

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. The basis of calculation is the simple average of the three month-end LRs over a particular quarter¹.

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 in the first half of 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 capital² 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 as specified under the BCR.

(C) Exposure Measure

Scope of consolidation

4. When calculated on a consolidated basis, the Exposure Measure of the LR should cover exposures of group entities that are either covered inside the scope of regulatory consolidation³ or the scope of accounting

¹ Each month-end LR is calculated by dividing the month-end Capital Measure by the month-end Exposure Measure.

² The BCBS is still considering alternatives to Tier 1 capital, including Common Equity Tier 1 and Total capital.

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

consolidation.

5. To ensure the internal consistency of the LR framework, the Exposure Measure (the denominator of the LR) should be determined consistently with the Capital Measure (the numerator of the LR) with respect to deductions from (and inclusions in) capital.
6. The following describes in greater detail how the Exposure Measure of an AI should be determined in respect of its investments in entities (“investees”) in terms of whether those entities are inside or outside the scope of regulatory consolidation⁴ or the scope of accounting consolidation.
 - 6.1 Where the investee is a **financial sector entity** that is outside the scope of regulatory consolidation but inside the scope of accounting consolidation (in other words the investee is not included in an AI’s consolidation group pursuant to a section 3C requirement under the BCR but is consolidated for accounting purposes), the investment in the capital of such financial sector entity is required, pursuant to section 43(1)(p) of the BCR, to be deducted from the AI’s regulatory capital to the extent such investment exceeds the specified thresholds. The assets and exposures of such entity should then be excluded from the AI’s LR Exposure Measure on a pro-rata basis (i.e. in proportion to the capital⁵ that is excluded under section 43(1)(p) of the BCR).
 - 6.2 Subject to 6.3, where the investee is a **commercial entity** that is outside the scope of regulatory consolidation but inside the scope of accounting consolidation (in other words the investee is not included in an AI’s consolidation group pursuant to a section 3C requirement under the BCR but is consolidated for accounting purposes), since the investment remains included in (or, in other words, not required to be deducted from) the capital of the AI, the commercial entity’s assets and other exposures must be included in the LR Exposure Measure of the AI.
 - 6.3 Where the investee is a **connected company** of the AI and that connected company is a commercial entity that is outside the scope of regulatory consolidation but inside the scope of accounting consolidation (in other words the investee is not included in an AI’s consolidation group pursuant to a section 3C

⁴ The scope of regulatory consolidation covers entities that are required to be consolidated by an AI under a Section 3C requirement of the BCR in calculating its consolidated capital ratios under the BCR.

⁵ For the purposes of determining the Exposure Measure of the LR, the proportion of capital excluded means the proportion of common equity excluded over the total common equity of these entities.

requirement under the BCR but is consolidated for accounting purposes), the investment in the capital of such connected company is required, pursuant to section 43(1)(n) of the BCR, to be deducted from the AI's regulatory capital to the extent such investment exceeds the specified thresholds. The assets and exposures of such connected company should then be excluded from the AI's LR Exposure Measure on a pro-rata basis (i.e. in proportion to the capital⁶ that is excluded under section 43(1)(n) of the BCR).

- 6.4 Where the investee is a ***financial sector entity*** that is outside both the scope of regulatory consolidation and the scope of accounting consolidation (in other words the investee is neither included in an AI's consolidation group pursuant to a section 3C requirement under the BCR nor consolidated for accounting purposes), the AI's investment in the capital of the entity may be excluded from the LR 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.
- 6.5 Subject to 6.6, where the investee is a ***commercial entity*** that is outside both the scope of regulatory consolidation and the scope of accounting consolidation (in other words the investee is neither included in an AI's consolidation group pursuant to a section 3C requirement under the BCR nor consolidated for accounting purposes), only the AI's investment in the capital of the entity (i.e. only the carrying value of the AI's investment and not the entity's underlying assets and exposures) must be included in the LR Exposure Measure of the AI. However, investments in the capital of investees which are deducted from Tier 1 capital of the AI should also be excluded from the Exposure Measure of the AI.
- 6.6 Where the investee is a ***connected company*** of the AI and that connected company is a commercial entity that is outside both the scope of regulatory consolidation and the scope of accounting consolidation (in other words the investee is neither included in an AI's consolidation group pursuant to a section 3C requirement under the BCR nor consolidated for accounting purposes), the AI's investment in the capital of the connected company may be excluded from the LR Exposure Measure of the AI to the same extent that it is deducted from the capital of the AI under section 43(1)(n) of the BCR.

⁶ For the purposes of determining the Exposure Measure of the LR, the proportion of capital excluded means the proportion of common equity excluded over the total common equity of these entities.

6.7 Where the investee is a ***securitization investee*** that is either:

- (a) outside the scope of regulatory consolidation but inside the scope of accounting consolidation (in other words the investee is not included in an AI's consolidation group pursuant to a section 3C requirement under the BCR but is consolidated for accounting purposes); or
- (b) inside the scope of regulatory consolidation and regardless of whether or not it is consolidated for accounting purposes;

then since the investment⁷ remains included in (or, in other words, not required to be deducted from) the capital of the AI, the underlying assets and other exposures of the investee must be included in the LR Exposure Measure of the AI.

6.8 Where the investee is a ***securitization investee*** that is outside both the scope of regulatory consolidation and the scope of accounting consolidation (in other words the investee is neither included in an AI's consolidation group pursuant to a section 3C requirement under the BCR nor consolidated for accounting purposes), 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 LR Exposure Measure of the AI. Moreover, any investments and retained positions (on- and off-balance sheet) in the securitization transaction must also be included in the LR Exposure Measure of the AI. Investments in the capital of securitization investees which are deducted from Tier 1 capital of the AI should, however, also be excluded from the LR Exposure Measure of the AI.

- 7. For ease of reference, a summary table is included in Annex 1A depicting the scope of consolidation under the LR framework described above.
- 8. Where there is a minority interest in an investee required to be consolidated under either the scope of regulatory consolidation or the scope of accounting consolidation for the purpose of calculating the LR, the LR Exposure Measure is not to be reduced due to the presence of a minority interest.

⁷ Includes a securitization exposure that is consolidated either under the risk-based regulatory framework or under the accounting framework.

Offsetting intra-group exposures

9. To avoid double counting of exposures between group entities within the scope of regulatory consolidation or the scope of accounting consolidation, an AI is permitted to offset the on- and off-balance sheet exposures of these entities in order to calculate its LR Exposure Measure. As most intra-group exposures may already have been consolidated as part of an AI's accounting or regulatory consolidation, an AI must ensure that offsetting of exposures between consolidated entities is carried out only once. When the exposures of an entity are excluded on a pro-rata basis from the LR Exposure Measure of the AI (e.g. the capital investment in financial sector entities mentioned in paragraph 6.1 above), exposures of the entity which would otherwise be available for offsetting purposes must be excluded (i.e. be made unavailable for offsetting purposes) on the same pro-rata basis.

General Measurement Principles in respect of the Exposure Measure

10. An AI should generally follow the accounting measure of exposure for the purposes of calculating the Exposure Measure for the LR, except that:
 - 10.1 on-balance sheet, non-derivative exposures are to be included in the Exposure Measure net of specific provisions and valuation adjustments (e.g. credit valuation adjustments);
 - 10.2 netting of loans and deposits is not allowed; and
 - 10.3 physical or financial collateral, guarantees or purchased credit risk mitigation is not allowed to reduce on-balance sheet exposures.
11. Exposures or assets deducted from Tier 1 capital should also be deducted from the LR 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 LR Exposure Measure of the AI).

Total Exposure Measure

12. An AI's total Exposure Measure is the sum of the following exposures:
 - 12.1 all on-balance sheet exposures;
 - 12.2 derivative exposures (i.e. counterparty default risk exposure and

exposure to the reference asset);

- 12.3 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
 - 12.4 other specified off-balance sheet exposures, including commitments, direct credit substitutes, acceptances, standby letters of credit, trade letters of credit, failed transactions and unsettled securities.
13. The methods for calculating the Exposure Measure in respect of the above four main exposure categories are described in greater detail below:

13.1 ***On-balance sheet exposures***

- (a) For the purpose of calculating an AI's LR Exposure Measure, the on-balance sheet exposures of an AI must include all on-balance sheet assets (save for those in relation to derivatives and SFTs, including collateral received or provided under these transactions, which are dealt with under separate sections below).
- (b) Liability items (e.g. gains/losses due to changes in the AI's own credit risk on fair-valued liabilities as described in section 38(2)(b) of the BCR) must not be deducted from the LR Exposure Measure of an AI.

13.2 ***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 contract and (ii) a counterparty default risk exposure.
- (b) AIs must calculate their counterparty default risk exposures⁸, including where an AI sells protection using a credit

⁸ This approach makes reference to the Current Exposure Method (CEM) which is used under the Basel II Framework to capture counterparty credit risk 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 as described in the previous bullet.

derivative contract, as the sum of the current exposure⁹ (“RC”) and potential exposure (“PE”) (as described in paragraph (c) below) applying the bilateral netting rules¹⁰ as specified in the BCR (see paragraphs 6 to 9 of Annex 1B) and adjusting the exposure amount for the related collateral as set out in paragraph (e) below. Written credit derivative contracts are subject to additional requirements as set out in paragraphs (f) to (h) below.

- (c) For a single derivative contract that is not covered by a valid bilateral netting agreement, the amount to be included in the 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 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 Annex 1B.

Bilateral netting

- (d) When a valid bilateral netting agreement as defined in the BCR is in place (see paragraph 6 of Annex 1B), the RC for the set of derivative contracts covered by the agreement will be the net RC and the PE will be “A_{Net}” as calculated under the BCR (see paragraphs 7 and 8 of Annex 1B).

Treatment of Collateral

- (e) The treatment of collateral described below applies regardless of whether the collateral is cash or non-cash;

⁹ Under a national GAAP, if there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, banks must use the sum of positive fair values of these derivatives as the current exposure.

¹⁰ 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).

received or provided under 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 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. Moreover, the RC must be grossed up by any collateral amount used to reduce its value, including when the collateral received by an AI has reduced the on-balance sheet derivatives assets reported by the AI under the applicable accounting standard.
- (ii) **Collateral Provided** must not reduce an AI's Exposure Measure. Where the provision of such derivatives collateral has reduced an AI's on-balance sheet assets under the applicable accounting standard, the AI must gross up its derivative exposure by the amount of collateral provided.

Written credit derivative contracts

- (f) 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.
- (g) 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 the notional amount of a purchased credit derivative contract on the same reference name and at the same level of seniority¹² if the remaining maturity of the

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 and level of seniority. 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 buy protection on an entire securitization structure. If an AI purchases protection on a pool of reference

purchased credit derivative contract is equal to or greater than the remaining maturity of the written credit derivative contract.

- (h) To avoid double counting between the PE and the notional amount of a written credit derivative contract in determining 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 Annex 1B) 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”).

13.3 *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.
- (b) *AI acting as principal*

Basic Formula

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

- (i) Where an AI is acting as principal on an SFT, the Exposure Measure is the sum of:
 - the AI’s gross SFT assets recognized for accounting

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 tranche of a securitization), 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.

purposes (i.e. no recognition of accounting netting).¹³ This means that cash payables would not be netted against cash receivables. In addition, the AI must deduct the value of securities it has purchased or received as collateral in connection with an SFT and has recognized as an asset if the AI has the right to hypothecate the securities but has not done so¹⁴. Where cash collateral is received in conduit securities lending transactions, the cash collateral generates an exposure and must itself also be counted as part of the LR Exposure Measure¹⁵.

- a measure of counterparty default risk calculated as the current exposure (i.e. *without* PE) in respect of the SFT.

Bilateral netting

- (ii) With respect to a netting set of SFTs subject to a valid bilateral netting agreement (see paragraph 10 of Annex 1B), 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 ($\Sigma(E)$) *less* the net current market value of securities and cash *received* from the counterparty under the SFTs ($\Sigma(C)$); and
 - zero.
- (iii) For the purposes of the current exposure calculation for SFTs, only the effects of a valid bilateral netting agreement will be recognized.
- (iv) 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.

¹³ The BCBS noted that the grossing up of SFT assets avoids netting inconsistencies across different accounting regimes.

¹⁴ This is in line with the overall approach under the LR framework of derecognizing sale accounting treatment for SFTs and requiring them to be treated as secured borrowing or lending transactions, as explained in subparagraph (v) under “Sale Accounting Transactions”.

¹⁵ That means there will be “no carve-out” for cash conduit lending in SFTs.

Sale Accounting Transactions

- (v) 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 in (i) and (ii) above for such an SFT) for the purposes of determining its LR Exposure Measure.

(c) *AI acting as agent*

Basic Formula

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

- (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.

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

13.4 *Other Off-balance Sheet Exposures*

Basic Formula

$$\text{Exposure Measure} = \text{Amount of Off-balance Sheet Item} \times 100\%$$

- (a) The LR Exposure Measure for off-balance sheet items is generally calculated by multiplying the principal amount of the off-balance sheet item by a CCF of 100%.

Examples of other off-balance items subject to 100% CCF

- (b) For the purposes of the LR framework, off-balance sheet items receiving 100% CCF include, but are not limited to, the following:
- (i) commitments with an original maturity up to one year and commitments with an original maturity over one year irrespective of the CCF applied to them under the BCR for the purposes of calculating the risk-weighted capital ratios;
 - (ii) commitments that provide for automatic cancellation due to deterioration in a borrower's creditworthiness;
 - (iii) direct credit substitutes;
 - (iv) forward asset purchases, forward deposits placed and partly paid-up shares and securities, which represent commitments with certain drawdown;
 - (v) certain transaction-related contingent items, e.g., performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions;
 - (vi) note issuance facilities and revolving underwriting facilities; and
 - (vii) short-term self-liquidating trade letters of credit arising from the movement of goods, e.g., documentary credits collateralized by the underlying shipment.

Exception to 100% CCF

- (c) An exception to the application of the 100% CCF is where a commitment is unconditionally cancellable at any time by an AI without prior notice, to which a 10% CCF should be

applied instead. The BCBS has indicated that it intends to further review this treatment to ensure that the 10% CCF is appropriately conservative.

Summary of Scope of Consolidation under the LR Framework

Types of investees	Consolidation		LR Exposure Measure	
	Regulatory	Accounting	AI should include assets and exposures of investees	Reference paragraph to the LR Framework at Annex 1
Financial Sector Entity	Yes	Yes	Yes	Para. 4
	Yes	No	Yes	Para. 4
	No	Yes	Pro rata ^(Note 1)	Para. 6.1
	No	No	No ^(Note 2)	Para. 6.4
Commercial Entity (other than a Connected Company)	Yes ^(Note 3)	Yes	Yes	Para. 4
	Yes ^(Note 3)	No	Yes	Para. 4
	No	Yes	Yes	Para. 6.2
	No	No	No ^(Note 2)	Para. 6.5
Connected Company which is a Commercial Entity	No	Yes	Pro rata ^(Note 4)	Para. 6.3
	No	No	No ^(Note 2)	Para. 6.6
Securitization Investee	Yes	Yes	Yes	Para. 6.7(b)
	Yes	No	Yes	Para. 6.7(b)
	No	Yes	Yes	Para. 6.7(a)
	No	No	No ^(Note 5)	Para. 6.8
Note 1: Pro rata means the assets of such entities should be excluded from the LR Exposure Measure on a pro rata basis in proportion to the capital that is excluded under section 43(1)(p) of the Banking (Capital) Rules. Note 2: Investment in the capital of such investee that is deducted from Tier 1 capital should be excluded from the LR Exposure Measure. Note 3: Generally situations where the assets of a commercial entity are required to be consolidated under the regulatory scope of consolidation should be rare. Note 4: Pro rata means the assets and exposures of such connected company should be excluded from the LR Exposure Measure on a pro rata basis in proportion to the capital that is excluded under section 43(1)(n) of the Banking (Capital) Rules. Note 5: Any investments and retained positions (on- and off-balance sheet) in the securitization transaction must be included in the LR Exposure Measure of the AI.				

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 the form and language consistent with those employed for describing the LR framework.

Derivative exposures

CCFs for determining potential exposure

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

Residual maturity	Interest rate	Exchange rate (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 potential exposure would be calculated for single currency fixed/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.

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 potential exposure 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. Potential exposure 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-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 grade¹⁶;
 - (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;

¹⁶ Eg 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 potential exposure. The net potential exposure 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 potential exposure

A_{Gross} = the sum of the individual potential exposures (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 are 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:

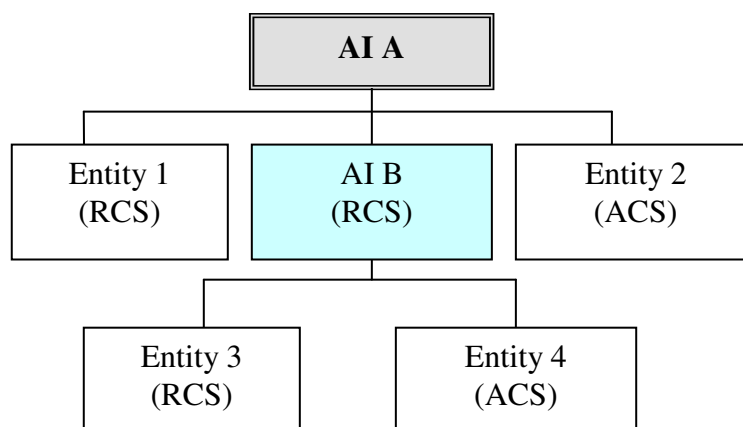
- (a) All transactions are marked to market daily, and
- (b) The collateral used in the transactions is recognized collateral in the banking book under the BCR.

**Examples illustrating how an AI should complete
Section 1 and Section 2 of the Leverage Ratio (“LR”) Survey**

Abbreviations:

- **RCS** refers to an entity that is inside the scope of regulatory consolidation pursuant to a section 3C requirement under the BCR other than one that is allowed by the HKMA to be solo-consolidated.
- **SC** refers to an entity that is allowed by the HKMA to be solo-consolidated.
- **ACS** refers to an entity that is inside the scope of accounting consolidation but outside the scope of regulatory consolidation.

Example 1 – for an AI required under the BCR to calculate risk-based capital ratios on a consolidated (other than a solo-consolidated) basis



Leverage Ratio reporting guidance:

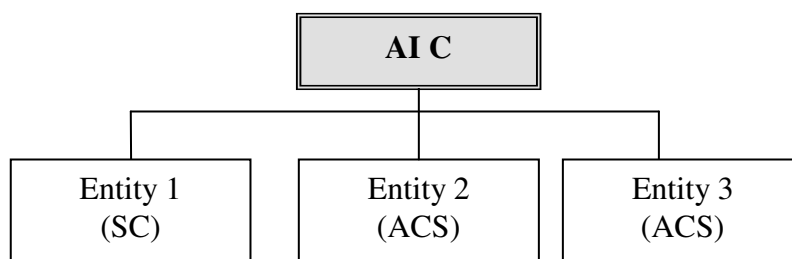
AI A

LR Survey section ref.	Reporting on combined position	Reporting on consolidated position
Section 1	Exposures of AI A	Exposures of AI A, Entity 1, AI B, Entity 3
Section 2	Not applicable	Exposures of Entity 2, Entity 4

AI B

LR Survey section ref.	Reporting on combined position	Reporting on consolidated position
Section 1	Exposures of AI B	Exposures of AI B, Entity 3
Section 2	Not applicable	Exposures of Entity 4

Example 2 – for an AI required under the BCR to calculate risk-based capital ratios on a solo-consolidated basis only



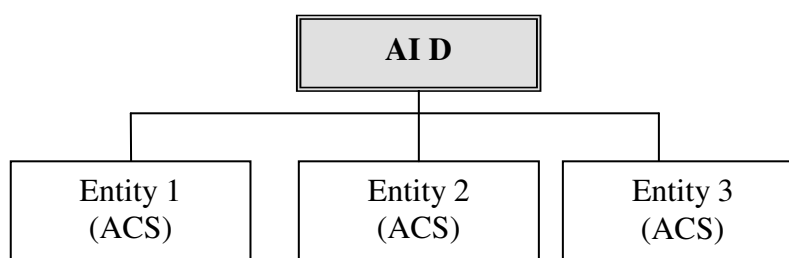
Leverage Ratio reporting guidance:

AI C

LR Survey section ref.	Reporting on combined position only	Reporting on combined position with the addition of any entities required to be consolidated for accounting purposes
Section 1	Exposures of AI C, Entity 1	Exposures of AI C, Entity 1
Section 2	Not applicable	Exposures of Entity 2, Entity 3

Example 3 – for an AI required under the BCR to calculate risk-based capital ratios on a solo basis only

(i) *where an AI has group entities inside the scope of accounting consolidation*



Leverage Ratio reporting guidance:

AI D

LR Survey section ref.	Reporting on combined position only	Reporting on combined position with the addition of any entities required to be consolidated for accounting purposes
Section 1	Exposures of AI D	Exposures of AI D
Section 2	Not applicable	Exposures of Entity 1, Entity 2, Entity 3

(ii) *where an AI (AI E) has no group entities*

Leverage Ratio reporting guidance:

AI E

LR Survey section ref.	Reporting on combined position only
Section 1	Exposures of AI E
Section 2	Not applicable