Completion Instructions

Return of Leverage Ratio

Form MA(BS)27

Introduction

1. This return collects information on the leverage position of authorized institutions incorporated in Hong Kong (AIs).

Section A : General Instructions

Definitions

2. Unless otherwise specified, terminology used in this return follows that of the Banking (Capital) Rules (BCR)[1]. For ease of reference, most of the main terms are printed in ***bold italics*** on their first appearance in these instructions. Reporting institutions should refer to the BCR for definitions of these terms.

Layout

3. This return comprises 2 sections:

   (a) Section 1 collects information on the four broad categories of an AI's exposures for which the calculation of ***exposure measure*** is required under the leverage ratio (LR) framework, viz., (i) on-balance sheet exposures, excluding those arising from derivative contracts or SFTs (other than collateral for derivative contracts or for SFTs recognised as an on-balance

[1] This refers to the BCR as amended by the Banking (Capital) (Amendment) Rules 2020.

sheet asset under the applicable accounting standard); (ii) derivative contracts; (iii) SFTs; and (iv) other off-balance sheet exposures; and

(b) Section 2 computes the LR of an AI based on the institution's total exposure measure (as derived from Section 1) and Tier 1 capital calculated in accordance with the BCR (i.e. after regulatory adjustments and deductions).

4. There are four input columns in this return for reporting exposures. Column 1 collects the gross values of the four broad categories of the AI's exposures, Columns 2 & 3 collects the values of the relevant breakdown items, where applicable, included in the calculation of the exposure measure for each of the four broad items, based on which the total exposure measure, and hence the LR, are calculated within Column 4.

Basis of reporting

5. AIs should report the quarter-end value for each item in this return.

6. This return should be completed on a solo (or solo-consolidated) basis (i.e. the Combined Return) and on a consolidated basis (i.e. the Consolidated Return) as specified by the HKMA under section 3Z of the BCR (i.e. corresponding to the bases in which the AI is required to report under the Return of Capital Adequacy Ratio (CAR Return) of an Authorized Institution Incorporated in Hong Kong (Form MA(BS)3)).

Submission dates

7. This return should be submitted quarterly. Submissions should be made to the HKMA within 1 month[2] after the end of March, June, September and December.

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[2] Please note that the submission deadline of this return will be changed from 6 weeks to "one month" starting from the reporting position of end-March 2022 to align with the same adjustment to submission deadline of the CAR Return and some other returns currently with a submission deadline of 6 weeks. Please refer to the HKMA's letter of 16 November 2020 on "New Return of Consolidated Accounts and revised submission deadlines for selected returns" (https://www.hkma.gov.hk/media/eng/doc/key-

If the submission deadline falls on a public holiday, it will be deferred to the next working day.

Others

8. Amounts should be shown to the nearest thousand, in HK$ or HK$ equivalents in the case of foreign currency items. The closing middle market T/T rates prevailing at the reporting date should be used for conversion purposes.

9. This return and its completion instructions (CIs) should be read in conjunction with the BCR and the relevant supervisory policy/guidance on the capital adequacy (CAR) framework and the LR framework.

Section B : Calculation methodology

10. AIs should refer to the calculation methodology described in Annex 1 for computing the value of each reporting item. For ease of reference, the following table explains and links each of the reporting items in the return to the relevant paragraphs of Annex 1.

Row	Item	Explanation / reference to Annex 1 (paragraph nos.)
Section 1: Exposure Measure		
(1) in column 1	On-balance Sheet Exposures	paragraphs 10.1(a), (b), (c) and (e)
(1)(a) in column 2	*Less: Regulatory adjustments*	paragraph 10.1(d)

information/guidelines-and-circular/2020/20201116e1.pdf) & Annex 5 to the letter (https://www.hkma.gov.hk/media/eng/doc/key-information/guidelines-and-circular/2020/20201116e1a5.pdf) for details.

Row	Item	Explanation / reference to Annex 1 (paragraph nos.)
(2) in column 1	Derivative Exposures	paragraph 10.2 Report the positive fair value of all derivative contracts (including those that are treated as off-balance sheet exposures under the applicable accounting standards) on a gross basis (without recognising any netting that would otherwise be permitted under accounting standards or any credit risk mitigation effects).
(2)(a) in column 2	Replacement cost associated with all derivative contracts	Replacement cost associated with all derivative contracts (paragraph 10.2(b) or 10.2(c)(i)), net of cash variation margin received (paragraph 10.2(i)(i)) and with, bilateral netting according to paragraphs 10.2(d) to (f).
(2)(a)(i) in column 3	of which: replacement cost associated with the offering of client clearing services	paragraphs 10.2(j) to (m)
(2)(b) in column 2	Add-on amounts for potential future exposure associated with all derivative contracts	paragraph 10.2(b) or 10.2(c)(ii)
(2)(b)(i) in column 3	of which: potential future exposure associated with the offering of client clearing services	paragraphs 10.2(j) to (m)

Row	Item	Explanation / reference to Annex 1 (paragraph nos.)
(2)(c) in column 2	Gross-up for collateral provided in respect of derivative contracts	paragraph 10.2(g)(ii)
(2)(d) in column 2	Adjusted effective notional amount of written credit-related derivative contracts	paragraph 10.2(o)
(2)(e) in column 2	*Less: Permitted reductions in effective notional amount and permitted deductions from add-on amounts for potential future exposure of written credit-related derivative contracts*	paragraphs 10.2(o) to (q)
(2)(f) in column 2	*Less: Receivables in respect of cash variation margin provided in derivative contracts*	paragraph 10.2(i)(ii)
(2)(g) in column 2	*Less: Exempted CCP legs of client-cleared trade exposures*	paragraphs 10.2(j) to (m)
(3) in column 1	Securities Financing Transaction (SFT) Exposures	Report the gross value of SFTs (without recognising any netting of (cash) payables against (cash) receivables that would otherwise be permitted under accounting standards or any credit risk mitigation effects).

Row	Item	Explanation / reference to Annex 1 (paragraph nos.)
(3)(a) in column 2	Gross SFT assets, after adjusting for sales accounting transactions	Gross SFT assets with no recognition of any netting other than novation with QCCPs as set out in footnote 19, removing certain securities received as determined by the first bullet in paragraph 10.3(b)(iii) and adjusting for any sales accounting transactions as determined by paragraph 10.3(b)(v).
(3)(b) in column 2	*Less: Netted amounts of cash payables and cash receivables of gross SFT assets*	The second bullet in paragraph 10.3(b)(iii)
(3)(c) in column 2	Counterparty credit risk exposure for SFT assets	paragraphs 10.3(b)(i),(ii) and (iv)
(3)(d) in column 2	Agent transaction exposures	paragraph 10.3(c)
(4) in column 4	Other Off-balance Sheet Exposures	An auto-calculation row representing the credit equivalent amount of the institution's off-balance sheet exposures.
(4)(a) in column 1	Exposures with a 10% CCF for the calculation of Leverage Ratio	paragraph 10.4
(4)(b) in column 1	Exposures with a 20% CCF for the calculation of Leverage Ratio	paragraph 10.4
(4)(c) in column 1	Exposures with a 50% CCF for the calculation of Leverage Ratio	paragraph 10.4

Row	Item	Explanation / reference to Annex 1 (paragraph nos.)
(4)(d) in column 1	Exposures with a 100% CCF for the calculation of Leverage Ratio	paragraph 10.4
(5) in Column 4	Collective provisions and specific provisions that are allowed to be excluded from Exposure Measure	paragraphs 6.1 and 10.4(c)
Section 2 – Calculation of the Leverage Ratio		
(6)	Exposure Measure for the calculation of the Leverage Ratio	An auto-calculation row representing the institution's exposure measure, being the sum of items (1), (2), (3) and (4) minus item (5) in column 4.
(7)	Tier 1 Capital After Deductions	paragraph 2 The amount reported in this row must be consistent with the figure reported for item (E) in column 2 of Part II of MA(BS)3.
(8)	Leverage Ratio	An auto-calculation row representing the institution's LR at the quarter-end.

Hong Kong Monetary Authority
June 2021

Annex

Leverage Ratio Calculation Methodology

(A) Definition of Leverage Ratio

1. The ***leverage ratio*** (LR) is defined as the ratio, expressed as a percentage, of the ***Tier 1 capital*** of an authorised institution (AI) to its ***exposure measure***.

(B) Tier 1 Capital

2. The Tier 1 capital is calculated according to Part 3 of the Banking (Capital) Rules (BCR), meaning that it should be net of any applicable regulatory deductions.

(C) Exposure Measure

Scope of consolidation

3. When calculated on a consolidated basis, the exposure measure should cover exposures of group entities that are inside the scope of regulatory consolidation[3]. In other words, the LR framework follows the same scope of regulatory consolidation as the risk-based capital framework.

4. 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.

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

5. However, investments in the capital of investees which are deducted from the Tier 1 capital of the AI may 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

6. An AI should generally follow the gross accounting value for the purposes of calculating the exposure measure for the LR, subject to the following:

6.1 on-balance sheet, non-derivative exposures are to be included in the exposure measure, net of any accounting valuation adjustments (e.g. accounting credit valuation adjustments) and the following (to the extent that they have reduced / are deducted from Tier 1 capital): (i) ***specific provisions***, (ii) ***collective provisions***, and (iii) prudent valuation adjustments (PVAs) for exposures to less liquid positions (other than those related to liabilities);

6.2 netting of loans and deposits is not allowed;

6.3 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; and

6.4 exposures or assets deducted from Tier 1 capital may be deducted from the exposure measure of the AI (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).

7. With regard to ***traditional securitization transactions***, the ***originating institution*** of an ***eligible securitization transaction*** may exclude the ***underlying exposures*** of the transaction from its exposure measure. Such institutions must

however include any retained ***securitization exposures*** in its exposure measure. For any ***non-eligible securitization transaction***, the underlying exposures of the transaction must be included in the exposure measure of the institution.

8. For the purposes of LR, any ***long settlement transaction*** (LST) or failed trade has to be treated according to their accounting classification. For example, if a LST is classified as a derivative according to applicable accounting standards, the exposure measure has to be calculated according to paragraph 10.2. Similarly, if a failed trade is classified as a receivable and reported on-balance sheet according to the applicable accounting standards, the exposure measure has to be calculated according to paragraph 10.1. For SFTs that have failed to settle, their exposure measure must be calculated according to paragraph 10.3. *[BCBS FAQ section 6 Q1]*[4]

Total exposure measure

9. An AI's total exposure measure is the sum of the following four categories of exposures, each as determined by the standard calculation methodology set out in this Annex:

9.1 on-balance sheet exposures, excluding those arising from paragraphs 9.2 and 9.3 below;

9.2 exposures arising from ***derivative contract*****s** (derivative exposures), other than collateral recognised as on-balance sheet asset under the applicable accounting standard;

9.3 exposures arising from ***SFT***s (SFT exposures), other than collateral recognised as on-balance sheet asset under the applicable accounting standard; and

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[4] Unless otherwise stated, all references in these CIs are to the frequently asked questions on the Basel III leverage ratio framework, which will be updated to the corresponding references to the Consolidated Basel Framework upon implementation of the 2017 Basel III Final Package (please see https://www.bis.org/basel_framework/standard/LEV.htm).

9.4 other off-balance sheet exposures.

10. The methods for calculating the exposure measure in respect of the above four 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 assets[5]. 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 derivatives 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 Ordinance (Chapter 66 of the Laws of Hong Kong) to, and held by, the AI.

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[5] Where an AI according to its operative accounting framework recognises fiduciary assets on the balance sheet, such assets can be excluded from the exposure measure provided that they meet the IAS 39 / HKAS 39 (or IFRS 9 / HKFRS 9 on or after 1 January 2018) criteria for derecognition and, where applicable, IFRS 10 / HKFRS 10 for deconsolidation. Where an AI leases a tangible asset, the related right-of-use asset being recognised on its balance sheet must be included in the exposure measure.

(d) Subject to the exceptions described in paragraph (b) above, items deducted from Tier 1 capital (as set out in sections 38(2)(a), (c), (d) and (e), 43 and 47 of the BCR) may be deducted from the exposure measure.[6]

(e) The following treatment applies in the case of "cash pooling" (i.e. arrangements involving treasury products whereby an AI combines the credit and/or debit balances of several individual participating customer accounts into a single account balance to facilitate cash and/or liquidity management): *[BCBS FAQ section 1.1 Q1]*

(i) when such arrangement entails a transfer at least on a daily basis of the credit and/or debit balances of the individual participating customer accounts into a single account balance, the individual participating customer accounts are deemed to be extinguished and transformed into a single account balance upon the transfer provided the institution is not liable for the balances on an individual basis upon the transfer. Thus, the basis of the exposure measure for such a cash pooling arrangement is the single account balance and not the individual participating customer accounts.

(ii) when the transfer of credit and/or debit balances of the individual participating customer account does not occur daily, extinguishment and transformation into a single account balance is deemed to occur and such balance may serve as the basis of the exposure measure provided all of the following conditions are met:

(A) in addition to providing for the several individual

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[6] 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.

participating customer accounts, the cash pooling arrangement provides for a single account, into which the balances of all individual participating customer accounts can be transferred and thus extinguished;

(B) the AI not only has a legally enforceable right to transfer the balances of the individual participating customer accounts into a single account so that the institution is not liable for the balances on an individual basis, but also has the discretion and be in a position to exercise this right at any point in time;

(C) the frequency by which the AI transfers the balances of individual participating customer accounts into a single account is not considered inadequate by the HKMA;

(D) there are no maturity mismatches among the balances of the individual participating customer accounts included in the cash pooling arrangement or all balances are either overnight or on demand; and

(E) the institution charges or pays interest and/or fees based on the combined balance of the individual participating customer accounts included in the cash pooling arrangement.

(iii) in case the conditions mentioned in sub-paragraph (ii) above are not fully met, the individual balances of the participating customer accounts must be reflected separately in the exposure measure.

10.2 *Derivative exposures*

The exposure measure for a derivative contract consists of two components: (i) exposure arising from the underlying reference obligation of the derivative contract and (ii) ***counterparty default risk*** exposure.

(a) The exposure measure for the counterparty default risk in respect of a derivative contract in turn consists of: (i) the replacement cost (RC)[7] and (ii) the potential future exposure (PFE) of the contract (as described in paragraphs (b) and (c) below), and is calculated based on the formula below:

$$\text{Exposure Measure} = 1.4 * (\text{RC} + \text{PFE})$$

Depending on the approach it is required to use for calculating its default risk exposures for CAR purposes under the BCR (i.e. ***current exposure method*** (CEM), ***SA-CCR approach, IMM(CCR) approach***), an AI is required to use either (i) the modified CEM (as described in paragraph (b) below) or (ii) the modified SA-CCR approach (as described in paragraph (c) below) to calculate the exposure measure of its counterparty default risk exposures for LR purposes as set out in the following table:

Approach used for CAR purposes	**Approach used for LR purposes**
CEM	Modified CEM
SA-CCR / IMM(CCR)	Modified SA-CCR

[7] Where there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, an AI must use the sum of positive fair values of these derivatives as the RC.

Basic formula (applicable for AIs adopting modified CEM)

(b) AIs must calculate the RC of a derivative contract as the ***current exposure*** of the contract and calculate the **PFE** of the contract by multiplying the notional amount of the contract and its applicable ***credit conversion factor*** (CCF) (i.e. Table 23AI under section 226MD of the BCR). The RC in relation to the contract must be calculated and adjusted for collateral received or provided as set out in paragraphs (g) to (i) below. Treatment of derivative exposures arising out of contracts cleared through ***central counterparties*** (CCPs) is described in paragraphs (j) to (m) below. Written ***credit-related derivative contracts*** are subject to additional requirements as set out in paragraphs (n) to (q) below.

Basic formula (applicable for AIs adopting modified SA-CCR approach)

(c) AIs must calculate the RC and the PFE of a derivative contract in accordance with sub-paragraphs (c)(i) & (ii) below). The exposure measure in relation to the contract must then be calculated and adjusted for collateral received or provided as set out in paragraphs (g) to (i) below. For derivative contracts not covered by a qualifying bilateral netting agreement[8], the amount to be included in the exposure measure is determined for each contract separately. When a qualifying bilateral netting agreement is in place, the formula above (paragraph 10.2(a)) is applied at the ***netting set*** level. Treatment of derivative exposures arising out of contracts cleared through CCPs is described in paragraphs (j) to (m) below. Written credit-related derivative contracts are subject to additional requirements as set out in paragraphs (n) to (q) below:

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[8] Please refer to sub-paragraph 10.2(h)(v).

RC

(i) RC is measured based on the following formula:

$$RC = \max (V - CVM_r + CVM_p, 0)$$

where

- V is the market value of the derivative contract or of the derivative contracts in a netting set;
- CVM_r is the cash portion of the ***variation margin*** (cash variation margin) received that meets the conditions set out in paragraphs (h) and (i), and for which the amount has not already reduced the market value of the derivative contract V under the AI's operative accounting standard; and
- CVM_p is the cash variation margin provided by the AI that meets the same conditions.

PFE

(ii) Same as SA-CCR approach for CAR purposes, the amount of PFE to be included in the exposure measure is calculated according to the formula below:

$$PFE = \text{multiplier} \times AddOn^{aggregate}$$

The manner in which the relevant methodology of SA-CCR approach described in Part 6A (Division 1A) of the BCR (i.e. subdivision 3 on "Classification of Derivative Contracts into Asset Classes and Further Classification into Hedging Sets"; subdivision 4 on "Calculation of PFE"; subdivision 5 on "Calculation of Add-on"; and

subdivision 6 on "Calculation of Effective Notional Amount") should be applied or adjusted for the calculation of the amount of PFE for LR purposes is set out in the following:

- For the purposes of LR framework, the **multiplier is fixed at one** (i.e. the calculation of multiplier prescribed under section 226BR(3) of the BCR is **NOT applicable**); and
- when calculating the aggregate add-on component for all margined contracts, the maturity factor for the contracts may be determined in accordance with section 226BZE of the BCR.

Bilateral netting

(d) AIs may net transactions subject to novation under which any obligation between an AI and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.

(e) AIs may also net transactions subject to any legally valid form of bilateral netting not covered in paragraph (d) above, including other forms of novation.

(f) For cases described in paragraphs (d) and (e) above, an AI will need to be satisfied that the agreement is a qualifying bilateral netting agreement (as defined in sub-paragraph (h)(v)).

Treatment of collateral

(g) Subject to the treatment of cash variation margin as described in paragraphs (h) and (i) below, in calculating the exposure measure, the treatment of collateral described in the following applies regardless of whether the collateral is cash or non-cash; received

or provided under contracts covered by a qualifying 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) by an AI must not be netted against its exposure measure irrespective of whether or not netting is permitted under the accounting rules or the BCR applicable to the AI. The 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) by an AI must not reduce its exposure measure. Where the provision of such collateral under the terms of a derivative contract has reduced the 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

(h) For the purpose of calculating the AI's exposure measure, the cash variation margin exchanged between AI and its 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), the cash received by the recipient counterparty is not segregated (i.e. if the recipient counterparty has no restrictions by law, regulation or any agreement with the counterparty on the ability to use the cash received. In other words, the cash variation margin received is used as its own cash). *[BCBS FAQ section 2.5 Q5 & Q6]*

(ii) the cash variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivative

positions. To meet this criterion, derivative positions must be valued daily and cash variation margin must be transferred daily to the counterparty or the counterparty's account, as appropriate. *[BCBS FAQ section 2.3 Q3]* Cash variation margin exchanged on the morning of the subsequent trading day based on the previous, end-of-day market values would meet this criterion. *[BCBS FAQ section 2.4 Q4]*

(iii) the cash variation margin is received in any currency of settlement specified in the derivative contract, governing master/ qualifying bilateral netting agreement, the credit support annex to the master/ qualifying bilateral netting agreement, or as defined by the netting agreement with a CCP. *[BCBS FAQ section 2.1 Q1]*

(iv) variation margin exchanged is the full amount that would be necessary to extinguish the mark-to-market exposure of the derivative contract subject to the threshold and minimum transfer amounts applicable to the counterparty.[9] *[BCBS FAQ section 2.4 Q4]*

(v) derivative contracts and the variation margins are covered by a single bilateral netting agreement between the legal entities that are counterparties in the derivative contracts. 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. For the purpose of this paragraph, the term "bilateral netting agreement" includes any netting agreement or arrangement

[9] In situations where a margin dispute arises, the amount of non-disputed variation margin that has been exchanged can be recognised.

that provides legally enforceable rights of offset[10] and a master bilateral netting agreement may be deemed to be a single bilateral netting agreement. The bilateral netting agreement must be legally enforceable and effective (i.e. it meets the conditions set out in the BCR) *[BCBS FAQ section 2.2 Q2]* in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency. Any bilateral netting agreement that can satisfy the conditions described in this paragraph is referred to as "qualifying bilateral netting agreement" for the purpose of these CIs.

(i) Subject to the conditions outlined in paragraph (h) above, the cash 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 PFE) of the exposure amount of the derivative contract as specified in paragraph (b) or (c)(i) above, as the case requires; and

(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, and instead include the cash variation margin provided in the calculation of the RC as specified in paragraph (b) or (c)(i) above, as the case requires.

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[10] This is to take into account the fact that, for netting agreements employed by CCPs, no standardization has currently emerged that would be comparable with respect to over-the-counter netting agreements for bilateral trading.

Treatment of clearing services

(j) Where an AI acting as ***clearing member*** (CM) offers clearing services to ***clearing clients***, the AI's trade exposures[11] to the CCP that arise when the AI is obligated to reimburse the clearing clients 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 contracts. However, if the AI, based on the contractual arrangements with the clearing client for derivative contracts cleared with a QCCP, is not obligated to reimburse the clearing client for any losses suffered due to changes in the value of its transactions in the event that the QCCP defaults, the AI need not recognise the resulting trade exposures to the QCCP in the exposure measure.

Where an AI within a ***multi-level client structure*** associated with a QCCP provides clearing services to a clearing client within the structure, the AI need not recognise in its exposure measure the resulting trade exposures to the CM of the QCCP or to an entity within the structure that is a ***higher-level client*** (HLC) of the AI in the exposure measure if all of the following conditions are met:

(i) the ***offsetting transactions*** with the CM are identified by the QCCP as client transactions and collateral to support them is held by the QCCP and/or the CM, as applicable, under arrangements that prevent losses to the AI and the HLC due to the default or insolvency of: (a) the CM; (b) the CM's other clearing clients; and (c) the joint default or insolvency

[11] For the purposes of these instructions, "trade exposures" means an exposure to the counterparty default risk of a CCP, clearing member or clearing client. If the entity to which the AI has a trade exposure is a CCP, the AI's trade exposures to the CCP includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP.

of (a) and (b)[12];

(ii) the AI must have conducted a sufficient legal review (and undertake such further review as necessary to ensure continuing enforceability) and have a well-founded basis to conclude that, in the event of legal challenge, the relevant courts and administrative authorities would find that such arrangements mentioned above would be legal, valid, binding and enforceable under relevant laws of the relevant jurisdiction(s);

(iii) relevant laws, regulation, rules and contractual or administrative arrangements provide that the offsetting transactions with the defaulted or insolvent CM are highly likely to continue to be indirectly transacted through the QCCP, or by the QCCP, if the CM defaults or becomes insolvent[13]. In such circumstances, the AI's and the HLC's positions and collateral with the QCCP will be transferred at market value unless the AI or the HLC requests to close out the position at market value; and

(iv) the AI is not obliged to reimburse its clearing client for any losses suffered in the event of default of either the CM or the QCCP.

(k) Pursuant to paragraph (j) above, for derivative exposures associated with the AI's offering of client clearing services, the RC and the PFE of the exposure to the ***direct client*** (or the exposure to the "***lower level client***" in the case of multi-level client

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[12] That is, upon the insolvency of the CM, there is no legal impediment (other than the need to obtain a court order to which the client is entitled) to the transfer of the collateral belonging to clearing clients of a defaulting CM to the QCCP, to one of more other surviving CMs or to the clearing client or the clearing client's nominee.

[13] If there is a clear precedent for transactions being ported at a QCCP and industry intent for this practice to continue, then these factors must be considered when assessing if trades are highly likely to be ported. The fact that QCCP documentation does not prohibit client trades from being ported is not a sufficient consideration that they are highly likely to be ported.

structure) may be calculated according to the SA-CCR approach (or the CEM if the AI also uses the CEM for the purpose of calculating CAR). For the determination of RC and PFE, the amount of initial margin received by the AI from its clearing client that may be included in the values of collateral and net amount of independent collateral ***(NICA)*** calculated under section 226BJ(3) of the BCR should be limited to the amount that is subject to appropriate segregation by the AI as defined in the relevant jurisdiction.

(l) Where an AI's clearing client enters directly into a derivative contract with the CCP and the AI as a CM merely guarantees the performance of the clearing client's trade exposure to the CCP in respect of the derivative contract, the AI must calculate its related exposure measure resulting from the guarantee as a derivative exposure as set out in paragraphs (a) to (i) above, as if it had entered directly into the contract with the clearing client, including with regard to the receipt or provision of cash variation margin.

(m) For the purposes of paragraphs (j) to (l) above, if an AI is a CM, an entity affiliated to the AI may be considered a clearing client of the AI if it is outside the relevant scope of regulatory consolidation at the level at which the LR is applied. In contrast, if an affiliate entity falls within the regulatory scope of consolidation, the trade between the affiliate entity and the AI is eliminated in the course of consolidation, but the AI still has a trade exposure to the CCP, which will be considered proprietary and the exemption in paragraph (j) no longer applies. *[BCBS FAQ section 2.7 Q8]*

Written credit-related derivative contracts

(n) In addition to the counterparty default risk exposure arising from the fair value of the contracts, written credit-related derivative contracts create a notional credit exposure arising from the creditworthiness of the reference entity that has to be incorporated

into the exposure measure[14] in addition to the above treatments for derivative contracts, netting and collateral.

(o) To capture the credit exposure to the underlying reference entity, in addition to the above treatment for derivative contracts and related collateral, the effective notional amount of a written credit-related derivative contract is incorporated into the exposure measure unless the written credit-related derivative contract is included in a transaction cleared on behalf of a clearing client of an AI acting as a CM (or acting as a clearing services provider in a multi-level client structure in paragraph (j) above) and the transaction meets the requirements of paragraph (j) above for the exclusion of trade exposures to the QCCP (or, in the case of a multi-level client structure, the requirements of paragraph (j) for the exclusion of trade exposures to the CM or the QCCP). 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. The effective notional amount of a written credit-related 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-related derivative contract.[15] The resulting amount may be further reduced by the

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[14] This is so even if certain written options are permitted the zero exposure at default treatment allowed in the BCR.

[15] For example, if a written credit-related derivative contract had a positive fair value of 20 on one date and has a negative fair value of 10 on a subsequent reporting date, the effective notional amount of the credit-related derivative contract may be reduced by 10. The effective notional amount cannot be reduced by 30. However, if at the subsequent reporting date the credit-related derivative contract has a positive value of 5, the effective notional amount cannot be reduced at all. This treatment is consistent with the rationale that the effective notional amounts included in the exposure measure may be capped at the level of the maximum potential loss, which means that the maximum potential loss at the reporting date is the notional amount of the credit-related derivative contract minus any negative fair value that has already reduced Tier 1 capital. *[BCBS FAQ section 3.1 Q1]*

effective notional amount of a purchased credit-related derivative contract on the same reference name,[16] provided that:

(i) the credit protection obtained through the purchased credit-related derivative contract is otherwise subject to the same or more conservative material terms as those in the corresponding written credit-related derivative contract. This ensures that if an AI provides written protection via some type of credit-related derivative contract, the AI may only recognise offsetting from another purchased credit-related derivative contract to the extent that the purchased protection is certain to deliver a payment in all potential future states. Material terms include the level of subordination, optionality credit events, reference and any other characteristics relevant to the valuation of the derivative contract;[17]

(ii) the remaining maturity of the credit protection obtained through the purchased credit-related derivative contract is equal to or greater than the remaining maturity of the written credit-related derivative contract;

(iii) the credit protection obtained through the purchased credit-related derivative contract is not purchased from a

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[16] An AI may offset the effective notional amount of a written credit-related derivative contract sold to a clearing client by means of a credit-related derivative contract on the same underlying name purchased from a CCP provided that the criteria of this paragraph are met. *[BCBS FAQ section 3.5 Q5]*

[17] For example, the application of the same material terms condition would result in the following treatments. First, in the case of single name credit-related derivative contracts, the credit protection purchased through the credit-related derivative contracts is on a reference obligation which ranks pari passu with or is junior to the underlying reference obligation of the written credit-related derivative contract. Credit protection purchased through credit-related derivative contracts that references a subordinated position may offset written credit-related derivative contracts 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. Second, for tranched products, the credit protection purchased through credit-related derivative contracts must be on a reference obligation with the same level of seniority.

counterparty whose credit quality is highly correlated with the value of the reference obligation[18];

(iv) in the event that the effective notional amount of written credit-related derivative contract is reduced by any negative change in fair value reflected in the AI's Tier 1 capital, the effective notional amount of the offsetting credit protection obtained through the purchased credit-related derivative contract must also be reduced by any resulting positive change in fair value reflected in Tier 1 capital; and

(v) the credit protection obtained through the purchased credit-related derivative contract is not included in a transaction that has been cleared on behalf of a clearing client (or that has been cleared by the AI in its role as a clearing services provider in a multi-level client structure as referenced in paragraph (j)) and for which the effective notional amount referenced by the corresponding written credit-related derivative contract is excluded from the exposure measure according to this paragraph.

(p) For the purposes of paragraphs (n) and (o) above:

(i) the term "written credit-related derivative contract" refers to a broad range of credit-related derivative contract through which an AI effectively provides credit protection and is not limited solely to credit default swaps and total return swaps. *[BCBS FAQ section 3.2 Q2]* For example, all options where an AI has the obligation to provide credit protection under certain conditions qualify as "written credit-related derivative contracts". The effective notional amount of

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[18] Specifically, the credit quality of the counterparty must not be positively correlated with the value of the reference obligation (i.e. the credit quality of the counterparty falls when the value of the reference obligation falls and the value of the purchased credit-related derivative contract increases). In making this determination, there does not need to exist a legal connection between the counterparty and the underlying reference entity.

such options sold by the AI may be offset by the effective notional amount of options by which the AI has the right to purchase credit protection which fulfils the conditions in paragraph (o); and the condition of same or more conservative material terms as those in the corresponding written credit-related derivative contracts as referenced in paragraph (o) can be considered met only when the strike price of the underlying purchased credit protection is equal to or lower than the strike price of the underlying sold credit protection.

(ii) two reference names are considered identical only if they refer to the same legal entity. Credit protection on a pool of reference names purchased through credit-related derivative contracts may offset credit protection sold on individual reference names if the credit protection purchased is economically equivalent to purchasing credit protection separately on each of the individual names in the pool (this would, for example, be the case if an AI were to purchase credit protection on an entire securitization structure). If an AI purchases credit protection on a pool of reference names through credit-related derivative contracts, but the credit protection purchased 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-related derivative contract or a securitization tranche), then the written credit-related derivative contracts on the individual reference names may not be offset. However, such purchased credit protection may offset written credit-related derivative contracts on a pool provided that the credit protection purchased through credit-related derivative contracts covers the entirety of the subset of the pool on which the credit protection has been sold. *[BCBS FAQ section 3.4 Q4]*. Credit protection purchased through a credit-related derivative contract on a pool of reference assets cannot offset a written credit-related derivative contract unless both contracts reference the same

pool of reference assets and the level of subordination of both contracts is identical.

(iii) where the effective notional amount of the purchased credit-related derivative contract has not been reduced by any resulting positive change in fair value reflected in Tier 1 capital, the effective notional amount of the written credit-related derivative contract may only be offset if the effective notional amount of that written credit-related derivative contract has not been reduced by any negative change in fair value reflected in Tier 1 capital. *[BCBS FAQ section 3.3 Q3]* Also, the effective notional amount of a written credit-related derivative contract may be reduced by any negative change in fair value reflected in the AI'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.

(iv) where an AI buys credit protection through a total return swap and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit-related derivative contract (either through reductions in fair value or by an addition to reserves) in Tier 1 capital, the credit protection will not be recognised for the purpose of offsetting the effective notional amounts related to written credit-related derivative contracts.

(q) Since written credit-related derivative contracts are included in the exposure measure at their effective notional amounts, and are also subject to amounts for PFE, the exposure measure for written credit-related derivative contracts may be overstated. AIs may therefore choose to exclude from the netting set for the PFE calculation the portion of a written credit-related derivative contract which is not offset according to paragraph (o) and for which the effective notional amount is included in the exposure

measure. This condition of exclusion refers only to the offset by credit protection purchased through a credit-related derivative contract according to paragraph (o) and not to the reduction of the effective notional amount as a result of the negative change in fair value that has reduced Tier 1 capital.

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.

(b) ***AI acting as principal***

Basic Formula

(i) Where a valid bilateral netting agreement (see paragraphs 1 and 2 of Appendix A) is in place, the exposure measure is calculated according to the formula below:

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

- where an AI is acting as principal on an SFT (or a portfolio of SFTs), the exposure measure is the sum of:

- the AI's gross SFT assets [19] recognised for accounting purposes (i.e. no recognition of accounting netting);[20] and

- a measure of counterparty default risk calculated as the current exposure (i.e. without PFE) in respect of the SFT (i.e. the current exposure (E^*) calculated as the greater of zero and the fair value of securities and cash lent to a counterparty for all transactions included in the valid bilateral netting agreement ($\mathbf{\Sigma E_i}$) less the total fair value of securities and cash received from the counterparty for those transactions ($\mathbf{\Sigma C_i}$)).

(ii) Where no valid bilateral netting is in place, the current exposure ($\mathbf{E_i^*}$) for transactions with a counterparty must be calculated on a transaction-by-transaction basis - that is, each transaction **(i)** is treated as its own netting set, as calculated in the formula below:

$$Ei^* = \max [0, (Ei - Ci)]$$

- The current exposure ($\mathbf{E_i^{*)}}$ may be set to zero if –

(A) $\mathbf{E_i}$ is the cash lent to the counterparty;

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[19] For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognised for accounting purposes" is replaced by the final contractual exposure, i.e. the exposure to the QCCP after the process of novation has been applied, given that pre-existing contracts have been replaced by new legal obligations through the novation process. However, AIs can only net cash receivables and cash payables with a QCCP if the criteria in paragraph 10.3(b)(iii) are met. Any other netting permitted by the QCCP is not permitted for the purposes of the LR. *[BCBS FAQ section 4.1 Q3]*

[20] Gross SFT assets recognised for accounting purposes must not recognise any accounting netting of cash payables against cash receivables (e.g. as currently permitted under the IFRS and US GAAP accounting frameworks). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes.

(B) the SFT is treated as its own netting set; and

(C) the associated cash receivable is not eligible for the netting treatment in paragraph 10.3(b)(iii) below.

(iii) 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 sheet[21], 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; in particular, transactions with no explicit end date but which can be unwound at any time by either party to the transaction are not eligible; *[BCBS FAQ section 4.1 Q2]*

(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 the counterparty's (i) default; (ii) insolvency; or (iii) bankruptcy; and *[BCBS FAQ section 4.1 Q4]*

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

(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 any issues arising from the securities legs of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables. In particular, this latter condition means that the failure of any single securities transaction in the settlement mechanism may delay settlement of only the matching cash leg or create an obligation to the settlement mechanism, supported by an associated credit facility. *[BCBS FAQ section 4.1 Q1]* If there is a failure of the securities leg of a transaction in such a mechanism at the end of the window for settlement in the settlement mechanism, then this transaction and its matching cash leg must be split out from the netting set and treated gross.[22] *[BCBS FAQ section 4.1 Q1]*

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[22] Specifically, the criteria in paragraph 10.3(b)(iii)(C) above are not intended to preclude a DVP settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements set out in that paragraph. For example, a settlement mechanism may meet these functional requirements if any failed transactions (i.e. the securities that failed to transfer and the related cash receivable or payable) can be re-entered in the settlement mechanism until they are settled. *[BCBS FAQ section 4.1 Q1]*

(iv) for the measurement of counterparty default risk, the term "counterparty" includes not only the counterparty of the bilateral repo transactions but also triparty repo agents that receive collateral in deposit and manage the collateral in the case of triparty repo transactions. Therefore, securities deposited at triparty repo agents are included in "total value of securities and cash lent to a counterparty" **(E)** up to the amount effectively lent to the counterparty in a repo transaction. However, excess collateral that has been deposited at triparty agents but that has not been lent out may be excluded. *[BCBS FAQ section 4.2 Q5]*

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 described in sub-paragraphs (b)(i) to (iv) above for such an SFT) for the purposes of determining its exposure measure.

(c) ***AI acting as agent***

(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.[23]

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,[24] the AI will need to calculate its exposure measure as if it were acting as principal, i.e. by also including gross SFT assets recognised 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.

(iii) to avoid doubt, where an AI acting as agent provides an indemnity or guarantee to both parties involved in an SFT (i.e. securities lender and securities borrower), the AI will be required to calculate exposure measure separately for each party involved in the SFT. *[BCBS FAQ section 4.3 Q6]*

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[23] 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 recognise the SFT in its exposure measure.

[24] For example, this may arise due to the bank managing collateral received in the bank's name or on its own account rather than on the customer's or borrower's account (e.g. by on-lending or managing unsegregated collateral, cash or securities). However, this does not apply to client omnibus accounts that are used by agent lenders to hold and manage client collateral provided that client collateral is segregated from the bank's proprietary assets and the AI calculates the exposure on a client-by-client basis. *[BCBS FAQ section 4.3 Q7]*

10.4 *Other off-balance sheet exposures*

Basic Formula

Exposure Measure = Amount of Off-balance Sheet Item x 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.[25]

CCFs	**Off-balance sheet items**
10%	- 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 qualified ***servicer cash advance facilities*** for securitization transactions that meet the requirements set out in section 235(3) of the BCR
20%	- Commitments (other than off-balance sheet securitization exposures) with an original maturity up to one year - ***Trade-related contingency***[26]

[25] 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.

[26] 20% CCF applies to both issuing and confirming banks.

CCFs	Off-balance sheet items
50%	- Commitments (other than off-balance sheet securitization exposures) with an original maturity over one year - ***Transaction-related contingencies*** - ***Note issuance facilities and revolving underwriting facilities***
100%	- ***Direct credit substitutes*** - ***Forward asset purchases***, ***forward forward deposits placed***[27] and ***partly paid-up shares and securities***, which represent commitments with certain drawdown - ***All*** off-balance sheet securitization exposures other than undrawn qualified servicer cash advance facilities mentioned above that are eligible for a 10% CCF

(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.

(c) Specific and collective provisions set aside against off-balance sheet exposures that have decreased Tier 1 capital may be deducted from the credit equivalent amount of those exposures. However, the resulting total credit equivalent amount for off-balance sheet exposures cannot be less than zero.

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[27] The commitment to place or accept forward forward deposits under the LR framework must be treated consistently with the treatment of these commitments under the risk-based capital framework. Specifically, the commitment to place forward forward deposits is subject to a 100% CCF, while the commitment to accept forward forward deposits is treated as an ***interest rate contract***. In addition, deliverable bond futures and over-the-counter equity forward purchases must be treated as derivative contracts. *[BCBS FAQ section 7.1 Q1]*

Appendix A

SFT exposures

1. The eligibility criteria for determining what constitutes a valid bilateral netting agreement follow those set out in the BCR.

2. Netting across positions in the banking book and trading book will only be recognised when the SFTs fulfill the following conditions:

   (a) all SFTs are marked to market daily; and

   (b) the collateral used in the SFTs is ***recognized collateral*** (if the AI concerned uses the STC approach or the BSC approach to calculate its credit risk for non-securitization exposures) or ***recognized financial collateral*** (if the AI concerned uses the IRB approach to calculate its credit risk for non-securitization exposures) in the banking book under the BCR.