

Leverage Ratio Framework

(A) Introduction

Definition

1. The Basel III Leverage Ratio (“LR”) is defined as the Capital Measure (the numerator) divided by the Exposure Measure (the denominator), expressed as a percentage.

Implementation

2. In accordance with the implementation timeline of the Basel Committee on Banking Supervision (“BCBS”), the parallel run period for the LR commences on 1 January 2013 and continues until 1 January 2017. Public disclosure of the LR will start on 1 January 2015. The BCBS will make any necessary final adjustments to the definition and calibration of the LR by 2017, with a view to incorporating it as a Pillar 1 requirement under Basel III on 1 January 2018. During the parallel run period, a “testing minimum” LR of 3% has been set by the BCBS for the purpose of regulatory monitoring.

(B) Capital Measure

3. The Capital Measure for the LR is Tier 1 capital¹ calculated according to Part 3 of the Banking (Capital) Rules (“BCR”), meaning that the measure of Tier 1 capital should be net of any regulatory deductions applicable to Tier 1 capital, taking account of the Basel III transition arrangements, as specified under the BCR.

(C) Exposure Measure

Scope of consolidation

4. When calculated on a consolidated basis, the Exposure Measure of the LR (the “Exposure Measure”) should cover exposures of group entities that are inside the scope of regulatory consolidation². In other words, the Basel III LR framework follows the same scope of regulatory consolidation as the risk-based capital framework.

¹ The BCBS will also continue to collect data during the transition period to track the impact of using either Common Equity Tier 1 or Total capital as the capital measure for the LR.

² This covers an AI and its subsidiaries that are required to be consolidated under a Section 3C requirement in the BCR.

5. In determining the Exposure Measure in respect of an AI's investment in other entities ("investees"), in cases where the investee is a **financial sector entity** or a **commercial entity** that is outside the scope of regulatory consolidation (in other words the investee is not included in an AI's consolidation group pursuant to a section 3C requirement under the BCR), only the AI's investment in the capital of the investee (i.e. only the carrying value of the AI's investment and not the investee's underlying assets and other exposures) must be included in the Exposure Measure of the AI.
6. However, investments in the capital of investees which are deducted from the Tier 1 capital of the AI should also be excluded from the Exposure Measure of the AI. The AI's investment in the entity may be excluded from the Exposure Measure of the AI to the same extent that it is deducted from the capital of the AI under section 43(1)(p) of the BCR in cases where the investee is a financial sector entity, or section 43(1)(n) in cases where the investee is a commercial entity that is a connected company of the AI.

General Measurement Principles in respect of the Exposure Measure

7. An AI should generally follow the accounting measure of exposure for the purposes of calculating the Exposure Measure, except that:
 - 7.1 on-balance sheet, non-derivative exposures are to be included in the Exposure Measure at accounting values, net of specific provisions and accounting valuation adjustments (e.g. accounting credit valuation adjustments);
 - 7.2 netting of loans and deposits is not allowed; and
 - 7.3 unless otherwise specified in this document, physical or financial collateral, guarantees or other credit risk mitigation techniques must not be taken into account for reducing the Exposure Measure.
8. Exposures or assets deducted from Tier 1 capital should also be deducted from the Exposure Measure (e.g. for IRB portfolios, the shortfall of the stock of provisions to expected losses that is deducted from the CET1 capital of the AI under section 43(1)(i) of the BCR should also be deducted from the Exposure Measure of the AI).

Total Exposure Measure

9. An AI's total Exposure Measure is the sum of the following exposures:

- 9.1 all on-balance sheet exposures;
 - 9.2 derivative exposures (i.e. counterparty default risk exposure and exposure to the reference asset);
 - 9.3 SFT exposures, including where the AI acts as principal and where the AI acts as agent and provides an indemnity or guarantee to one or both counterparties; and
 - 9.4 other specified off-balance sheet exposures, including commitments, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit.
10. The methods for calculating the Exposure Measure in respect of the above four main exposure categories are described in greater detail below:

10.1 ***On-balance sheet exposures***

- (a) For the purpose of calculating an AI's Exposure Measure, the on-balance sheet exposures of an AI must include all on-balance sheet assets³. This includes on-balance sheet derivatives collateral and collateral for SFTs (i.e. which is recognised as an on-balance sheet asset under the applicable accounting standard), with the exception of on-balance sheet derivative and SFT assets as described under separate sections below.
- (b) Liability items (e.g. gains/losses on fair-valued liabilities or debit valuation adjustments on derivative liabilities due to changes in the AI's own credit risk as described in sections 38(2)(b) and 43(1)(h) respectively of the BCR) must not be deducted from the Exposure Measure of an AI.
- (c) Where an AI is a note-issuing bank (which has the meaning assigned to it by section 2 of the Legal Tender Notes Issue Ordinance (Chapter 65 of the Laws of Hong Kong)), the AI's on-balance sheet exposure shall not include, for the purpose of calculating the Exposure Measure, any certificates of indebtedness issued by the Financial Secretary pursuant to section 4 of the Exchange Fund

³ To avoid doubt, fiduciary assets can be excluded from the Exposure Measure provided that the assets meet the IAS 39 / HKAS 39 criteria for derecognition and, where applicable, IFRS 10 / HKAS 10 for deconsolidation.

Ordinance (Chapter 66 of the Laws of Hong Kong) to, and held by, the AI.

- (d) Subject to the exceptions described in paragraph (b) above, on-balance sheet exposures deducted from Tier 1 capital (as set out in sections 38(a), (c), (d) and (e), 43 and 47 of the BCR) may be deducted from the Exposure Measure.⁴

10.2 *Derivative exposures*

Basic formula

- (a) The Exposure Measure for derivative contracts consists of two components: (i) exposure arising from the underlying reference obligation of the derivative contract and (ii) counterparty default risk exposure.
- (b) AIs must calculate their counterparty default risk exposures⁵, including where an AI sells protection using a credit derivative contract, as the sum of the current exposure⁶ (“RC”) and potential future exposure (“PE”) (as described in paragraph (c) below) applying the bilateral netting rules⁷ as specified in the BCR (see paragraphs 6 to 8 of Appendix A) and adjusting the exposure amount for the related collateral as set out in paragraphs (e) to (g) below. Treatment of derivatives exposures arising out of transactions cleared through central counterparties (“CCPs”) is described in paragraphs (h) to (i) while written credit derivative contracts are subject to additional requirements as set out in paragraphs (j) to (l) below.
- (c) For a single derivative contract that is not covered by a valid bilateral netting agreement, the amount to be included in the

⁴ Where applicable, the deductions should include any shares issued by the AI by virtue of capitalizing property revaluation reserves that have been excluded from the institution’s CET1 capital under section 38(1)(a) of the BCR.

⁵ This approach makes reference to the Current Exposure Method (CEM) which is used under the Basel II Framework to calculate counterparty credit risk exposure amounts associated with derivative exposures. The BCBS is considering alternatives to the CEM. If an alternative approach is adopted as a replacement for the CEM, the Committee will consider whether that alternative approach is appropriate for the LR in the context of the need to capture both types of exposure created by derivatives.

⁶ Where there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the bank must use the sum of positive fair values of these derivatives as the current exposure.

⁷ For the purpose of determining the RC, AIs are permitted to recognize bilateral netting when a valid bilateral netting agreement is in place (although cross-product netting is not permitted).

Exposure Measure is determined as follows:

$$\text{Exposure Measure} = \text{RC} + \text{PE}$$

RC: The greater of the mark-to-market value of the contract and zero.

PE: an amount of potential future exposure over the remaining life of the contract calculated by multiplying the notional amount of the contract by the appropriate credit conversion factor (“CCF”). Where the notional amount is leveraged or enhanced by the structure of the contract, AIs must use the effective notional amount when determining PE. The CCFs for different types of derivative contract, including credit derivative contracts, are included in paragraphs 1 and 3 of Appendix A.

Bilateral netting

- (d) For a set of derivative contracts covered by a valid bilateral netting agreement as defined in the BCR (see paragraph 6 of Appendix A), the RC will be the net RC and the PE will be “ A_{Net} ” as calculated under the BCR (see paragraphs 7 and 8 of Appendix A).

Treatment of Collateral

- (e) Subject to paragraphs (f) and (g) in calculating the Exposure Measure, the treatment of collateral described below applies regardless of whether the collateral is cash or non-cash; received or provided under contracts covered by a valid bilateral netting agreement; or in connection with derivative contracts traded on an exchange or through a central counterparty:
- (i) **Collateral Received** (cash or non-cash) must not be netted against derivatives exposures irrespective of whether or not netting is permitted under the accounting rules or the BCR applicable to an AI. An AI must not reduce its Exposure Measure for a derivative contract by any collateral received from the counterparty.

- (ii) **Collateral Provided** (cash or non-cash) must not reduce an AI's Exposure Measure. Where the provision of such collateral under the terms of a derivative contract has reduced an AI's on-balance sheet assets under the applicable accounting standard, the AI must gross up its Exposure Measure by the amount of collateral provided.

Treatment of cash variation margin

- (f) For the purpose of calculating the Exposure Measure, the cash portion of variation margin exchanged between counterparties may be viewed as a form of pre-settlement payment and may be used to reduce the Exposure Measure if the following conditions are met:
 - (i) For trades not cleared through a qualifying central counterparty ("QCCP")⁸, the cash received by the recipient counterparty is not segregated.
 - (ii) The cash variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivative positions.
 - (iii) The cash variation margin is held in the same currency as the currency of settlement of the derivative contract.
 - (iv) Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.
 - (v) Derivative transactions and the variation margins are covered by a single bilateral netting agreement between the legal entities that are counterparties in the derivative transaction. The bilateral netting agreement must explicitly stipulate that the counterparties agree to settle net any payment obligations covered by such a netting agreement, taking into account any variation margin received or provided, if a credit event occurs as to either counterparty. The bilateral netting agreement must be

⁸ "Qualifying CCP" is defined under section 226V(1) of the BCR.

legally enforceable and effective in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.

- (g) Subject to the conditions outlined in paragraph (f), the cash portion of variation margin received may be used to reduce the RC portion of the Exposure Measure, and the assets constituted by the receivable in respect of the cash variation margin provided may be deducted from the Exposure Measure as follows:
- (i) in the case of cash variation margin received, the receiving AI may reduce the RC (but not the PE) of the exposure amount of the derivative asset by the amount of cash received if the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the accounting treatment applicable to the AI;
 - (ii) in the case of cash variation margin provided to a counterparty, the posting AI may deduct the resulting receivable from its Exposure Measure, where the cash variation margin has been recognised as an asset under the accounting treatment applicable to the AI;
 - (iii) cash variation margin may not be used to reduce the PE amount (and must not be taken into account in the calculation of the net-to-gross ratio as defined in paragraph 7 of Appendix A)

Treatment of clearing services

- (h) Where an AI acting as clearing member (“CM”)⁹ offers clearing services to clients, the CM’s trade exposures¹⁰ to the CCP that arise when the CM is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults, must be captured by applying the same treatment that applies to any other type of derivative transactions. However, if the CM, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the

⁹ “Clearing member” is defined under section 2 of the BCR.

¹⁰ For the purposes of paragraphs (h) and (i), “trade exposures” include initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP.

event that a QCCP defaults, the CM need not recognise the resulting trade exposures to the QCCP in the Exposure Measure.

- (i) Where a client enters directly into a derivative transaction with the CCP and the CM merely guarantees the performance of its clients' derivative trade exposures to the CCP, the AI acting as the CM for the client to the CCP must calculate its related Exposure Measure resulting from the guarantee as a derivative exposure as set out in paragraph 10.2 (a) to (g), as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

Written credit derivative contracts

- (j) In addition to the CCR exposure arising from the fair value of the contracts, written credit derivative contracts create a notional credit exposure arising from the creditworthiness of the reference entity that has to be incorporated into the Exposure Measure in addition to the above treatments for derivative contracts, netting and collateral.
- (k) To capture the credit exposure to the reference entity, the notional amount¹¹ of a written credit derivative contract, is incorporated into the Exposure Measure. However, the notional amount of a written credit derivative contract may be reduced by any negative change in fair value amount that has been incorporated into the calculation of Tier 1 capital with respect to the written credit derivative. Such resulting amount may be further reduced by the notional amount of a purchased credit derivative on the same reference name,^{12 13}

¹¹ For credit derivative contracts where the stated notional amount differs from the effective notional amount, AIs must use the greater of the effective notional amount and the notional amount. The effective notional amount is obtained by adjusting the notional amount to reflect the true exposure of contracts that are leveraged or otherwise enhanced by the structure of the transaction.

¹² Two reference names are considered identical only if they refer to the same legal entity. For single name credit derivatives, protection purchased that references a subordinated position may offset protection sold on a more senior position of the same reference entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset. Protection purchased on a pool of reference entities may offset protection sold on individual reference entities if the protection purchased is economically equivalent to buying protection separately on each of the individual entities in the pool. This would, for example, be the case if an AI were to purchase protection on an entire securitization structure. If an AI purchases protection on a pool of reference entities, but the credit protection does not cover the entire pool (i.e. the protection covers only a subset of the pool, as in the case of an nth-to-default credit derivative contract or a securitization tranche), then offsetting is not permitted for protection sold on individual reference entities. Such purchased protection may offset sold protection on a pool only if the purchased protection covers the entire subset of the pool on which protection has been sold. In other words, offsetting may only be recognized when the pool of reference entities and the level of subordination in both transactions are identical.

provided:

- (i) the credit protection purchased is on a reference obligation which ranks pari passu with or is junior to the underlying reference obligation of the written credit derivative in the case of single name credit derivatives;¹⁴ and
 - (ii) the remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative.
- (l) To avoid overstatement of the Exposure Measure, an AI may deduct from the gross PE of all derivative contracts the PE of the written credit derivative contract if the contract is not offset by an eligible purchased credit derivative contract and the notional amount of the former contract is already included in the Exposure Measure. Where the written credit derivative contract is subject to a valid bilateral netting agreement, when calculating the “A_{Net}”, “A_{Gross}” (as calculated under the BCR (see paragraph 7 of [Appendix A](#))) may be reduced by the PE of the written credit derivative contract if its notional amount is already included in the Exposure Measure. However, no adjustments should be made to the net to gross ratio (“NGR”).

10.3 *SFT Exposures*

- (a) The Exposure Measure calculations for SFTs distinguish between:
 - (i) situations where an **AI is acting as principal**; and
 - (ii) situations where an **AI is acting as agent** and provides an indemnity or guarantee to one or both counterparties to the SFTs.

¹³ The notional amount of a written credit derivative may be reduced by any negative change in fair value reflected in the bank’s Tier 1 capital provided the effective notional amount of the offsetting purchased credit protection is also reduced by any resulting positive change in fair value reflected in Tier 1 capital. Where an AI buys credit protection through a total return swap (“TRS”) and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit derivative (either through reductions in fair value or by an addition to reserves) in Tier 1 capital, the credit protection will not be recognized for the purpose of offsetting the notional amounts related to written credit derivatives.

¹⁴ For tranching products, the purchased protection must be on a reference obligation with the same level of seniority.

(b) *AI acting as principal*

Basic Formula

$$\text{Exposure Measure} = \text{Gross SFT Assets} + \max \{0, [\Sigma(E_i) - \Sigma(C_i)]\}$$

(i) Where an AI is acting as principal on an SFT, the Exposure Measure is the sum of:

- the AI's gross SFT assets¹⁵ recognized for accounting purposes (i.e. no recognition of accounting netting),¹⁶ and
- a measure of counterparty default risk calculated as the current exposure (i.e. *without* PE) in respect of the SFT.

(ii) The gross SFT assets as mentioned in sub-paragraph (i) above may be adjusted as follows:

- exclude the value of any securities received under a SFT, where the AI has recognised the securities as an asset on its balance sheet¹⁷, and
- cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:
 - (A) Transactions have the same explicit final settlement date;
 - (B) The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of business and in the event of: (i) default; (ii) insolvency;

¹⁵ For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognized for accounting purposes" is replaced by the final contractual exposure, given pre-existing contracts have been replaced by new legal obligations through the novation process.

¹⁶ The BCBS noted that the grossing up of SFT assets avoids netting inconsistencies across different accounting regimes.

¹⁷ This may apply where securities received under a SFT may be recognized as assets if the recipient has the right to rehypothecate but has not done so under the applicable accounting standards.

and (iii) bankruptcy; and

- (C) The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intra-day credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.¹⁸

Bilateral netting

- (iii) With respect to a netting set of SFTs subject to a valid bilateral netting agreement (see paragraph 9 of Appendix A), the current exposure for the netting set is calculated as the greater of:
- the current market value of securities and cash *provided* to a counterparty under the SFTs ($\Sigma(E_i)$) *less* the current market value of securities and cash *received* from the counterparty under the SFTs ($\Sigma(C_j)$); and
 - zero.
- (iv) For the purposes of the current exposure calculation for SFTs, only the effects of a valid bilateral netting agreement will be recognized.
- (v) Where no valid bilateral netting agreement is in place, each individual SFT is treated as its own netting set for the purposes of the current exposure calculation.

¹⁸ This latter condition ensures that any issues arising from the securities leg of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables.

Sale Accounting Transactions

- (vi) Leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the accounting framework. As such, where sale accounting is achieved for an SFT under the AI's accounting framework, the AI must first reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the accounting framework (i.e. in this last step, the AI must include the sum of amounts described in (i) above for such an SFT) for the purposes of determining its Exposure Measure.

(c) *AI acting as agent*

Basic Formula

$$\text{Exposure Measure} = \max \{0, [\Sigma(E_i) - \Sigma(C_i)]\}$$

- (i) If an AI acts as an agent in respect of an SFT (or a portfolio of SFTs) entered into by the AI's customer and the AI provides an indemnity or guarantee to the customer for any difference between the value of the security or cash provided by the customer under the SFT (or SFTs) and the value of security or cash received by the customer, the AI will only be required to calculate its current exposure using the above formula.¹⁹

Exposure beyond indemnity / guarantee

- (ii) If, however, an AI's exposure in respect of an SFT goes beyond an indemnity or a guarantee for the difference in value between the assets provided and received and includes exposure to the underlying cash or securities in the SFT, the AI will need to calculate its Exposure Measure as if it were acting as principal, i.e. by also including gross SFT assets recognized for accounting purposes. This would be the case where an AI manages collateral received in connection with an

¹⁹ Where an AI is acting as an agent in a SFT but does not provide an indemnity or guarantee to any of the involved parties, the AI is not exposed to the SFT and therefore need not recognize the SFT in its Exposure Measure.

SFT for its own account rather than for the customer's account.

10.4 *Other Off-balance Sheet Exposures*

Basic Formula

$$\text{Exposure Measure} = \text{Amount of Off-balance Sheet Item} \times \text{applicable CCF}$$

- (a) The credit equivalent amount of an off-balance sheet item is generally calculated by multiplying the principal amount of the off-balance sheet item by a specific CCF as set out below.²⁰

| CCFs | Off-balance sheet items |
|------|---|
| 10% | <ul style="list-style-type: none"> - Commitments that are unconditionally cancellable at any time by the AI without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness - Undrawn servicer cash advance facilities for securitization transactions that meet the requirements set out in section 240(6) or 252(3), as the case requires, of the BCR and that are unconditionally cancellable without prior notice. |
| 20% | <ul style="list-style-type: none"> - Commitments other than servicer cash advance facilities and liquidity facilities for securitization transactions with an original maturity up to one year - Short-term self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment)²¹ |

²⁰ These correspond to the CCFs of the standardized (credit risk) approach under the Basel II framework, subject to a floor of 10%. The floor of 10% will impact commitments that are unconditionally cancellable at any time by the AI without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. These may receive a 0% CCF under the risk-based capital framework.

²¹ 20% CCF applies to both issuing and confirming banks.

| CCFs | Off-balance sheet items |
|------|--|
| 50% | <ul style="list-style-type: none"> - Commitments other than servicer cash advance facilities and liquidity facilities for securitization transactions with an original maturity over one year - Transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) - Note issuance facilities and revolving underwriting facilities - Unrated eligible liquidity facilities and unrated eligible servicer cash advance facilities (other than those that are eligible for a 10% CCF). |
| 100% | <ul style="list-style-type: none"> - Direct credit substitutes, e.g. general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances) - Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown - All off-balance sheet securitisation exposures other than those that are eligible for a 10% or 50% CCF, including rated liquidity facilities and rated servicer cash advance facilities. |

- (b) Where there is an undertaking to provide a commitment on an off-balance sheet item, AIs are to apply the lower of the two applicable CCFs.

Supplementary References for derivatives and securities financing transactions

The LR framework generally follows the non-model based methodologies of the existing counterparty credit risk framework under the BCR for measuring the exposure amounts of derivative contracts and SFTs. For ease of reference, these are reproduced below in a form and language consistent with those employed for describing the LR framework.

Derivative exposures

CCFs for determining potential future exposure (“PE”)

1. The following CCFs apply to financial derivative contracts (other than credit derivative contracts), based on residual maturity.

| Residual maturity | Interest rate | Exchange rate²² (including gold) | Equities | Precious metals (except gold) | Other commodities |
|--------------------------|----------------------|--|-----------------|--|--------------------------|
| 1 year or less | 0.0% | 1.0% | 6.0% | 7.0% | 10.0% |
| Over 1 year to 5 years | 0.5% | 5.0% | 8.0% | 7.0% | 12.0% |
| Over 5 years | 1.5% | 7.5% | 10.0% | 8.0% | 15.0% |

Notes:

- For contracts with multiple exchanges of principal, the CCFs are to be multiplied by the number of remaining payments in the contract.
 - For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate contracts with residual maturities of more than one year that meet the above criteria, the CCF is subject to a floor of 0.5%.
 - Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns in this matrix are to be treated as “other commodities”.
 - No PE would be calculated for single currency floating/floating interest rate swaps; the credit exposure on these contracts would be evaluated solely on the basis of their mark-to-market value.
2. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, AIs must use the effective notional amount when determining PE.

²² To avoid doubt, exchange rate contracts with residual maturity of 1 year or less cover those with an original maturity of not more than 14 calendar days.

3. The following CCFs apply to single-name credit derivative contracts:

| | Protection buyer | Protection seller |
|-------------------------------------|------------------|-------------------|
| Total return swap | | |
| Qualifying reference obligation | 5.0% | 5.0% |
| Non-qualifying reference obligation | 10.0% | 10.0% |
| Credit default swap | | |
| Qualifying reference obligation | 5.0% | 5.0%* |
| Non-qualifying reference obligation | 10.0% | 10.0%* |

There will be no difference depending on residual maturity.

* The protection seller of a credit default swap is required to calculate PE for the swap only when the swap is subject to closeout upon the insolvency of the protection buyer while the reference entity is still solvent. PE in such case should be capped at the amount of unpaid premiums.

4. Where the credit derivative contract is a first-to-default credit derivative contract, the CCF for non-qualifying reference obligation should be used if there is at least one non-qualifying reference obligation in the basket. For second-to-default credit derivative contracts, the CCF for non-qualifying reference obligation should be used if there are at least 2 non-qualifying reference obligations in the basket. For any other subsequent nth-to-default credit derivative contract, the CCF should be determined with reference to the corresponding number of non-qualifying reference obligations in the basket based on the approach taken for second-to-default credit derivative contracts.
5. Qualifying reference obligations means-
- (a) debt securities issued by sovereigns that are rated investment grade²³;
 - (b) debt securities issued by multilateral development banks;
 - (c) debt securities issued by public sector entities where the debt securities are assigned a credit quality grade of 2 or 3 (i.e. equivalent to investment grade) based on the ECAI issuer rating of the sovereign in which the public sector entity is incorporated;
 - (d) debt securities, not falling within the categories above, that are rated investment grade; and
 - (e) unrated debt securities, where
 - (i) the AI uses the IRB approach to calculate its credit risk;

²³ E.g. rated Baa or higher by Moody's and BBB or higher by Standard and Poor's.

- (ii) the debt securities are assessed as equivalent to investment grade under the AI's rating system; and
- (iii) the issuer of the debt securities (i) has securities listed on a recognized stock exchange or (ii) is subject to supervisory arrangements regarding the maintenance of adequate capital to support its business activities comparable to those prescribed for AIs under the Banking Ordinance and the BCR.

Bilateral netting for derivatives transactions

6. For the purposes of the LR, the following will apply:

A bilateral netting agreement is considered a valid bilateral netting agreement if the following criteria are met:

- (i) the agreement is in writing;
- (ii) the agreement creates a single legal obligation for all individual contracts covered by the agreement, and provides, in effect, that an AI would have a single claim or obligation to receive or pay only the net amount of the sum of the positive and negative mark-to-market values of the individual contracts covered by the agreement in the event that a counterparty to the agreement, or a counterparty to whom the agreement has been validly assigned, fails to comply with any obligation under the agreement due to default, insolvency, bankruptcy, or similar circumstance;
- (iii) the AI has been given independent legal advice in writing to the effect that in the event of a challenge in a court of law, including a challenge resulting from default, insolvency, bankruptcy, or similar circumstance, the relevant court or administrative authority would find the AI's exposure to be the net amount under—
 - the law of the jurisdiction in which the counterparty is incorporated or the equivalent location in the case of non-corporate entities, and if a branch of the counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
 - the law which governs the individual contracts covered by the agreement; and
 - the law which governs the agreement;
- (iv) the AI establishes and maintains procedures to monitor developments in any law relevant to the agreement and to ensure

that the agreement continues to satisfy this definition;

- (v) the AI manages the transactions covered by the agreement on a net basis;
 - (vi) the AI maintains in its files documentation adequate to support the netting of the contracts covered by the agreement; and
 - (vii) the agreement is not subject to a provision that permits the non-defaulting counterparty to make only limited payment, or no payment at all, to the defaulter or the estate of the defaulter, regardless of whether or not the defaulter is a net creditor under the agreement;
7. The counterparty default risk exposure in respect of derivative contracts subject to a valid bilateral netting agreement with a counterparty will be calculated as the sum of net current exposure, if positive, and net PE. The net PE will be calculated by using the following formula:

$$A_{\text{Net}} = (0.4 \times A_{\text{Gross}}) + (0.6 \times \text{NGR} \times A_{\text{Gross}})$$

where:

A_{Net} = the net PE

A_{Gross} = the sum of the individual PEs (calculated by multiplying the notional amount of each of the contracts by the appropriate CCF set out in paragraphs 1 to 3 above) of all the derivative contracts

NGR = level of net replacement cost/level of gross replacement cost for the contracts

8. AIs must calculate the NGR either on a counterparty-by-counterparty basis or on an aggregate basis for all contracts that are subject to valid bilateral netting agreements. Under the aggregate basis, the net replacement cost (that is the positive sum of the positive and negative replacement costs of the contracts) for each of the counterparties is aggregated.

SFT exposures

9. The eligibility criteria for determining what constitutes a valid bilateral netting agreement follow those set out in paragraph 6 above.
10. Netting across positions in the banking book and trading book will only be recognised when the transactions fulfill the following conditions:
- (a) All transactions are marked to market daily, and

- (b) The collateral used in the transactions is recognized collateral in the banking book under the BCR.