for the QIS purposes. Please provide details of what was done in a separate Word document.

(added 27 August 2015)

9. Does paragraph 60(c) confirm that no correlation parameter ρ_{kl} for "different curves" is to be recognised under curvature risk of CSR non-securitisation?

Answer: Yes. For curvature risk of CSR non-securitisation, the correlation ρ_{kl} / basis between two "different curves" as specified in paragraph 84, 85(a) and 86(a) are not applicable.

(added 27 August 2015)

10. For bonds, as specified in paragraph 59(a)(ii) both interest rates and credit sensitivities are capitalised for delta risk in GIRR and CSR. Please confirm that the same is true for curvature and vega risks from a bond option? (ie a bond option should be subject to capital charges for curvature and vega risks under the GIRR and the CSR risk classes)?

Answer: Yes.

(added 27 August 2015)

11. In cases where a firm builds a distinct sovereign bond curve via bootstrapping, and derives PV01s against this, please confirm if PV01 sensitivities for local currency sovereign bonds may be treated as GIRR risk factors only (as opposed to contributing to both GIRR and CSR) such that a firm is not required to allocate LCY sovereign PV01s to the CSR calculation?

Answer: No. Please refer to paragraph 59(a)(ii).

(added 27 August 2015)

12. Paragraph 62(a) states that CSR securitisation (non-CTP) risk factors should be spread curve for the tranche rather than underlying names, but in paragraph 98, correlations are defined between sensitivities to the issuer name. Should sensitivities be computed to tranches or underlying names?

Answer: Paragraph 62(a) is correct. For CSR securitisation (non-CTP), sensitivities should be computed to tranches. The prescribed correlations in paragraph 98 and 98(a) and paragraph 99 and 99(a) should be read with the phrase "issuer name" replaced by "tranche". Paragraph 97 is amended as "... related to the same *securitisation tranche* and the same tenor, but different curves (eg a sensitivity to a given tranche bond curve and a sensitivity to *the CDS curve for the same tranche*)" Paragraph 100 remains unchanged.

(added 27 August 2015)

13. In paragraph 65(a), while delivery location has been specified at city level, some commodities can be delivered across a region (e.g. US Gulf Coast, US Mid-West). How do we treat these locations in the capital calculations?

Answer: In paragraph 65(a), please replace "city" by "same legal terms with respect to the delivery location". For instance, a contract that can be delivered in 5 ports can be considered having the same delivery location as another contract if and only if it can be delivered in the same 5 ports. However, it cannot be considered having the same delivery location as another contract that can be delivered in eg only 4 of those 5 ports.

(added 27 August 2015)

14. Many commodity derivatives such as monthly averaged swaps entail cash flows determined within multiple fixing periods. A literal interpretation of the draft text would not allow partial hedging between two positions in similar swaps having different maturities, and sharing more than one overlapping fixing period. Please confirm that an acceptable interpretation of paragraph 65(a) would be to allow netting of bucketed delta risks tied to future fixings, or groups of fixings such as monthly or quarterly averaging periods?

Answer: For the purposes of the QIS, the time to maturity dimension of the commodity risk factors (specified in paragraph 65(a)) should be the same vertices as those used for GIRR. Specifically, 0 years, 0.25 years, 0.5 years, 1 year, 2 years, 3 years, 5 years, 10 years, 15 years, 20 years, 30 years.

(added 27 August 2015)

15. Paragraph 65(c) states that commodity curvature risk factors are all the commodity spot prices. Please confirm that an acceptable interpretation of the commodity curvature risk factor is to shift a commodity futures/forward curve in parallel?

Answer: For delta risk any vertex above 0 years implicitly introduces a forward commodity price as a risk factor. For curvature the same parallel shift is applied to all risk factors for the delta risk of a commodity. Hence in order to determine CVR_k for a commodity according to paragraph 53(b) the same relative shift is applied to all vertices.

(added 27 August 2015)

3.6. Definitions of the sensitivities

1. How should we calculate vega risk for:
- (a) Options that do not have a maturity?
 - (b) Options that do not have a strike or barrier (eg Callable bond, Makewhole bond, instruments with prepayment optionality)?
 - (c) Options that have multiple strikes or barrier (which strikes and maturities should be used)?
 - (d) Instruments which do not have an implied volatility (ie σ_j)?

Answer: With regard to (a), assign those options to the longest maturity tenor, and assign these options to the residual risks add-on, as per paragraph 58(d); With regard to (b) and (c), compute the vega risk charge as usual, using the mapping to strikes and maturity used internally to price the option, and assign those instruments to the residual risks add-on, as per paragraph 58(d); With regard to (d), do not compute vega risk for such an instrument. Such instruments may not, however, be exempt from delta and curvature risk capital charges.

(added 27 August 2015)

2. In paragraph 66, both the delta and curvature foreign exchange (FX) risk factors are defined in terms of a bank's reporting currency, and not in terms of currency pairs (as is the case for vega risk factors). However, a reduced delta/curvature risk weight is provided for certain currency pairs (footnote 35 to paragraph 119). It is not clear if (a) banks are to consider that any currency appearing in one of the listed pairs is eligible for the reduced risk weight; or (b) banks are to make a distinction between exposures deriving from one of the listed pairs from other exposures?

Note that in the "FRTB-Revised SA" worksheet, Panel G, column M for FX curvature is entitled "Currency Pair" where only single currencies are listed as for delta. Should this read "Currency" rather than "Currency Pair"?

Answer: For this QIS, banks may choose not to scale down the risk weights for FX risk, as allowable under footnote 35 to paragraph 119. Specifically, a flat risk weight of 15% may still be applied to all FX sensitivities or risk exposures. Banks that choose to floor their risk weights for FX and GIRR risk classes are requested to answer the relevant qualitative question(s) in Panel E of "General Info" worksheet.

(added 27 August 2015)

3. For jurisdictions where currency controls are in force, and where a bank manages FX and general interest rate risk using separate yield curves tied to onshore and offshore variants of the same currency, must the two currency variants be counted as belonging to the same risk bucket for GIRR calculation purposes, or must sensitivities for the two variants be mapped into two separate currency risk buckets? What is the corresponding bucketing treatment for onshore and offshore variants of the same national currency for the FX risk component? Examples of national currencies subject to currency controls are Korean Won, Taiwan Dollar, Philippine Peso.

Answer: Correlation parameters/basis risk is disregarded between onshore and offshore curves for the FX risk class, but it must be reflected for the GIRR risk class as per para 59 (a) (iii). For GIRR, the sensitivities to the onshore and offshore variants must be mapped to the same GIRR currency bucket. For the purpose of paragraphs 76, 77 and 78, these different variants would be subject to the "different curve" criterion.

(added 27 August 2015)

3.7. Vega risk sensitivities

1. Please confirm that paragraph 68(b)(v) meant to refer to "...set out in paragraph 68(a)" instead of paragraph 69(a)?

Answer: Yes, this is confirmed.

(added 27 August 2015)

2. Please confirm that implied volatilities should not be allocated / interpolated as the option vega is already being allocated? For example, a 2yr option with Vega Risk of \$100 and implied volatility of 20% will allocate \$50 vega to 1yr and \$50 vega to 3yr. However, the implied volatility of 20% should not be allocated to 1yr (10%) and 2yr (10%) tenors, and the 1yr and 3yr implied volatilities are not impacted by the 2yr implied volatility?

Answer: Yes, the example in this question is correct. Only one mapping allocation should be performed for vega. No mapping allocation should be performed for implied volatility. The product of the decomposed vega and the (un-decomposed) implied volatility at a specific vertex yields the vega risk sensitivity contribution of option j to that vertex. Paragraph 68(b)(i) should be amended as follows:

"The vega risk sensitivity is the product of the vega and the implied volatility of option j at maturity n_j , which has to be mapped to specific vertices as described in Section 3(i). More often the option's maturity does not perfectly coincide with a specified vertex point so the vega risk sensitivity (ie the product of the vega and the implied volatility of option j) has to be decomposed. To perform this decomposition, the bank maps the vega ($\frac{\partial V_j}{\partial \sigma_j}$) for option j to the respective maturity vertices T_1 and T_2 for the relevant risk class by linear interpolation.²²"

(added 27 August 2015)

3. Paragraph 68 (b) provides "detailed specification for how vega risk sensitivities for non-exotic options" are to be derived. Please confirm if exotic options are exempt from vega risk calculation?

Answer: No. The specification in paragraph 68(b) is recommended for all instruments in scope for the vega risk capital charge, as set out in paragraph 49. For supplementary specifications for more complex options, see FAQ 1 in Section 2.6 above.

(added 27 August 2015)

3.8. Treatment of indices and multi-underlying options

1. Please clarify the scope of the delta, vega and curvature risk treatment for indices and multi-underlying options in paragraph 69?

Answer: Indices and multi-underlying options where all constituent/underlyings have delta risk sensitivities of the same sign are to be included within the scope of the delta and vega risk treatment set out in paragraph 69 and paragraph 70. For the QIS, please note that multi-underlying options with delta risk sensitivities of different sign are not subject to the treatment in paragraph 69 and 70; these type of options are excluded from vega risk computations and are subject only to the residual risk add-on (without prejudice to paragraph 58).

The treatment for curvature risk, as set out in paragraph 71, is to be disregarded for this QIS. There are no indices or multi-underlying options that will be subject to a curvature risk capital charge.

(added 27 August 2015)

2. Please clarify the delta risk treatment of indices and multi-underlying options in paragraph 69?

Answer: In paragraph 69(a), the sentence beginning with "A weight..." and ending with "delta risk factor k " should be disregarded. There is no weighting scheme for delta risk of indices and multi-underlying options, since indices are look-through. Instead, delta risk treatment should be based on unweighted delta sensitivities to risk factors for the index constituents.

(added 27 August 2015)

3. Can sensitivities to constituent risk factors from indices and multi-underlying options in paragraph 69 be allowed to net with sensitivities to single name instruments without restrictions?

Answer: Yes.

(added 27 August 2015)

4. Please clarify the delta risk treatment of indices and multi-underlying options in paragraph 70?

Answer: The text in paragraph 70(a) should be replaced with the following treatment:

"Index options and similar multi-underlying options are usually priced based on the implied volatility of the index option (rather than the implied volatility of its constituents). A "weight" is

to be determined by dividing each delta sensitivity to risk factors of each constituent by the simple sum of all the delta sensitivities to the constituents. In notational form, this “delta weighted ratio” can be expressed as follows:

$$w_{ck} = s_{ck} / \sum_k s_{ck}$$

where w_{ck} is the delta-weighted ratio and s_{ck} is the sensitivity of index constituent instrument c to delta risk factor k .

The vega risk sensitivity is to be calculated by multiplying the delta-weighted ratio w_{ck} by the vega $\frac{\partial V_j}{\partial \sigma_j}$ and the implied volatility σ_j of index option j :

$$vs_k = w_{ck} \cdot \frac{\partial V_j}{\partial \sigma_j} \cdot \sigma_j$$

Consistent with paragraph 68, the vega risk sensitivity of index option j to maturity node n_j with respect to the risk factor k is $w_{ck} \left(\frac{\partial V_j}{\partial \sigma_j} \cdot \sigma_j \right)_{n_j}$.

As stated above, multi-underlying options with delta risk sensitivities of different sign are not subject to the treatment in paragraph 69 and 70. These type of options are excluded from vega risk computations and are subject only to the residual risk add-on (without prejudice to paragraph 58).”

(added 27 August 2015)

5. With regard to paragraph 71, the specification is unclear in the context of a multi-sector index where constituents are known to belong to different delta risk categories with differing risk weights. It is unclear which risk weight must then be applied in order to derive the relevant CVR_k curvature risk elements such that curvature risk contributions are consistent with other risk factors?

Answer: As mentioned in FAQ 2.8.1, for this QIS, please disregard paragraph 71 in its entirety.

(added 27 August 2015)

3.9. Prescribed delta risk weights and correlations

1. Please confirm how the differentiated risk weights for GIRR (see footnote 26, paragraph 75(b)) and for FX (see footnote 35, paragraph 119(a)) are to be applied?

Answer: For this QIS, banks may choose not to downward-scale the risk weights for GIRR and FX risk, as allowable under paragraph 75(b) and paragraph 119(a) and the corresponding footnotes to these paragraphs. Banks that choose to floor their risk weights for FX and GIRR risk classes are requested to answer the relevant qualitative question(s) in Panel E of “General Info” worksheet.

(added 27 August 2015)

2. Please clarify if there is a consistent treatment for the prescribed correlations of the buckets “other”?

Answer: All the “other” buckets in the CSR (securitisation and non-securitisation) and the Equity risk classes, should have no within-bucket correlations, ie ρ_{kl} applied ie ρ_{kl} all circumstances for

delta and vega risk. The capital charge for curvature risk does not apply. The bucket-level capital requirement for the delta and vega risk aggregation formula would be equal to the simple sum of the absolute values of the net weighted sensitivities allocated to this bucket:

$$K_{b(\text{other bucket})} = \sum_k |WS_k|$$

For the Commodity risk class, the treatment of the "other commodity" bucket remains unchanged; $\rho_{kl} = 15\%$. The "other commodity" bucket is to be treated like any other bucket within the Commodity risk class.

(added 27 August 2015)

3. For Equity risk, paragraph 108 and paragraph 111 seem to contradict each other: for the same basis (spot/repo). What is the correct correlation to apply?

Answer: Paragraph 108 is to be amended as follows: "The correlation parameter ρ_{kl} is set at **99.90%** between two sensitivities WS_k and WS_l within the same bucket where one is a sensitivity to an Equity spot price and the other a sensitivity to an Equity repo rate, where both are related to the same Equity issuer name."

Paragraph 111 is to remain unchanged.

(added 27 August 2015)

4. For Commodity risk, can it be assumed that for the same commodity with different grade/location/maturity the correlation is 99.90%?

Answer: Yes, paragraphs 115 and 116 are modified as follows:

"115. Between two sensitivities WS_k and WS_l to the same or different physical commodities within the same commodity bucket that differ by any one of the following three factors: (i) contract grade of a physical commodity, (ii) contractual delivery location of a physical commodity or (ii) time to maturity of the traded instrument (same vertices as prescribed for GIRR), correlation ρ_{kl} is set at 99.90%.

115(a). Between two sensitivities WS_k and WS_l to different contract grades of the same or different physical commodities within the same commodity bucket, the correlation ρ_{kl} is set at the parameters specified for each bucket in the table below.

.....

116 As indicated in the table below certain commodity categories should be read with a wider meaning:

1	Coal	solid combustibles (e.g. coal, charcoal, wood, nuclear fuel)
2	Crude oil	liquid combustibles (e.g. crude oil, heating oil, gasoline, diesel, aviation fuel, bioethanol)
6	Natural gas	gaseous combustibles (e.g. natural gas, methane, city gas)

(added 27 August 2015)

5. For Delta CSR Securitisation (CTP), do we need to distinguish genuine single name exposures from single name exposures derived from index positions? Can these be netted against each other without restriction? We would like to have explicit guidance that index constituents can be netted with single names without restriction.

Answer: For the CTP, sensitivities to index constituents and sensitivities to single names are not allowed to be netted without restrictions. Please refer to paragraph ___ for more details.

(added 27 August 2015)

6. For Delta CSR Securitisation (non-CTP), How do banks differentiate between senior investment grade and non-senior investment grade? How to differentiate between prime, mid-prime and sub-prime?

Answer: Please use market conventions for the purpose of the QIS.

(added 27 August 2015)

3.10. Prescribed vega risk weights and correlations

1. For Vega risk, the GIRR and CSR risk weights are derived from a 10 days liquidity horizon risk weight of 3.2 bp [paragraph 123]. However Vega sensitivities are defined as relative Vega sensitivities for all asset classes [paragraph 68(a)]. Consequently we do not understand the low 10 days LH Vega risk weight for GIRR and CSR?

Answer: This is a valid observation. Paragraph 123 is to be modified as follows: only one RW_{σ} is kept, which is 55%. The 0.0032 risk weight should be disregarded: since the vega sensitivity is now defined as the product of the vega and the implied volatility, it is not necessary to have a normality-assumption-based calibration.

(added 27 August 2015)

2. What delta correlation ($\rho_{kl}^{(DELTA)}$) should be used in the Vega Risk correlation calculations for CSR and Commodity risk classes? For example, in CSR non-securitisations, when we aggregate Apple 0.25Y and Apple 1Y vega risks, should we use same-tenor, same-curve (100%) delta correlations as the vega correlations already account for the differences in tenor?

Answer: These concerns are valid.

Paragraph 124 is amended as follows:

“Between vega risk sensitivities within the same bucket of the GIRR risk class, the correlation parameter ρ_{kl} is set as follows:

$$\rho_{kl} = \min [\rho_{kl}^{(option\ maturity)} \cdot \rho_{kl}^{(underlying\ maturity)}; 1]$$

where:

- $\rho_{kl}^{(option\ maturity)}$ is equal to $e^{-\alpha \frac{|T_k - T_j|}{\min\{T_k, T_j\}}}$ where α is set at 1%, T_k (respectively T_j) is the maturity of the option from which the vega sensitivity VR_k (VR_j) is derived, expressed as a number of years;
- $\rho_{kl}^{(underlying\ maturity)}$ is equal to $e^{-\alpha \frac{|T_k^U - T_j^U|}{\min\{T_k^U, T_j^U\}}}$, where α is set at 1%, T_k^U (respectively T_j^U) is the maturity of the underlying of option from which the sensitivity VR_k (VR_j) is derived, expressed as a number of years after the maturity of the option.”

Paragraph 125 is also amended as follows:

“Between vega risk sensitivities within a bucket of the other risk classes (ie not GIRR), the correlation parameter ρ_{kl} is set as follows:

$$\rho_{kl} = \min[\rho_{kl}^{(DELTA)} \cdot \rho_{kl}^{(option\ maturity)}, 1]$$

where:

- $\rho_{kl}^{(DELTA)}$ is equal to the correlation that applies between the two delta risk factors. For instance, if k is the vega to equity option X and l is the vega to equity option Y; and
- $\rho_{kl}^{(option\ maturity)}$ is defined as in paragraph 124.”

(added 27 August 2015)

3.11. Prescribed curvature risk weights and correlations

1. For curvature calculations, should we cap the downward shocks so that the IR curve that results from these shocks is floored at 0 (as previously indicated in the previous trading book QIS but not in the current QIS instructions) and, if so, should the same be done for Credit Curves?

Answer: No, there is no floor for downward shocks in curvature risk calculations.

(added 27 August 2015)

3.12. The default risk charge

1. Please provide guidance/examples of how to compute JTD amounts by individual constituent issuer legal entity for traded credit and equity derivatives which are tied to indices.

Answer: Please apply the look-through approach.

Default risk (non-securitisation) treatment

2. With regard to Default risk non-securitisation (paragraphs 133 to 150), For non-vanilla instruments the formulation for JTD does not always align with the losses that would occur in an event of default. We would like clarification that JTD is the change in MTM on the event of default if the credit name's instrument recovers at $(1 - LGD)$. E.g. FX-Credit Hybrid Option where the cash flows are swap of cash flows, long EUR coupons and short USD coupons with a knockout feature that ends cash flows on an event of default of a particular obligor. This instrument is sensitive to the event of default but not to the eventual recovery rate of that obligor. The P&L on default would be the PV of loss of cash flows from future swap payment. Would it be consistent with the spirit of the instructions if for non-vanilla instruments to calculate the P&L/Change in MTM that occurs if there is an instantaneous default with LGD applied to the underlying credit (ignoring if there is not sensitivity the recovery rate to that contract)?

Can we confirm that we would be following the instructions as it is intended if JTD is calculated as the P&L generated in the case of an instantaneous default of the obligor with the application of LGD prescribed (or alternatively a recovery rate of 100%-LGD). I.e. $JTD = V(\text{current}) - V(\text{event of default, Recovery} = 1 - LGD)$?

Answer: Regarding exotic derivatives, when the price of the instrument is obviously not linked to the recovery rate of the defaulter, there should be no multiplication of the notional by the LGD. Please compute JTD as specified in the text. Though your proposal of formulation may

have merits as a more general specification, the formula in paragraph 139 has the advantage of being more specific and applicable in most cases.

(added 27 August 2015)

3. Should default risk exposure be calculated post non-default shocks to avoid double counting of exposure already capitalized in the non-default components as the total SA capital plus default risk capital will always exceed market value for defaulted names? For example, \$100mm CCC Rated Equity in bucket 9 - delta + default risk capital = 120mm, which exceeds market exposure. \$100mm defaulted equity in bucket 9 - delta + default risk capital = \$170mm, which exceeds market exposure.

Answer: No, non-default and DRC should be computed independently.

(added 27 August 2015)

4. Could maturity weighting (refer to paragraphs 143 and 145) be clarified? It is unclear what default exposures should be maturity weighted:
- (a) From paragraph 143 it seems that all default exposures below 1 year shall be maturity weighted though long exposures maturity weight shall be floored to 0.25?
- (b) From paragraph 145, it seems that below 1 year long exposures should not be maturity weighted if matched by an above 1 year short exposure (no flooring seems to apply)?

Answer: Regarding (a), the floor should be kept, meaning that the positions having shorter-than-3M remaining maturity would be regarded as having a remaining maturity of 3M for the purpose of the DRC.

Regarding (b), maturity scaling is changed as follows. Instead of the current asymmetric scaling (ie only the short positions are downward scaled), a symmetric scaling should be performed: both the long and short positions would be scaled. E.g. a portfolio comprising a long position with 9M maturity, and a short position with 1Y maturity, both positions having the same notional, would not give rise to any default risk charge: the portfolio is deemed fully hedged with respect to default risk.

(added 27 August 2015)

5. Short term lending seems to refer to a strategy rather than a product set. What criteria should we apply to identify those products? Can you provide a list of specific examples of "short term lending"? Do those products also have a 3 month floor if used outside of a short term lending strategy? Are all products within the short term lending strategy also subject to the 3month floor?

Answer: The notion of "short term lending" is not linked to a product or a strategy. It should be determined by the maturity of the contract. It is any sort of product with maturity less than 3M.

(added 27 August 2015)

6. Please illustrate in the proposed SA default Risk charges for a TRS with one month maturity hedged with the underlying equity or underlying bond with over 1 year maturity. Would this charge change in any way if there were sufficient legal terms on the TRS such that there is no settlement risk at swap maturity as the swap is terminated based on executed price of the stock/bond hedge and any unwind of the TRS can be delayed (beyond swap maturity date) in event of hedge disruption until stock/bond can be liquidated?

Answer: The Net JTD for the TRS is 0. In the general case, if the contractual/legal terms of the derivative allow for the unwinding of both legs of the position at the time of expiry of the first

to mature with no exposure to default risk of the underlying credit beyond that point, then the JTD for the maturity mismatched position is equal to zero.

(added 27 August 2015)

Default risk (securitisation: non CTP)

7. What is the definition of JTD for tranche positions? Can you confirm that we take (tranche notional+NPV) for JTD, rather than the sum of the name by name JTD's of the reference names.

Answer: The definition of JTD for tranche positions is their market value (refer to paragraph 151).

(added 27 August 2015)

8. For default risk (CTP) each index is regarded as its own bucket, and the different indices are listed. Please confirm the approach to allocate non-index instruments (single name hedges / bespoke tranches) to one or more index buckets.

Answer: Bespoke tranches should be allocated to the index bucket of the index they are a bespoke tranche of. For instance, the bespoke tranche 5%-8% of a given index should be allocated to the bucket of that index.

(added 27 August 2015)

9. Paragraph 162 states to use banking book treatment to calculate default risk weights for tranche products in CTP. Please confirm if we should use the corresponding banking book treatment for the non-tranche products in CTP?

Answer: For the tranching products, please use the risk weight as per paragraph 146. For the non-tranching products, please derive the risk weight using the banking book treatment.

(added 27 August 2015)

Default risk (securitisation: CTP)

10. Please confirm the correct course of actions to perform offsetting for Default Risk calculations for securitizations CTP positions. Paragraph 161(b) first says "when perfect replication is not possible, then offsetting is not allowed". Next line says "Where long/shorts are otherwise equivalent except for a residual component, the net amount must show the residual exposure." This suggests that we can offset when long/shorts are not perfect replications, contradicting the earlier statement.

Answer: The first sentence referenced contains a typo. It should have included the following clause at the end of the sentence: "except as indicated in the next sentence."

(added 27 August 2015)

11. In paragraph 159, the exposure amount is the market value of the exposure. Could you please confirm that the same is true for non-securitisations in the CTP (ie single-name and index hedges)?

Answer: Yes.

(added 27 August 2015)

12. In paragraph 164, please confirm if the “net short JTD_i ” within the formula for DRC_b for the CTP should be reflected as the absolute value of the “net short JTD_i ”?

Answer: No, the absolute value of “net short JTD_i ” should not be included in the DRC_b formula. The default risk approach provides for a cross-index partial hedge benefit and the DRC_b formula as it is written reflects this partial hedge benefit.

(added 27 August 2015)

4. The proposed internal models approach for market risk

1. Paragraph 171 (d) page 92 it states that the “reduced set of risk factors...must have a minimum observation history of [10] years.” Paragraph 171 (f), page 92 states that “The observation horizon for determining the most stressful 12 months must, at a minimum, span back to 2005” The above statement are inconsistent between each other.

Answer: Banks should ensure that their observation periods for their reduced set of risk factors satisfy both paragraph references.

(added 27 August 2015)

2. ES measure must be calibrated to the period of stress - based on which methodology should we identify the 12-months stressed period over the past 10 years? The only ref on this is under (f) 'For measures based on stressed observations (ESR,S), banks must identify the 12-month period of stress over the observation horizon in which the portfolio experiences the largest loss.' - does it imply we must compute 12 month rolling window ES from 2005 onwards and the period which results in the largest ES should be selected as a stress period? If that is the case, do we also have to use ES adjusted for liquidity horizons?

Answer: Yes to each assertion in this question.

(added 27 August 2015)

3. As per the prescribed formula in paragraph 171(j), is the backtesting multiplier m_c to be applied to ACC_{avg} which includes DRC and standard rules capital charge.

Answer: For the QIS, banks should disregard the factor m_c in paragraph 171(j). This will be clarified in the final standards text but should not affect banks' data submissions in this QIS.

(added 27 August 2015)

4. Please specify the granularity at which the LH for risk factors can be increased for a portfolio. Please confirm this can be done at the individual risk factor level?

Answer: Confirmed.

(added 27 August 2015)

5. On which liquidity horizon should mono-currency basis and cross-currency basis be assigned?

Answer: LH should be consistent with GIRR.

(added 27 August 2015)

6. Please confirm how to shock risk factors that cover different asset classes (correlation between FX and interest rates?)

Answer: Have a default liquidity horizon of 250 days.

(added 27 August 2015)

7. Please confirm that the LH of Credit Spread Volatilities risk factors would have the same liquidity horizon as the "Credit (other)" category?

Answer: Yes.

(added 27 August 2015)

8. Please confirm that the LH of Recovery Rates risk factors can take on the LH of the underlying credit spread (i.e. bond with recovery risk would not split the credit risk and recovery rate risk into two different LH)

Answer: Yes.

(added 27 August 2015)

9. May liquidity horizons be capped at instrument maturity (For example, a 6M Credit Index Option will be subject to 250D LH for volatilities)?

Answer: Liquidity horizons are capped at the maturity of the instrument.

(added 27 August 2015)

10. Are sovereigns limited to government issuers only or do they include agencies / other issuers backed by government?

Answer: There needs to be an explicit guarantee that the agency is backed by the government for the instrument to be treated as a sovereign. For example, in the U.S. agency RMBS backed by Fannie Mae and Freddie Mac will not be treated as sovereigns since there is no explicit guarantee by the U.S. government.

(added 27 August 2015)

11. Please confirm all specific underlyings that come under the 'Energy' bucket?

Answer: The energy bucket includes Oil, Natural Gas and Electricity underlyings.

(added 27 August 2015)

12. There no information on the lengths of the current period used to compute 1-day VaR at both 99th and 97.5th percentile? 1-year, 2-years, 3-years?

Answer: One year observation period.

(added 27 August 2015)

13. For IDR, "the bank must assume constant positions over the one-year horizon". Please provide guidance on the requirements implied by the statement. For reference, EBA guidelines on the Incremental Default and Migration Risk Charge (IRC) (16.05.2012) indicates (p16, 18.2) "When assuming a one-year constant position, which implies not adopting liquidity horizons, institutions should consistently apply to all IRC positions an instantaneous shock over the one-year capital horizon (referred to as 'one-year constant position assumption'). Also, on p39 this is further clarified: "The issue of maturity mismatches occurs only if liquidity horizons are defined, as per wording in the CRD III / CRR. It is not an issue in the case of a constant position assumption. We agree that a liquidity horizon of one year for all positions is not different from the constant position assumption over one year." Can you confirm that "constant position" for IDR should be understood as applying an instantaneous shock over the one-year capital horizon and that maturity mismatches, e.g. between trades and their hedges, are not to be modeled?

Answer: The following enhancements to Paragraph 176(j) in red resolve this first issue: The model must capture any material mismatch between a position and its hedge. With respect to default risk within the one-year capital horizon, the model must account for the risk in the

timing of defaults to capture the relative risk from the maturity mismatch of long and short positions of less than one year maturity.

With respect to the instantaneous shock, this is correct: Instantaneous shocks should be applied over the one-year capital horizon.

(added 27 August 2015)

14. Please confirm if the simplified approach for equity derivatives with multiple underlyings may also be used for credit derivatives with multiple underlyings (e.g. Credit Index Options)

Answer: No. The simplified approach for equity derivatives cannot be used for credit derivatives.

(added 27 August 2015)

15. Paragraph 180 states that: "Each non-modellable risk factor is to be capitalised using a stress scenario that is calibrated to be at least as prudent as the expected shortfall calibration used for modelled risks (i.e. a loss calibrated to a 97.5% confidence threshold over a period of extreme stress for the given risk factor)." For material exposures to interest rate movements in the major currencies and markets, banks must model the yield curve using a minimum of [six] risk factors. Please clarify if it is really required to pick a (different) stressed period specifically for each NMRF, in the case where a risk factor is defined as 6 segments of 1 curve.

Answer: For the quantitative portion of the QIS, banks should measure the impact of NMRFs applying the current rules text, as written. Banks are encouraged to consider alternative rules specifications that are explored in the qualitative questionnaire.

(added 27 August 2015)

At what frequency do banks need to test the NMRF criteria to identify which risk factors are non-modellable?

Answer: Banks should assume that NMRF criteria need to be assessed on a monthly basis.

(added 27 August 2015)

16. For bonds, both interest rates and credit sensitivities are capitalized for delta risk in GIRR and CSR. Do you confirm that the same is true for curvature and vega risks, a bond option resulting in a curvature exposure in both the GIRR asset class and the CSR risk classes. Can general market risk plus idiosyncratic risk for a portfolio all be considered modellable provided there is a "sufficient set of representative transactions" satisfying the real price criteria?

'Scenario: There is a population of bonds for which a fraction of these bonds do not have sufficient real prices to be modellable themselves. For the bonds without sufficient real prices the firm proceeds to utilize a statistical technique (such as a factor model) to capture the general market risk as well as the idiosyncratic risk of the bonds. For the idiosyncratic component is modelled by using the distribution of idiosyncratic risks observed in the modellable bonds of the same sector, e.g. through a Monte Carlo simulation. Please confirm that these idiosyncratic risk factors are modellable as they are derived from only modellable risk factors. This technique is accepted in specific risk modeling under the current regime.

Please confirm that the above technique may be applied so that new debt or equity issuances could be considered modellable?

Answer: The idiosyncratic risk factors arising from this monte carlo technique are modellable in the context of the bonds for which there are sufficient real prices. For bonds that do not have sufficient real prices, but banks model the distribution of idiosyncratic risks observed in the same sector, such a proxy would be considered modellable. However, there remains a basis between any idiosyncratic sector proxy mapping from the actual bond prices. This basis is still

considered non-modellable – see footnote 45. By analogy, new debt and equity issuances (whether directly or through remaining basis post-proxy) are not considered modellable either.

(added 27 August 2015)

17. In paragraph 176(i) the text states that “Correlations must be based on a period of stress estimated over a 10-year time horizon and be based on a [one]-year liquidity horizon” (Based on listed equity prices (or credit spreads as fall-back))”.

How should “liquidity horizon” be interpreted in this context? For example:

- (a) Should correlations be calibrated over a one-year stress period (using daily/monthly co-movements) which took place within the last ten years?; or;
- (b) Should correlations be calibrated over a ten year period which includes a one-year stress period using annual co-movements?
- (c) Should correlations be calibrated over a ten year period which includes a one-year stress period using daily/weekly/monthly/quarterly co-movements scaled to a yearly period?

Answer: The second answer, (b), annual co-movements.

(added 27 August 2015)

18. In paragraph 176(e), the text states that “A bank must assume constant positions over the one-year horizon”; in paragraph 176(j), the text states that “The model must capture any material mismatch between a position and its hedge” and in paragraph 176(i), the text states “Firms need to reflect all significant basis risks in recognising these correlations, including, for example, maturity mismatches, internal or external ratings, vintage etc.”

How should the requirement to consider maturity mismatches be modelled under the constant positions approach.

- (a) Can it be neglected?
- (b) Should default probabilities be adjusted to the remaining lifetime if the remaining lifetime is below 1 year (i.e. constant position over min (maturity, one-year horizon)? or
- (c) Should the same concept of scaling exposure like in the proposed standardised approach be applied: “An exposure to an obligor comprising a mix of long and short positions with a maturity less than 1y should be weighted by the ratio of the positions’ maturity relative to the capital horizon [...] In the case of long and short offsetting positions where both have a maturity under one year, the scaling can be applied to both the long and short positions.”

Answer: On (a), no it cannot be neglected. On (b), yes. On (c), do not apply the weighting approach in the proposed standardised approach. Paragraph (j) should be augmented by:

“With respect to such mismatch, the model must also account for the relative risk in maturity mismatched long/short positions from the timing of defaults within the one year capital horizon.” The constant position specification was intended to deny any capital benefit for risk management actions a firm might take in the future. Specifically, if the firm is following a dynamic hedging strategy, the firm cannot assume that future market conditions will allow the execution of the hedge adjustments when they are needed. Similarly, in the case of a 3-month position hedging a one year position, the firm is exposed to the risk of a change in monthly incremental default rates between month three and twelve; and the firm cannot assume that the rollover/replacement cost of the hedge is riskless.

(added 27 August 2015)

19. In paragraph 176(t), the text states that: "The LGD should reflect the type and seniority of the position and may not be less than zero." How should the reference to LGD in this context be interpreted?

"LGD = 1 – recovery rate"? or

"LGD = the loss from the instrument"?

Answer: LGD = 1 – recovery rate.

(added 27 August 2015)

20. In paragraph 176(s) & (t) the text states that IRBA PDs / LGDs "must be used" and concludes with PDs / LGDs "provided by external sources may also be used by institutions". Please confirm that if the institution solely uses external ratings & LGDs to risk manage the IDR portfolio then it can continue to use them also for capital calculation and is not required to use IRBA parameters for those issuers where available.

Answer: Paragraph 176 (s) and (t) explicitly state that a bank must use data for PD and LGD based on an approved IRB approach if that information is available. Banks should be mindful of paragraph (u) and establish a hierarchy in order to prevent cherry picking.

(added 27 August 2015)

5. The proposed credit valuation adjustment (CVA) risk framework

1. The QIS template requests data on CVA capital charges on the largest 5 counterparties. Do the counterparties in the "largest 5" worksheets need to be selected from the counterparties in the "Top 50" worksheet? For example, if the top 50 counterparties only include two of the largest 5 liquid sovereigns for a bank, should the bank instead select the remaining 3 counterparties from the top 50?

Answer: No. Counterparties included in the "largest 5" worksheets do not need to be selected from the counterparties in the "Top 50" worksheet.

(added 27 August 2015)

2. In the July 2015 consultative document *Review of the credit valuation adjustment (CVA) risk framework*, under "Scope of application" (page 5), it is stated that qualified central counterparties are excluded from scope. In the QIS instructions "clearing houses" are viewed as "other financials" (page 12). Please confirm that qualified central counterparties are excluded from the scope of the QIS?

Answer: Yes, qualified counterparties are excluded as per the text referenced from the July 2015 consultative document.

(added 27 August 2015)

3. In the BA-CVA formula (page 28 of the July 2015 consultative document), M_{NS} is defined as the effective maturity for netting set NS. Under the current Basel III standardised method for CVA, a 5 year cap on effective maturity should not be applied. Please confirm if this treatment carries over to the proposed BA-CVA approach?

Answer: Yes, for the proposed BA-CVA approach, M_{NS} should not be capped at 5 years.

(added 27 August 2015)

4. In the Basel III standardised method for CVA, exposure at default (EAD) and the notionals of single-name and credit index hedges are discounted with an explicit discount factor $(1 - \exp(-0.05 * Mi)) / (0.05 * Mi)$. Under the revised framework, it is explicitly mentioned that the notionals of single-name and credit index hedges are discounted but no discount factor is provided. Please confirm if and how the discount factor should be applied to the notionals and to EAD?

Answer: Apply the discount factor $(1 - \exp(-0.05 * Mi)) / (0.05 * Mi)$ from the current Basel III standardised CVA method to notionals of single-name and credit index hedges, as well as to non-IMM (ie SA-CCR) EADs. This discount factor should not be applied to IMM EAD since the effective maturity calculation under IMM already incorporates a method for discounting.

(added 27 August 2015)

5. In determining the supervisory risk weight, the Basel III standardised method for CVA allows the banks to refer to internal ratings when a counterparty does not have an external rating. In the proposed BA-CVA approach set out in the July 2015 consultative paper, please clarify whether banks may still refer to internal ratings in similar circumstances?

Answer: Apply the same approach set out in the current Basel III standardised method for CVA. Specifically, when a counterparty does not have an external rating, the bank must, subject to supervisory approval, map the internal rating of the counterparty to one of the external ratings.

(added 27 August 2015)