Part 8 Calculation of market risk

- 1. §308, §309, §310 and §311 of the BCRs, which correspond to paragraphs 713 to 717 of Basel II, relate to an AI's use of credit derivative contracts to hedge its trading book position in an underlying exposure or in another credit derivative contract. The sections specify the permissible treatments for offsetting of the market risk capital charge for specific risk applicable to the two sides of the transaction. Amendments to these provisions are proposed below with a view to
 - 1.1 closer alignment with Basel II; and
 - 1.2 addressing internal inconsistencies in the existing provisions.

For ease of review, a revised version of these sections incorporating the proposed changes is set out in Annex 4.1.

2. **Section 308**

- 2.1 Both §308 and §309 address situations in which an AI uses a credit derivative contract to hedge its trading book position in (a) the "underlying exposure" or (b) "another credit derivative contract". However, the reference to situation (b) is not tracked through into similar provisions under §310 and §311. It is therefore proposed that
 - (a) a <u>new §308(1A)</u> be added to extend §309, §310 and §311 to cover situation (b) mentioned above; and
 - (b) the existing reference to "or in another credit derivative contract," in §308(1) be repealed to avoid duplication with the new §308(1A).
- 2.2 The other proposed amendments to §308(1) and (2) are consequential to the proposed new §308(1A) and amendments to §311(1) (see paragraph 5.1 below).

3. **Section 309**

3.1 It is proposed that references relating to "another credit derivative contract" and "the other credit derivative contract" in §309(1) and (2) be repealed because the effect of the new §308(1A) will be to incorporate reference to these items into these sections. Hence we should remove what will become overlapping requirements, as mentioned in paragraph 2.1(b) above.

4. **Section 310**

4.1 Paragraph 714 of Basel II specifies that when a long cash position is hedged by a credit default swap or a credit-linked note (or vice versa) and "there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency of the underlying exposure", banks will be allowed to offset 80% of the market risk capital charge for specific risk pertaining to the side of the transaction

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with the higher market risk capital charge for specific risk.

- 4.2 The existing text of §310(2)(b)(ii) of the BCRs, which requires that the maturity of the reference obligation should match with that for the <u>position</u> in the <u>underlying exposure</u>, does not accurately reflect the requirement of paragraph 714 of Basel II (i.e. the maturity of the reference obligation should match with that for the <u>credit derivative contract</u>). It is thus proposed to replace "of the position in the underlying exposure" in §310(2)(b)(ii) with "of the swap contract or note, as the case may be".
- 4.3 It is also proposed to repeal "the reference obligation specified in" in §310(2)(b)(iii) to align the currency match requirement under the BCRs (currently between the reference obligation and the underlying exposure) with that under paragraph 714 of Basel II (between the credit derivative contract and the underlying exposure). On further consideration, it appears that the match in terms of "the currency of the underlying exposure" mentioned in paragraph 714 of Basel II should more logically relate to the currency of the underlying exposure and the credit derivative contract, given that paragraph 714 already requires "an exact match in terms of the reference obligation" and the underlying exposure (which should include currency match) and there would appear to be little point for the Basel Committee to repeat this in the same paragraph.

5. Section 311

- 5.1 §311 of the BCRs aims to reflect the requirements of paragraph 715 of Basel II. The existing wording of the chapeau to §311(1) can be construed to mandate an absolute asset match between the reference obligation specified in the credit derivative contract and the underlying exposure. Paragraph 715 however allows an "asset mismatch" (see paragraph 715(a) and (c)). It is therefore proposed to repeal "which is identical to the reference obligation specified in the contract", where it appears on two occasions in the chapeau of §311(1).
- 5.2 §311(1)(a) and (c) of the BCRs address permissible "asset mismatch" as set out in paragraph 715(a) and (c) of Basel II respectively, however the wording between the two subsections is inconsistent and the meaning in the case of subsection (c) would benefit from clarification. Hence, it is proposed to -
 - (a) add "specified in the credit derivative contract" after "an asset mismatch between the reference obligation" in §311(1)(a) to align with the parallel reference under §311(1)(c); and
 - (b) revise §311(1)(c) to align with the parallel provision on permissible asset mismatch under §311(1)(a).
- 5.3 Paragraph 715 of Basel II mentions that "Partial allowance will be recognized when ..." without specifying the extent of the offsetting allowed when the specified conditions are met. At the time of implementing Basel II in Hong Kong in 2007, given that similar provisions under paragraphs

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713 and 714 clearly spelled out the extent of offsetting permitted¹, the HKMA took the view that an offsetting of <u>no more</u> than 80% (vis-à-vis an offsetting of 80% permitted under paragraph 714 of Basel II) of the market risk capital charge for specific risk that pertains to the side of transaction with the higher capital requirement should be permitted. This is reflected in the existing §311(2)(a) of the BCRs. This view was taken notwithstanding paragraph 716 of Basel II, which says that "In each of these cases in paragraphs 713 to 715, ... <u>only the higher of the two capital</u> requirements will apply." (emphasis added).

- 5.4 In a recent review of the parallel provisions adopted by some other major banking supervisors (Australia, Singapore, UK and US), the HKMA has observed that they simply apply paragraph 716 to the situation described under paragraph 715, i.e. 100% of the market risk capital charge for specific risk pertaining to the side of the transaction with the higher capital requirement applies to a transaction that falls within paragraph 715 and no further offsetting of this capital charge is permitted.
- 5.5 To align with this mainstream approach to implementing paragraph 715 of Basel II, it is proposed to revise §311(2)(a) so that it requires AIs, in respect of a transaction that falls within §311(1), to apply 100% of the market risk capital charge for specific risk that pertains to the side of the transaction with the higher market risk capital charge for specific risk.

6. Sections 309, 310 and 311

6.1 The following amendments to §309, §310 and §311 are proposed to address internal inconsistencies among the provisions-

- (a) §310(1) and §311(1) currently specify that an AI may offset the "market risk capital charge for specific risk for its position" against "a position" when in fact the offset is between the market risk capital charges for specific risk calculated for both the positions. It is therefore proposed to add "that for" after "against" in the chapeau of the said subsections;
- (b) §310 and §311 relate to the permissible offsetting of two market risk capital charges for specific risk instead of the offsetting of trading book positions, but this is not accurately reflected in the chapeau to §310(3) and §311(2). To rectify this and simplify the wording, it is proposed to replace "its positions in a credit derivative contract" in the chapeau to §310(3) and §311(2) with "the market risk capital charge for specific risk for its positions";
- (c) To align with the drafting style used in §308 and §309 where reference is made to the term "credit derivative contract" in full, it is proposed to replace the references in §310 and §311 to "the contract" with "the credit derivative contract"; and

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¹ Paragraph 713 of Basel II states that "no specific risk capital requirement applies" (i.e. "full allowance"); while paragraph 714 states equally clearly that "an 80% specific risk offset will be applied", notwithstanding paragraph 716.

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(d) Consequential to the proposed amendments under paragraphs (a) and (b) above, it is proposed to similarly amend §309(1) and (2) to bring them into alignment.

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<u>Proposed amendments to sections 308 to 311 of the BCRs² for illustrative purposes only</u>

308 Use of credit derivative contracts to offset specific risk

- (1) Subject to subsection (2) and section 307(6), an authorized institution may use a credit derivative contract booked in the institution's trading book to offset the market risk capital charge for specific risk calculated for the institution's trading book position in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract, or in another credit derivative contract, in accordance with section 309, 310 or 311.
- (1A) Subject to subsection (2), an authorized institution may use a credit derivative contract booked in the institution's trading book to offset the market risk capital charge for specific risk calculated for the institution's trading book position in another credit derivative contract in accordance with section 309, 310 or 311 with all necessary modifications.
- (2) Where section 309, 310 or 311 does not permit an authorized institution to use a credit derivative contract booked in the institution's trading book to offset the market risk capital charge for specific risk calculated for the institution's trading book position in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract, or in another credit derivative contract, the institution shall calculate and provide the market risk capital charge against both trading book positions.

309 Offsetting in full

- (1) For the purposes of section 308(1), an authorized institution may fully offset 100% of the market risk capital charge for specific risk for its position in a credit derivative contract against that for a position in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract, or against a position in another credit derivative contract, where the values of the 2 positions, being the long or short position in the credit derivative contract, and the short or long position respectively in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract or the short or long position respectively in the other credit derivative contract, always move in the opposite direction and broadly to the same extent due to—
 - (a) the 2 positions consisting of identical exposures; or
 - (b) a long or short position in the underlying exposure being hedged by a total return swap and there being a match between the reference obligation specified in the total return swap and the position in the underlying exposure in every respect, and notwithstanding that the maturity of the total return swap may be

² BCR text proposed to be deleted is highlighted in red and strikethrough mode; proposed new text is highlighted in blue and underlined.

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different from that of the position in the underlying exposure.

(2) Where an authorized institution has fully offsets the market risk capital charge for specific risk for its positions in a credit derivative contract against a position in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract, or against a position in another credit derivative contract, pursuant to subsection (1), no market risk capital charge for specific risk is required to be calculated in respect of those positions.

310 Offsetting by 80%

- (1) For the purposes of section 308(1), an authorized institution may offset 80% of the market risk capital charge for specific risk for its position in a credit derivative contract against that for a position in the underlying exposure which is identical to the reference obligation specified in the credit derivative contract where—
 - (a) the values of the 2 positions, being the long or short position in the <u>credit</u> <u>derivative</u> contract, and the short or long position respectively in the underlying exposure which is identical to the reference obligation specified in the <u>credit</u> <u>derivative</u> contract, always move in the opposite direction but not broadly to the same extent as set out in section 309(1); and
 - (b) the institution demonstrates to the satisfaction of the Monetary Authority that the <u>credit derivative</u> contract can mitigate the credit risk of the institution's position in the underlying exposure effectively.
- (2) For the purposes of the demonstration referred to in subsection (1)(b), an authorized institution falls within that subsection in any case where—
 - (a) subject to paragraphs (b), (c) and (d), the institution's long or short position in the underlying exposure referred to in that subsection is effectively hedged by a credit default swap or credit-linked note;
 - (b) there is a match between—
 - (i) the reference obligation specified in the credit default swap or credit-linked note referred to in paragraph (a) and the position in the underlying exposure;
 - (ii) the maturity of the reference obligation specified in the credit default swap or credit-linked note referred to in paragraph (a) and of the swap contract or note, as the case may be of the position in the underlying exposure; and
 - (iii) the currency in which the reference obligation specified in the credit default swap or credit-linked note referred to in paragraph (a) and the position in the underlying exposure are denominated;
 - (c) the credit event definitions and settlement mechanisms and other key factors of the credit default swap or credit-linked note referred to in paragraph (a) do not cause the price movement of the swap contract or note, as the case may be, to materially deviate from the price movement of the position in the underlying exposure; and

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- (d) the credit default swap or credit-linked note referred to in paragraph (a) transfers risk effectively taking account of any restrictive payout provisions (including fixed payouts and materiality thresholds).
- (3) Where an authorized institution offsets the market risk capital charge for specific risk for its positions in a credit derivative contract pursuant to subsection (1)—
 - (a) only 20% of the market risk capital charge for specific risk is required to be calculated for the position with the higher market risk capital charge for specific risk; and
 - (b) the market risk capital charge for specific risk to be calculated for the other position shall be zero.

311 Other offsetting

- (1) For the purposes of section 308(1), an authorized institution may offset partially the market risk capital charge for specific risk for its position in a credit derivative contract against that for a position in the underlying exposure which is identical to the reference obligation specified in the contract where the values of the 2 positions, being the long or short position in the credit derivative contract, and the short or long position respectively in the underlying exposure which is identical to the reference obligation specified in the contract, usually move in the opposite direction in any case where—
 - (a) the positions would fall within section 309(1)(b) but for there being an asset mismatch between the reference obligation specified in the credit derivative contract and the position in the underlying exposure (being that the reference obligation and the position in the underlying exposure are similar but not identical) and—
 - (i) the reference obligation specified in the <u>credit derivative</u> contract ranks for payment or repayment equally with, or junior to, the position in the underlying exposure; and
 - (ii) the obligor in respect of the position in the underlying exposure is the same legal entity as the obligor in respect of the reference obligation and legally enforceable cross default or cross acceleration clauses are included in the terms of the position in the underlying exposure and the reference obligation;
 - (b) the positions would fall within section 309(1)(a) or 310 but for there being a currency or maturity mismatch between the <u>credit derivative</u> contract and the position in the underlying exposure; or
 - (c) the positions would fall within section 310 but for there being an asset mismatch between the reference obligation specified in the credit derivative contract and the position in the underlying exposure and the reference obligation specified in the contract (being that the reference obligation and the position in the underlying exposure are similar but not identical) and the position in the underlying exposure is included in one of the deliverable obligations specified in the credit derivative contract.

- (2) Where an authorized institution offsets the market risk capital charge for specific risk for its positions in a credit derivative contract pursuant to subsection (1)—
 - (a) 100% of the market risk capital charge for specific risk is required to be calculated for the position with the higher market risk capital charge for specific risk shall be subject to a partial allowance to reflect the extent of the offsetting but, in any case, not higher than 80%; and
 - (b) the market risk capital charge for specific risk to be calculated for the other position shall be zero.