Part 4 (STC approach), Part 5 (BSC approach) and Part 6 (IRB approach)

1. **Capital treatment of recognized credit derivative contracts** [CCR FAQ[1] Q5.11]

1.1 The Basel Committee has clarified that if a bank hedges its loan exposure with a credit default swap ("CDS") cleared through a central counterparty ("CCP"), the bank may substitute the applicable risk-weight of the CCP (i.e. 2% or 4%) if the CDS is eligible for the adoption of the "substitution approach" under the Basel II framework[2]. In other words, if the CDS is a recognized credit derivative contract under the Banking (Capital) Rules ("BCRs"), an AI may substitute the risk-weight of the CCP that clears the CDS for the risk-weight that would otherwise apply in respect of the loan exposure. However, §100(1) and §134(1) of the BCRs (which provide that an AI may allocate the attributed risk-weight of the credit protection provider to an exposure covered by a recognized credit derivative contract) are not able to accommodate this treatment because "credit protection provider", is defined in this context, as the protection seller under the contract and not the CCP which clears the contract. In order to incorporate the clarification issued by the Basel Committee, the HKMA proposes to revise §100 and §101 (STC approach) and §134 and §135 (BSC approach), and make corresponding changes to §215, §216 and §217 (IRB approach), as set out below:

1.2 **§100**

(a) In §100(1) and (2), replace "(8) and (9)" with "(8), (9) and (10)".

(b) Add a new subsection (10) along the following lines:

(i) Where an authorized institution's exposure is covered by a recognized credit derivative contract cleared by a qualifying CCP (within the meaning of §226V(1)), the institution may allocate to the exposure or the credit protection covered portion of the exposure-

(A) a risk-weight of 2% if the institution-

- is a clearing member of the qualifying CCP; or
- is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) are met;

(B) a risk-weight of 4% if the institution is a client of a clearing member of the qualifying CCP and all the conditions set out

[1] "CCR FAQ" refers to the document "Basel III counterparty credit risk and exposures to central counterparties – Frequently asked questions" issued by the Basel Committee in December 2012 which can be accessed at http://www.bis.org/publ/bcbs237.pdf.

[2] "Basel II framework" refers to the document entitled "International Convergence of Capital Measurement and Capital Standards – A Revised Framework (Comprehensive Version)" issued by the Basel Committee in June 2006 (http://www.bis.org/publ/bcbs128.pdf).

in section 226ZA(6) (excluding the condition set out in section 226ZA(6)(a)(iii)) are met.

1.3 **§101**

(a) In §101(3), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(b) In §101(4), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(c) In §101(6), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(d) Add a new subsection (9) along the following lines:

(i) For the purposes of subsections (3), (4) and (6), if the credit derivative contract concerned is cleared by a qualifying CCP (within the meaning of §226V(1)), the reference to "the attributed risk-weight of the credit protection provider" in these subsections, may be construed to mean-

(A) "a risk-weight of 2%" if the authorized institution-

- is a clearing member of the qualifying CCP; or
- is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) are met; or

(B) "a risk-weight of 4%" if the authorized institution is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) (excluding the condition set out in section 226ZA(6)(a)(iii)) are met.

1.4 **§134**

(a) In §134(1), replace "(5) and (6)" with "(5), (6) and (7)";

(b) Add a new subsection (7) along the lines of the proposed §100(10).

1.5 **§135**

(a) In §135(3), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(b) In §135(4), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(c) In §135(6), add "Subject to subsection (9)" before "Where the credit protection in respect of …";

(d) Add a new subsection (9) along the lines of the proposed §101(9):

1.6 **§215**

(a) In §215(b), add "subject to sections 216(3B) and 217(5) and" before "to the extent", to accommodate the proposed addition of §216(3B) and §217(5) below.

1.7 **§216**

(a) In §216(1), after "subsections (2), (3), (3A)," add "(3B),";

(b) In §216(2)(a), replace "subsections (3) and (3A)" with "subsections (3), (3A) and (3B)";

(c) In §216(3), replace "An" with "Subject to subsection (3B), an"; and

(d) After §216(3A), add §216(3B) along the following lines-

"Where an authorized institution's exposure is covered by a recognized credit derivative contract cleared by a qualifying CCP (within the meaning of §226V(1)), the institution may allocate to the covered portion–

(a) a risk-weight of 2% if the institution-

(i) is a clearing member of the qualifying CCP; or

(ii) is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) are met;

(b) a risk-weight of 4% if the institution is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) (excluding the condition set out in section 226ZA(6)(a)(iii)) are met. ".

1.8 **§217**

(a) In §217(1), replace "subsection (2) and sections 210(2) and 215" with "subsections (2) and (5)"; and

(b) After §217(4), add §217(5) along the following lines-

"Where an authorized institution's exposure is covered by a recognized credit derivative contract cleared by a qualifying CCP (within the meaning of §226V(1)), the institution may allocate to the covered portion as determined in accordance with section 216(2) –

(a) a risk-weight of 2% if the institution-

(i) is a clearing member of the qualifying CCP; or

(ii) is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) are met;

(b) a risk-weight of 4% if the institution is a client of a clearing member of the qualifying CCP and all the conditions set out in section 226ZA(6) (excluding the condition set out in section 226ZA(6)(a)(iii)) are met.”.

The reasoning behind removing the cross-references to §210(2) and §215 is that §210 is a general provision that applies to all IRB AIs that adopt Division 10 of Part 6 of the BCRs, and §215 is a general provision that applies to IRB AIs that adopt the substitution framework under Division 10 of Part 6 of the BCRs. It is therefore not considered necessary to explicitly indicate that §217(1) is subject to §210(2) and §215. Also, retention of the cross- references may in future create some ambiguity in respect of the applicability of other provisions under §210. §217 is and will continue to be subject to, inter alia, §210 and §215.

Part 6A Division 3 (CVA capital charge)

2. **Section 226P Advanced CVA method** [CCR FAQ Q2c.4]

2.1 The Basel Committee has clarified that CDS swaptions (i.e. options on single-name or index credit default swaps) can be considered as eligible CVA hedges and the VaR model of banks that use the Advanced CVA method should properly capture the non-linear risk of swaptions. Hence, the HKMA proposes to amend §226P(2) of the BCRs by adding a new paragraph (c) along the following lines:

> “it properly captures the non-linear risk of options on credit default swaps if, in accordance with subsection (3), the institution includes eligible CVA hedges that consist of such options in the CVA capital charge calculation for the purpose of reducing the institution’s CVA capital charge.”.

3. **Section 226S Standardized CVA method**

Hedging instruments other than credit default swaps [CCR FAQ Q1.1 and 2c.4]

3.1 The Basel Committee has clarified that short bond positions and CDS swaptions can be considered as eligible CVA hedges under certain circumstances. In order to cater for these hedging instruments, the HKMA proposes to make the following changes to §226S of the BCRs[*]-

[*] BCR text proposed to be deleted is highlighted in red and strikethrough mode; proposed new text is highlighted in blue and underlined.

(a) Amend paragraph (d) in Formula 23J as follows:

"B_i is the notional amount of a single-name eligible CVA hedge referencing~~credit default swap, with~~ counterparty "*i*" ~~as the reference entity,~~ purchased for hedging CVA risk but that notional amount must be discounted by a factor that is equal to $(1-\exp(-0.05M_i^{hedge}))/(0.05M_i^{hedge})$;";

(b) Amend paragraph (e) in Formula 23J as follows:

"B_{ind} is the notional amount of an eligible CVA hedge referencing ~~index credit default swap on~~ index "*ind*" purchased for hedging CVA risk but—

(i) the authorized institution must discount the notional amount by a factor that is equal to $(1-\exp(-0.05M_{ind}))/(0.05M_{ind})$;

(ii) if counterparty "*i*" is a constituent of index "*ind*", the notional amount attributable to that counterparty (based on its weight in the index ~~credit default swap~~eligible CVA hedge concerned) may, with the prior consent of the Monetary Authority, be subtracted by the authorized institution from the notional amount of the index eligible CVA ~~swap~~hedge and be treated by the institution as a single-name ~~credit default swap~~eligible CVA hedge ~~on~~for that counterparty (that is, may be included in the calculation of B_i) with maturity based on the maturity of index "*ind*";";

(c) Amend paragraph (h) in Formula 23J as follows:

"M_i^{hedge} is the maturity of the single-name eligible CVA hedge~~credit default swap~~ referred to in paragraph (d); and";

(d) Amend paragraph (i) in Formula 23J as follows:

"M_{ind} is the maturity of the index eligible CVA hedge~~credit default swap~~ referred to in paragraph (e).";

(e) Amend subsection (4) as follows:

"An authorized institution must, if there is more than one single-name eligible CVA hedge~~credit default swap~~ purchased for hedging the CVA risk in respect of counterparty "*i*", construe the expression $M_i^{hedge} \cdot B_i$ in Formula 23J as the sum of the quantities $M_i^{hedge} \cdot B_i$ calculated for the ~~swaps~~hedges.";

(f) Amend subsection (5) as follows:

> "An authorized institution must, if there is more than one index eligible CVA hedge~~credit default swap~~ purchased for hedging the CVA risk, construe the expression $M_{ind} \cdot B_{ind}$ in Formula 23J as the sum of the quantities $M_{ind} \cdot B_{ind}$ calculated for the ~~swaps~~hedges."; and

(g) Add a new subsection (6), along the following lines:

> "If the hedging instrument used in an eligible CVA hedge is an option on a credit default swap (regardless of whether the swap is a single-name or index credit default swap), an authorized institution may construe the notional amount mentioned in paragraph (d) or (e) in Formula 23J, as the case requires, as the delta-adjusted notional amount of the option concerned.".

Determination of w_{ind} [CCR FAQ Q2a.4]

3.2 The Basel Committee has clarified that banks should determine w_{ind}, for the purposes of the calculation in Formula 23J, by first looking through the index constituents and using the credit ratings of the constituents to determine the corresponding weight for each constituent and then calculating w_{ind} as the weighted average of those corresponding weights. To reflect the clarification made by the Basel Committee, it is proposed to revise paragraph (f) in Formula 23J as follows:

> "w_{ind} is the weight applicable to the index eligible CVA hedge~~credit default swap~~ referred to in paragraph (e), which is determined by either –
>
> (i) mapping index "*ind*" to one of the 7 weights in Table 23A based on the average spread of index "*ind*"; or
>
> (ii) determining the weight (w) applicable to each of the constituents of index "*ind*" in accordance with paragraph (b) and calculating w_{ind} as the weighted average of w (using the weight of each constituent in the index for weighting w);".

3.3 The HKMA is seeking further clarification as to whether the method based on average spread of the index should be superseded. Hence, there may be further changes to paragraph (f) depending upon the reply received.

4. Section 226T Eligible CVA hedges

Eligible protection providers [CCR FAQ Q2c.5]

4.1 The Basel Committee has made it clear that there are no specific restrictions on the protection providers for the purpose of CVA hedges. Eligible CVA hedges can be purchased from special purpose entities, private equity funds, pension funds or other non-bank financial entities as long as the general

eligibility criteria set by the Basel II framework (in particular paragraph 195 of the framework) are met. Changes to §226T of the BCRs are therefore proposed to reflect the clarification made by the Basel Committee.

4.2 The general eligibility criteria specified by the Basel II framework are set out in §99 of the BCRs and the specific criteria in respect of protection providers are set out in §99(1)(b). It is proposed to add a new paragraph (c) after §226T(1)(b) along the following lines:

> "The external counterparties of the hedges fall within section 99(1)(b)(i), (ii), (iii), (iv), (v) or (vi);".

Eligible hedging instruments [CCR FAQ Q1.1 and 2c.4]

4.3 As mentioned in paragraph 3.1 above, short bond positions and CDS swaptions can be eligible CVA hedges under certain circumstances. Under the BCRs, short bond positions and options on single-name credit default swaps fall within §226T(1)(c)(iii). However, options on index credit swaps are not eligible CVA hedges under the BCRs. In order to align with the Basel Committee's clarification, the HKMA proposes to add, after §226T(1)(c)(iv), a new subparagraph (v) along the following lines:

> "subject to subsection (2), options on index credit default swaps where the options do not contain a clause that would result in the options being terminated following a credit event;".

Excess CVA hedges [CCR FAQ Q2c.7 and 2c.8]

4.4 The Basel Committee has clarified that banks are prohibited from, or should derecognize, over-hedging[3] on the single-name level and should set a cap on the recognition of all single-name hedges (see CCR FAQ Q2c.7). In order to reflect this requirement, the HKMA proposes to add a new paragraph to §226T(6) along the following lines:

> "must not, if it has over-hedged the CVA risk in respect of a counterparty with an eligible CVA hedge that falls within subsection (1)(c)(i), (ii) or (iii), include the excess portion of the eligible CVA hedge in its CVA capital charge calculation for the purpose of reducing its CVA capital charge."

4.5 The Basel Committee has also made it clear that if a bank unwinds excess CVA hedges by selling protection, the bank may recognize the protection sold as part of CVA hedging if the unwinding is done explicitly and subject to the same process, documentation and controls as those that apply to purchased protection for CVA hedging and the national supervisor agrees with the recognition (see CCR FAQ Q2c.8). Hence, the HKMA proposes to add a new subsection (7) to §226T to clarify that:

[3] Generally speaking, over-hedging means the CVA hedge entered into by an AI is more than the amount (however described) required to protect against CVA risk.

(a) an authorized institution that has over-hedged the CVA risk in respect of a counterparty with an eligible CVA hedge (***CVA hedge A***) may, subject to the prior consent of the Monetary Authority, treat any credit protection sold for the purpose of unwinding the excess portion of CVA hedge A as an eligible CVA hedge for the CVA risk associated with the excess portion of CVA hedge A if all the applicable requirements set out in subsection (1) are met in respect of the protection sold and the protection sold is subject to the same process, documentation and controls as apply to eligible CVA hedges.

Part 6A Division 4 (Exposures to CCPs)

5. **Section 226X Exposures of clearing members to qualifying CCPs** [CCR FAQ Q5.3]

5.1 To align with the Basel Committee's clarification that bankruptcy remote collateral receives a risk-weight of 0%, instead of 2% and 20%, in the formula in §226X(6), the HKMA proposes to add a new provision to §226X to clarify that TE_i in §226X(6) does not include any collateral posted –

(a) that is regarded as a default risk exposure to a qualifying CCP under §226V(2)(a); and

(b) that falls within §226ZE(3).

6. **Section 226Z Exposures of clearing members to clients** [CCR FAQ Q5.12]

6.1 The Basel Committee has clarified that 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, initial margins posted with a CCP by clients of a clearing member mitigate the exposure the clearing member has against these clients.

6.2 In order to allow an AI to recognize collateral collected from a client that has been passed on to a CCP, the HKMA proposes to add a new subsection after §226Z(2) along the following lines:

"For the purposes of subsections (1) and (2)-

(a) if an authorized institution has collected collateral from its client for a transaction cleared by a CCP and passed on the collateral to the CCP to secure that transaction;

(b) the collateral is not recognized collateral in respect of the institution's default risk exposure to the client arising from the transaction because the institution does not have a first-lien (or any similar right or security interest) on the collateral,

the institution may take into account the credit risk mitigating effect of the collateral passed on to the CCP in calculating the risk-weighted amount of the institution's default risk exposure to the client arising from the transaction as if the collateral were recognized collateral."

Schedules

7. **Schedule 1A Transactions and Contracts not Subject to CVA Capital Charge** [CCR FAQ Q2d.2]

7.1 The Basel Committee has clarified the conditions that should be met in order for defaulted transactions to be exempted from the CVA capital charge. In this connection, it is proposed to amend §1(e) of Schedule 1A as follows:

(a) OTC derivative transactions, credit derivative contracts and SFTs (, other than those transactions or contracts that fall within paragraph (a), (b), (c) or (d)), —

(i) that are in default as determined under the terms and conditions of the transactions or contracts;

(ii) in respect of which the losses due to the default have been recognized by the authorized institution concerned for accounting and reporting purposes; and

(iii) in respect of which the exposures have been transformed into simple claims that do not have the risk characteristics of a derivative contract or SFT.