Guideline

Subject: **Leverage Requirements Guideline**

Date: **October 2014** **Effective Date: November 2014 / January 2015**[1]

Subsections 485(1) and 949(1) of the *Bank Act* (BA) and subsection 473(1) of the *Trust and Loan Companies Act* (TLCA) and subsection 409(1) of the *Cooperative Credit Associations Act* (CCAA) require banks, bank holding companies, trust and loan companies, and cooperative retail associations, respectively, to maintain adequate capital. The Leverage Requirements Guideline is not made pursuant to subsections 485(2) or 949(2) of the BA, to subsection 473(2) of the TLCA, or to subsection 409(2) of the CCAA. However, the leverage requirements set out in this guideline, together with the capital standards specified in the Capital Adequacy Requirements (CAR) Guideline, provide the framework within which the Superintendent assesses whether a bank or a trust or loan company maintains adequate capital pursuant to the Acts. For this purpose, the Superintendent has established two minimum standards: the leverage ratio described in this Guideline, and the risk-based capital ratio set out in the CAR Guideline. The first test provides an overall measure of the adequacy of an institution's capital. The second measure focuses on risk faced by the institution. Notwithstanding that a bank, bank holding company, a trust and loan company, or cooperative credit association may meet these standards, the Superintendent may direct a bank or bank holding company to increase its capital under subsections 485(3) or 949(3) of the BA, a trust and loan company to increase its capital under subsection 473(3) of the TLCA, or a cooperative retail association to increase its capital under section 409(3) of the CCAA.

OSFI, as a member of the Basel Committee on Banking Supervision, participated in the development of the international leverage ratio framework, *Basel III leverage ratio framework and disclosure requirements* (January 2014). This domestic guidance is based on the Basel III leverage ratio framework.

Where relevant, the Basel III leverage ratio framework paragraph numbers are provided in square brackets at the end of each paragraph referencing material from the Basel III leverage ratio framework.

[1] For institutions with a fiscal year ending October 31 or December 31, respectively.

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Overview

1. Outlined below are the leverage requirements for banks, federally regulated trust or loan companies and cooperative retail associations, and for bank holding companies incorporated or formed under Part XV of the *Bank Act*, collectively referred to as 'institutions'.

2. Parts of this guideline are drawn from the Basel Committee on Banking Supervision (BCBS) Basel III leverage ratio framework, entitled: *Basel III leverage ratio framework and disclosure requirements* (January 2014) and the BCBS *Frequently asked questions on the Basel III leverage ratio framework* (October 2014). For reference, the Basel text paragraph numbers and FAQ page numbers that are associated with the text appearing in this guideline are indicated in square brackets at the end of each paragraph[2]. OSFI will review and update this guideline on a regular basis, as appropriate, to incorporate any changes adopted by the BCBS and agreed to by OSFI as a member of the BCBS.

Scope of Application

3. These leverage requirements apply on a consolidated basis and apply to all institutions as defined in paragraph 1 above[3]. The consolidated entity includes all subsidiaries except insurance subsidiaries. This is consistent with the scope of regulatory consolidation used under the risk-based capital framework as set out in Section 1.1 of OSFI's Capital Adequacy Requirements (CAR) Guideline. [BCBS Jan 2014 par 8]

4. *Treatment of investments in the capital of banking, financial, insurance and commercial entities that are outside the regulatory scope of consolidation*: where a banking, financial, insurance or commercial entity is outside the scope of regulatory consolidation, only the investment in the capital of such entities (i.e., only the carrying value of the investment, as opposed to the underlying assets and other exposures of the investee) is to be included in the leverage ratio exposure measure. However, investments in the capital of such entities that are deducted from Tier 1 capital as set out in paragraph 15 may be excluded from the leverage ratio exposure measure. [BCBS Jan 2014 par 9]

Calculation of leverage requirements

5. The leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with this ratio expressed as a percentage:

$$\text{Leverage ratio} = \frac{\text{Capital Measure}}{\text{Exposure Measure}}$$

[BCBS Jan 2014 par 6]

2 Following the format: [BCBS Jan 2014 par xx] and [BCBS FAQ #x, page x]

3 This includes "institutions" that are subsidiaries of other Federally Regulated Financial Institutions (FRFIs). Foreign bank branches are not subject to this guideline.

Minimum and authorized leverage requirements

6. Beginning in Q1 2015, institutions will be expected to maintain a leverage ratio that meets or exceeds 3% at all times. The Superintendent will also prescribe authorized leverage ratio requirements for individual institutions. Authorized leverage ratios, which will take effect in Q1 2015, will be communicated to individual institutions on a bilateral basis. The authorized leverage ratio is considered supervisory information and is not permitted to be disclosed under the *Supervisory Information Regulations*[4].

7. When setting authorized leverage ratios and when assessing whether an increase or a decrease in the institution's authorized leverage ratio is appropriate, OSFI will take into account the following factors:

- the potential impact of the change in the leverage ratio on the institution's risk-based capital ratios compared to internal targets and OSFI targets;
- the effectiveness of operational management and oversight functions;
- the adequacy of capital and liquidity management processes and procedures;
- the intervention history[5] of the institution;
- the institution's risk profile and business lines (including diversification of exposures); and
- the institution's strategic and business plans.

8. Requests for decreases in authorized leverage ratios should be addressed to the Legislation and Approvals Division[6], with a copy to the Relationship Manager, and should also include a business case that, at a minimum, sets out:

- the reason why a decrease is requested;
- financial projections, including growth by business line; and
- the expected impact of the projected growth on profitability, liquidity, and risk-based capital ratios.

9. As part of its intervention strategy for institutions, OSFI may increase the institution's authorized leverage ratio and, if so, may require the institution to file with OSFI an action plan for achieving the higher authorized level.

Capital Measure

10. The capital measure used for the leverage ratio is the all-in Tier 1 capital of the institution as defined in Chapter 2 of the CAR Guideline. Therefore, the capital measure used for the

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4 Supervisory Information (Banks) Regulations, Supervisory Information (Trust and Loan Companies) Regulations, Supervisory Information (Cooperative Credit Associations) Regulations

5 Refer to the *Guide to Intervention for Federal Financial Institutions*.

6 Managing Director, Approvals and Precedents, approvalsandprecedents@osfi-bsif.gc.ca.

leverage ratio at any particular point in time is the all-in Tier 1 capital measure applying at that time under the risk-based capital framework. [BCBS Jan 2014 par 10]

Exposure Measure

11. The exposure measure for the leverage ratio should generally follow the accounting value, subject to the following:

- on-balance sheet, non-derivative exposures are included in the exposure measure net of individual or collective allowances or accounting valuation adjustments (e.g., accounting credit valuation adjustments);
- netting of loans and deposits is not allowed.

[BCBS Jan 2014 par 12]

12. Unless specified differently in this guideline, institutions must not take account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the exposure measure. [BCBS Jan 2014 par 13]

13. An institution's total exposure measure is the sum of the following exposures: (a) on-balance sheet exposures; (b) derivative exposures; (c) securities financing transaction (SFT) exposures; and (d) off-balance sheet (OBS) items. The specific treatments for these four main exposure types are defined below. [BCBS Jan 2014 par 14]

(a) On balance sheet exposures

14. Institutions must include all balance sheet assets in their exposure measure, including on-balance sheet derivatives collateral and collateral for SFTs, with the exception of on-balance sheet derivative and SFT assets that are covered in paragraphs 21 to 56 below.
[BCBS Jan 2014 par 15]

15. However, to ensure consistency, balance sheet assets deducted from Tier 1 capital (as set out in section 2.3 of the CAR Guideline) may be deducted from the exposure measure. Two examples follow:

- Where a banking, financial or insurance entity is not included in the regulatory scope of consolidation as set out in paragraph 4 of this guideline, the amount of any investment in the capital of that entity that is totally or partially deducted from CET1 capital or from Additional Tier 1 capital of the institution following the corresponding deduction approach in paragraphs 70 to 78 of Chapter 2 of the CAR Guideline must also be deducted from the exposure measure.
- For institutions using the internal ratings-based (IRB) approach to determining capital requirements for credit risk, paragraph 57 of Chapter 2 of the CAR Guideline requires any shortfall in the stock of eligible provisions relative to expected losses to be deducted from CET1 capital. The same amount must be deducted from the exposure measure.

[BCBS Jan 2014 par 16]

16. Liability items must not be deducted from the measure of exposure. For example, gains/losses on fair valued liabilities or accounting valuation adjustments on derivative liabilities due to changes in the institution's own credit risk as described in paragraph 59 of the Chapter 2 of the CAR Guideline must not be deducted from the exposure measure. [BCBS Jan 2014 par 17]

17. Securitization exposures which are not derecognized or which are not exempted from consolidation under applicable accounting standards (e.g., IFRS) should be included in the exposure measure[7]. Furthermore, irrespective of the accounting standards' determination of what is on the balance sheet, the exposure measure should reflect the originator's exposure as a result of the securitization. Where the originator's balance sheet exposure is not deemed to be materially reduced by the securitization, inclusion in the exposure measure may be appropriate, irrespective of the accounting treatment.

18. OSFI is generally of the view that where derecognition is achieved as a result of the institution demonstrating to its auditors that substantially all of the risks and rewards have been transferred under IFRS, exclusion from the exposure measure is appropriate unless other exceptional circumstances exist. Where it is not evident that substantially all of the risks and rewards have been transferred and the derecognition test is passed based on the seller demonstrating that control of the asset has been relinquished, an institution will be expected to include derecognized assets in the exposure measure unless otherwise instructed by OSFI, following a case-specific assessment of the institution's submission indicating how its balance sheet risks have been materially reduced.

Specific cases where OSFI guidance has been provided

19. In the case of mortgage whole loan sale transactions having the following characteristics, the balance sheet exposure will be considered to be substantially reduced and the institution will not be required to include sold loans in the exposure measure.

a) The mortgages are insured by CMHC or a private insurer recognized by the *Protection of Residential Mortgage or Hypothecary Insurance Act*;
b) The institution has retained the option, not the obligation to repurchase the mortgages at par from the investor at the end of their contractual term.;
c) The institution may continue to administer and service mortgages for the investor following the sale but the institution is not obligated to advance uncollected mortgage payments on account of delinquent or defaulted mortgages; and
d) The investor has the right to sell the mortgages to a third party at any time.

[7] The grandfathering treatment of mortgages sold through Canada Mortgage Housing Corporation (CMHC) programs (which includes National Housing Act Mortgage-Backed Securities (NHA MBS) and Canada Mortgage Bond (CMB) Programs, as well as Insured Mortgage Purchase Program (IMPP)) permitted under OSFI's March 2010 Advisory *Conversion to International Financial Reporting Standards (IFRSs) by Federally Regulated Entities* where such assets were excluded from the ACM is permitted under the leverage ratio.

20. Mortgage insured as per paragraph 19(a) above for their whole life, that have been pooled and sold as *National Housing Act* Mortgage Backed Securities (NHA MBS or NHA MBS Program) and derecognized under IFRS following a transaction with a third party with respect to the institution's retained interest in any excess spread, can be excluded from the exposure measure. Such exclusion is subject to the institution obtaining written confirmation from CMHC that CMHC does not object to the institution proceeding with such a transaction or similar transactions. However, recognizing the potential liquidity constraints imposed by the NHA MBS Program on institutions in a stressed environment, institutions must be able to demonstrate alignment with OSFI's B-6 Liquidity Guideline, Liquidity Adequacy Requirements Guideline, and other liquidity requirements as necessary and/or specified by OSFI. This includes institutions having in place appropriate liquidity plans that demonstrate the management of liquidity risks, including an appropriate laddering of the scheduled maturities for all outstanding NHA MBS and on-going tracking of cash flows against those plans.

(b) Derivative exposures

(i) Treatment of derivatives

21. Derivatives create two types of exposure: (a) an exposure arising from the underlying of the derivative contract; and (b) a counterparty credit risk (CCR) exposure. This guideline uses the method set out below to capture both of these exposure types. [BCBS Jan 2014 par 18]

22. Institutions must calculate their derivative exposures[8], including where an institution sells protection using a credit derivative, as the replacement cost (RC)[9] for the current exposure plus an add-on for potential future exposure (PFE), as described in paragraph 28. If the derivative exposure is covered by an eligible bilateral netting contract as specified in paragraphs 31 and 32, an alternative treatment may be applied.[10] Written credit derivatives are subject to an additional treatment, as set out in paragraphs 44 to 48 below. [BCBS Jan 2014 par 19]

23. For a single derivative exposure not covered by an eligible bilateral netting contract as specified in paragraphs 31 and 32 of this guideline, the amount to be included in the exposure measure is determined as follows:

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8 This approach makes reference to the Current Exposure Method which is used under the Basel II framework to calculate counterparty credit risk exposure amounts associated with derivative exposures. In March 2014, the BCBS released a revised framework for assessing the counterparty credit risk associated with derivative transactions entitled *The standardised approach for measuring counterparty credit risk exposures*. The BCBS will consider whether this approach is appropriate in the context of the leverage ratio taking account of the need to capture both types of exposures created by derivatives as described in paragraph 21. [BCBS Jan 2014 par 19 footnote 5]

9 If under an institution's national accounting standards, there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the institution must use the sum of the positive fair values of these derivatives as the replacement cost. [BCBS Jan 2014 par 19 footnote 6]

10 These are netting rules of the Basel II framework excepting the rules for cross-product netting in Annex 4, Section III. That is, netting across product categories (i.e. derivatives and SFTs) is not permitted in determining the leverage ratio exposure measure. However, where an institution has a cross-product netting agreement in place that meets the eligibility criteria of paragraphs 31 and 32 of this guideline, it may choose to perform netting separately in each product category provided that all other conditions for netting in this product category that are applicable to the leverage ratio are met. [BCBS Jan 2014 par 19 footnote 7, BCBS FAQ#4, page 4]

exposure measure = replacement cost (RC) + add-on

where

RC = the replacement cost of the contract (obtained by marking to market), where the contract has a positive value.

add-on = an amount for PFE over the remaining life of the contract calculated by applying an add-on factor to the notional principal amount of the derivative. [BCBS Jan 2014 par 20]

24. The following add-on factors apply to financial derivatives, based on residual maturity: [BCBS Jan 2014 Annex par 1]

	Interest rates	Foreign Exchange and Gold	Equities	Precious metals except gold	Other commodities
One year or less	0.0%	1.0%	6.0%	7.0%	10.0%
Over one year to five years	0.5%	5.0%	8.0%	7.0%	12.0%
Over five years	1.5%	7.5%	10.0%	8.0%	15.0%

Notes:

1. For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract.
2. For contracts that are structured to settle outstanding exposures 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 remaining maturities of more than one year that meet the above criteria, the add-on is subject to a floor of 0.5%.
3. 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".
4. No potential future credit exposure would be calculated for single currency floating/floating interest rate swaps; the credit exposure of these contracts would be evaluated solely on the basis of their mark-to-market value.

25. OSFI will take care to ensure that add-ons are based on effective rather than apparent notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, institutions must use the effective notional amount when determining potential future exposure. [BCBS Jan 2014 Annex par 2]

26. The following add-on factors apply to single-name credit derivatives: [BCBS Jan 2014 Annex par 3]

	Protection buyer	Protection seller
Total return swaps		
"Qualifying" reference obligation	5%	5%
"Non-qualifying" reference obligation	10%	10%
Credit default swaps		
"Qualifying" reference obligation	5%	5%**
"Non-qualifying" reference obligation	10%	10%**

There will be no difference depending on residual maturity.

** The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. The add-on should then be capped to the amount of unpaid premiums.

27. Where the credit derivative is a first-to-default transaction, the add-on will be determined by the lowest credit quality underlying the basket, i.e., if there are any non-qualifying items in the basket, the non-qualifying reference obligation add-on should be used. For second and subsequent nth-to-default transactions, underlying assets should continue to be allocated according to the credit quality, i.e., the second or, respectively, nth lowest credit quality will determine the add-on for a second-to-default or an nth-to-default transaction, respectively. [BCBS Jan 2014 Annex par 4]

28. The "qualifying" category includes debt securities that are rated investment-grade and issued by or fully guaranteed by:

a) a public sector entity,

b) a multilateral development bank[11],

c) an institution where the instrument does not qualify as capital of the issuing institution[12], or

d) a regulated securities firm in a BCBS-member country or country that has implemented the BCBS-equivalent standards.

OSFI expects the institution to conduct its own internal self-assessment as to whether a non-BCBS member country has implemented BCBS equivalent standards.
[BCBS Jan 2014 Annex par 5 and 6]

29. Furthermore, the "qualifying" category also includes any other debt securities issued by a non-government obligor that has been rated investment-grade[13] by at least two nationally recognized credit rating services or rated investment-grade by one nationally recognized credit rating agency and not less than investment-grade by any other credit rating agency.
[BCBS Jan 2014 Annex par 7]

(ii) Bilateral netting

30. When an eligible bilateral netting contract is in place as specified in paragraphs 31 and 32 of this guideline, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on will be A_{Net} as calculated in paragraph 33 of this guideline. [BCBS Jan 2014 par 21]

31. For the purposes of the leverage ratio, the following will apply:

a) Institutions may net transactions subject to novation under which any obligation between an institution and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same

11 Multilateral development banks are defined in Chapter 3 of the CAR Guideline.
12 Instruments issued by institutions should meet the ratings criteria listed in paragraph 29 of this guideline and should originate from a BCBS-member country or country that has implemented BCBS-equivalent standards.
13 For example, rated Baa or higher by Moody's and BBB of higher by Standard and Poor's.

currency and value date, legally substituting one single amount for the previous gross obligations.

b) Institutions may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.

c) In both cases (a) and (b), an institution will need to satisfy OSFI that it has:

   i) a netting contract or agreement with the counterparty that creates a single legal obligation, covering all included transactions, such that the institution would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;

   ii) written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the institution's exposure to be such a net amount under:

      - the law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of jurisdiction in which the branch is located;
      - the law that governs the individual transactions; and
      - the law that governs any contract or agreement necessary to effect the netting.

      OSFI, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions;[14] and

   iii) procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.

[BCBS Jan 2014 Annex par 8]

32. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating the leverage ratio requirements pursuant to this guideline. A walkaway clause is a provision that permits a non-defaulting counterparty to make only limited payments or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor. [BCBS Jan 2014 Annex par 9]

33. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (A_{Net}) will equal the sum of (i) 40% of the gross add-on (A_{Gross}) and (ii) 60% of the gross add-on adjusted by the ratio of net current

[14] Thus, if any of these supervisors is dissatisfied about enforceability under its laws, the netting contract or agreement will not meet the condition and neither counterparty could obtain supervisory benefit. [BCBS Jan 2014 Annex par 8 footnote 31]

replacement cost to gross current replacement cost (*NGR*). This is expressed through the following formula:

$$A_{Net} = 0.4 \cdot A_{Gross} + 0.6 \cdot NGR \cdot A_{Gross}$$

where:

NGR = level of net replacement cost/level of gross replacement cost for transactions subject to legally enforceable netting agreements

A_{Gross} = sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors set out in paragraphs 24 to 29 of this guideline) of all transactions subject to legally enforceable netting agreements with one counterparty.

34. OSFI will permit a choice of calculating the NGR on a counterparty by counterparty or on an aggregate basis for all transactions that are subject to legally enforceable netting agreements. However, the method chosen by the institution is to be used consistently. Under the aggregate approach, net negative current exposures to individual counterparties cannot be used to offset net positive current exposures to others, i.e., for each counterparty the net current exposure used in calculating the NGR is the maximum of the net replacement cost or zero. Note that under the aggregate approach, the NGR is to be applied individually to each legally enforceable netting agreement. [BCBS Jan 2014 Annex par 10 footnote 32]

35. For the purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which the notional principal amount is equivalent to cash flows, the notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure. [BCBS Jan 2014 Annex par 11]

(iii) Treatment of related collateral

36. Collateral received in connection with derivative contracts has two countervailing effects on leverage:

- it reduces counterparty exposure; but
- it can also increase the economic resources at the disposal of the institution, as the institution can use the collateral to leverage itself.

[BCBS Jan 2014 par 22]

37. Collateral received in connection with derivative contracts does not necessarily reduce the leverage inherent in an institution's derivatives position, which is generally the case if the settlement exposure arising from the underlying derivative contract is not reduced. As a general rule, collateral received may not be netted against derivative exposures whether or not netting is permitted under the institution's operative accounting (e.g., IFRS) or risk-based framework.

Hence, when calculating the exposure amount by applying paragraphs 22 to 35 above, an institution must not reduce the exposure amount by any collateral received from the counterparty. [BCBS Jan 2014 par 23]

38. Similarly, with regard to collateral provided, institutions must gross up their exposure measure by the amount of any derivatives collateral provided where the provision of that collateral has reduced the value of their balance sheet assets under their operative accounting framework (e.g., IFRS). [BCBS Jan 2014 par 24]

(iv) Treatment of cash variation margin

39. In the treatment of derivative exposures for the purpose of the leverage ratio, the cash portion of variation margin exchanged between counterparties may be viewed as a form of pre-settlement payment, if the following conditions are met:

(i) For trades not cleared through a *qualifying* central counterparty (QCCP) [15] the cash received by the recipient counterparty is not segregated by law, regulation or an agreement with the counterparty – i.e. it is used as its own cash.

(ii) Variation margin is calculated and exchanged on a daily basis[16] based on mark-to-market valuation of derivatives positions.

(iii) The cash variation margin is received in the same currency as the currency of settlement of the derivative contract provided that for purposes of this paragraph, currency of settlement means any currency of settlement specified in the derivative contract, governing qualifying master netting agreement (MNA) or the credit support annex (CSA) to the qualifying MNA[17].

(iv) Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.[18]

(v) Derivatives transactions and variation margins are covered by a single master netting agreement (MNA)[19,20] between the legal entities that are the counterparties

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15 A qualifying central counterparty (QCCP) is an entity that is licensed to operate as a CCP (including a license granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such with respect to products offered. This is subject to the provision that the CCP is based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the CCP on an ongoing basis, domestic rules and regulations that are consistent with CPSS-IOSCO Principles for Financial Market Infrastructures. [BCBS Jan 2014 par 25 footnote 8]

16 To meet this criterion, derivative positions must be valued daily and cash variation margin must be transferred daily to the counterparty or to the counterparty's account, as appropriate. [BCBS FAQ#1.3, page 2]

17 To the extent that the criteria in this paragraph include the term *master netting agreement*, this term should be read as including any netting agreement that provides legally enforceable rights of offsets. 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 OTC netting agreements for bilateral netting. [BCBS FAQ#1.1, page 1]

18 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, provided that the variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to applicable threshold and minimum transfer amounts. [BCBS FAQ#1.4, page 2]

in the derivatives transaction. The MNA 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 involving either counterparty. The MNA must be legally enforceable and effective[21] in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.

[BCBS Jan 2014 par 25, BCBS FAQ#1.5 page 2]

40. If the conditions in paragraph 39 are met, the cash portion of variation margin *received* may be used to reduce the replacement cost portion of the leverage ratio exposure measure, and the receivables assets from cash variation margin *provided* may be deducted from the leverage ratio exposure measure as follows:

- In the case of cash variation margin *received*, the receiving institution may reduce the replacement cost (but not the add-on portion) of the exposure amount of the derivative asset by the amount of cash received if the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the institution's operative accounting standard (e.g., IFRS).
- In the case of cash variation margin *provided* to a counterparty, the posting institution may deduct the resulting receivable from its leverage ratio exposure measure, where the cash variation margin has been recognised as an asset under the institution's operative accounting framework (e.g., IFRS).

Cash variation margin may not be used to reduce the PFE amount even if the conditions in paragraph 39 are fully met. Specifically, in the calculation of the net-to-gross ratio (NGR), cash variation margin may not be used to reduce the net replacement cost (i.e. the numerator of the NGR), nor the gross replacement cost (i.e. the denominator of the NGR).[BCBS Jan 2014 par 26, BCBS FAQ#1.6, page 3]

(v) Treatment of clearing services

41. Where an institution acting as clearing member (CM) [22] offers clearing services to clients, the clearing member's trade exposures[23] to the central counterparty (CCP)[24] that arise when the

[19] A Master MNA may be deemed to be a single MNA for this purpose. [BCBS Jan 2014 par 25 footnote 9]

[20] See footnote 17

[21] A master netting agreement is deemed to have the criteria of "legally enforceable and effective" if it meets the conditions set in paragraphs 31c) and 32 of this guideline. [BCBS FAQ#1.2, page 2]

[22] A clearing member is a member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the CCP, regardless of whether it enters into trades with the CCP for its own hedging, investment, or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and the other market participants. [BCBS Jan 2014 par 27 footnote 11]

[23] For purposes of paragraphs 41 and 42, "trade exposures" includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP. [BCBS Jan 2014 par 27 footnote 12]

[24] A central counterparty (CCP) is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby

clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults, must be captured by applying the same treatment that applies to any other type of derivatives transactions. However, if the clearing member, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that a QCCP defaults, the clearing member need not recognise the resulting trade exposures to the QCCP in the leverage ratio exposure measure[25]. [BCBS Jan 2014 par 27]

42. Where a client enters directly into a derivatives transaction with the CCP and the clearing member guarantees the performance of its clients' derivative trade exposures to the CCP, the institution acting as the clearing member for the client to the CCP must *calculate* its related leverage ratio exposure resulting from the guarantee as a derivative exposure as set out in paragraphs 22 to 40 of this guideline, as if the institution had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin. [BCBS Jan 2014 par 28]

43. An affiliate entity to the institution acting as a CM may be considered a client for the purpose of paragraph 41 if it is outside the relevant scope of regulatory consolidation at the level at which the leverage ratio is applied as specified in paragraph 3. In contrast, if an affiliate entity falls within the regulatory scope of consolidation, the trade between the affiliate entity and the CM is eliminated in the course of consolidation, but the CM still has a trade exposure to the QCCP, which will be considered *proprietary* and the exemption in paragraph 41 no longer applies. [BCBS FAQ#3, page 3]

(vi) Additional treatment of written credit derivatives

44. In addition to the counterparty credit risk (CCR) exposure arising from the fair value of the contracts, written credit derivatives create a notional credit exposure arising from the creditworthiness of the reference entity. The BCBS therefore believes that it is appropriate to treat written credit derivatives consistently with cash instruments (e.g., loans, bonds) for the purposes of the exposure measure. [BCBS Jan 2014 par 29]

45. In order to capture the credit exposure to the underlying reference entity, in addition to the above CCR treatment for derivatives and related collateral, the effective notional amount[26] referenced by a written credit derivative is to be included in the exposure measure. The effective notional amount of a written credit derivative 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

ensuring the future performance of open contracts. A CCP becomes counterparty to trades with market participants through novation, an open system, or another legally binding arrangement.

[25] Where an institution acts as a clearing member and does not guarantee the CCP's performance to the client, the institution may exclude from the exposure measure the effective notional principal amount of credit protection sold through a credit derivative contract that it clears on behalf of a clearing member client.

[26] 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. [BCBS Jan 2014 par 30 footnote 13]

written credit derivative. The resulting amount may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name provided:

a) the credit protection purchased is on a reference obligation which ranks pari passu with or is junior to the underlying reference obligation of the written credit derivative in the case of single name credit derivatives;[27] and

b) the remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative.

[BCBS Jan 2014 par 30]

46. For greater clarity, two reference names are considered identical only if they refer to the same legal entity. For single-name credit derivatives, protection purchased that references a subordinated position may offset protection sold on a more senior position of the same reference entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset. Protection purchased on a pool of reference entities may offset protection sold on individual reference names if the protection purchased is economically equivalent to buying protection separately on each of the individual names in the pool (this would, for example, be the case if an institution were to purchase protection on an entire securitisation structure). If an institution purchases protection on a pool of reference names, 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 or a securitisation tranche), then offsetting is not permitted for the protection sold on individual reference names. However, such purchased protections may offset sold protections on a pool provided the purchased protection covers the entirety of the subset of the pool on which protection has been sold. In other words, offsetting may only be recognised when the pool of reference entities and the level of subordination in both transactions are identical. [BCBS Jan 2014 par 30 footnote 14]

47. In paragraph 45 above, the effective notional amount of a written credit derivative may be reduced by any negative change in fair value reflected in the institution'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[28]. Where an institution buys credit protection through a total return swap (TRS) and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit derivative (either through reductions in fair value or by an addition to reserves) reflected in Tier 1 capital, the credit protection will not be recognised for the purpose of offsetting the effective notional amounts related to written credit derivatives. [BCBS Jan 2014 par 30 footnote 15]

48. Since written credit derivatives are included in the exposure measure at their effective notional amounts, and are also subject to add-on amounts for PFE, the exposure measure for

[27] For tranched products, the purchased protection must be on a reference obligation with the same level of seniority. [BCBS Jan 2014 par 30 footnote 16]

[28] For example, if a written credit derivative has a positive fair value of 20 on one date and has a negative fair value on a subsequent reporting date, the effective notional amount of the credit derivative may be reduced by 10. The effective notional amount cannot be reduced by 30. However, if at the subsequent reporting date, the credit derivative has a positive fair value of 5, the effective notional amount cannot be reduced at all. [BCBS FAQ#5, page 4]

written credit derivatives may be overstated. Institutions may therefore choose to deduct the individual PFE add-on amount relating to a written credit derivative (which is not offset according to paragraph 45 and whose effective notional amount is included in the exposure measure) from their gross add-on in paragraphs 22 to 35. This adjustment to the gross add-on must be done consistently over time for the calculation of PFE for all such instruments. In these cases, where effective bilateral netting contracts are in place, and when calculating $A_{Net} = 0.4 \cdot A_{Gross} + 0.6 \cdot NGR \cdot A_{Gross}$, A_{Gross} may be reduced by the individual add-on amounts (i.e., notionals multiplied by the appropriate add-on factors) which relate to written credit derivatives whose notional amounts are included in the leverage ratio exposure measure. However, no adjustments must be made to *NGR*. Where effective bilateral netting contracts are not in place, the PFE add-on may be set to zero in order to avoid the double-counting described in this paragraph.
[BCBS Jan 2014 par 31]

(c) Securities financing transaction (SFT) exposures

49. SFTs[29] are included in the exposure measure according to the treatment described below. The treatment recognises that secured lending and borrowing in the form of SFTs is an important source of leverage, and ensures consistent international implementation by providing a common measure for dealing with the main differences in the operative accounting frameworks.
[BCBS Jan 2014 par 32]

(i) General treatment (institution acting as a principal)

50. Where an institution acts as a principal, the sum of the amounts in subparagraphs (i) and (ii) below are to be included in the leverage ratio exposure measure:

(i) Gross SFT assets[30] recognised for accounting purposes (i.e., with no recognition of accounting netting),[31] adjusted as follows:

- excluding from the exposure measure the value of any securities received under an SFT, where the institution has recognised the securities as an asset on its balance sheet; 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;

29 SFTs are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements. [BCBS Jan 2014 par 32 footnote 18]

30 For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognised for accounting purposes" are replaced by the final contractual exposure, given that pre-existing contracts have been replaced by new legal obligations through the novation process. [BCBS Jan 2014 par 33 footnote 19]

31 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 IFRS). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes. [BCBS Jan 2014 par 33 footnote 20]

b) The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of business and in the event of: (i) default; (ii) insolvency; and (iii) bankruptcy; and

c) The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, all transactions must be settled through the same settlement mechanism and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of all transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement[32]. The failure of any single securities transaction in the settlement mechanism should delay settlement of only the matching cash leg or create an obligation to the settlement mechanism, supported by an associated credit facility. 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 for purposes of total exposures.

(ii) A measure of CCR calculated as the current exposure without an add-on for PFE[33], calculated as follows:

- Where a qualifying MNA is in place, the current exposure (E^*) is the greater of zero and the total fair value of securities, gold and cash that the institution has lent, sold subject to repurchase or provided as collateral to the counterparty for all transactions included in the qualifying MNA (ΣEi), less the total fair value of securities, gold and cash that the institution has borrowed, purchased subject to resale or received as collateral from the counterparty for those transactions (ΣCi). This is illustrated in the following formula:

$$E^* = \max \{0, [\Sigma Ei - \Sigma Ci]\}$$

- Where no qualifying MNA is in place, the current exposure for transactions with a counterparty must be calculated on a transaction by transaction basis:

[32] This latter condition ensures that any issues arising from the securities leg do not interfere with the completion of the net settlement of the cash receivables and payables. This criterion is not intended to preclude *a Delivery-versus-Payment* (DvP) settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements as set out in this paragraph. For example, a settlement mechanism may meet these functional requirements if any failed transactions (that is, 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 Jan 2014 par 33 footnote 22; BCBS FAQ#3, pages 3-4]

[33] The determination of PFE for SFTs under paragraph 66 of Chapter 5 of the CAR Guideline (applicable to those executed under MNAs) and footnote 16 of that chapter (which recapitulates paragraph 46 and is applicable to those transactions not executed under MNAs) requires the institution to apply haircuts to the value of securities and for foreign exchange risk. Since counterparty risk for SFTs for leverage ratio purposes is determined solely by the current exposure portion of the formulas in those paragraphs, no haircuts are needed in the calculation.

that is, each transaction *i* is treated as its own netting set, as shown in the following formula:

$$Ei^* = \max \{0, [Ei - Ci]\}$$

[BCBS Jan 2014 par 33]

(ii) Qualifying master netting agreement[34]

51. The effects of bilateral netting agreements for covering SFTs will be recognised on a counterparty by counterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

a) provide the non-defaulting party with the right to terminate and close out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;

b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;

c) allow for the prompt liquidation or setoff of collateral upon the event of default; and

d) be, together with the rights arising from provisions required in (a) and (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.

[BCBS Jan 2014 Annex par 12]

52. Netting across positions held in the banking book and trading book will only be recognised when the netted transactions fulfil the following conditions:

a) all transactions are marked to market daily; and

b) the collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

[BCBS Jan 2014 Annex par 13]

(iii) Sale accounting transactions

53. Leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework (e.g., IFRS). As such, where sale accounting is achieved for an SFT under the institution's operative accounting framework, the institution must reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the operative accounting framework (i.e., the institution must include the sum of amounts in subparagraphs (i) and (ii) of paragraph 50

[34] The provisions related to qualifying master netting agreements (MNAs) for SFTs are intended for the calculation of the counterparty add-on of the exposure measure of SFTs as set out in paragraph 50 (ii) only. [BCBS Jan 2014 Annex par 12 footnote 33]

for such an SFT) for the purposes of determining its exposure measure. Forward purchase agreements or forward sale agreements treated as derivative contracts that are part of SFTs that qualify for sale accounting treatment under IFRS may be excluded from the exposure measure. [BCBS Jan 2014 Annex par 34]

(iv) Institution acting as an agent providing an indemnity for credit risk

54. An institution acting as agent in an SFT generally provides an indemnity or guarantee to only one of the two parties involved, and only for the difference between the value of the security or cash its customer has lent and the value of collateral the borrower has provided. In this situation, the institution is exposed to the counterparty of its customer for the difference in values rather than to the full exposure to the underlying security or cash of the transaction (as is the case where the institution is one of the principals in the transaction). Where the institution does not own/control the underlying cash or security resource, that resource cannot be leveraged by the institution. [BCBS Jan 2014 par 35]

55. Where an institution acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided, then the institution will be required to calculate its exposure measure by applying only subparagraph (ii) of paragraph 50.[35] [BCBS Jan 2014 par 36]

56. An institution acting as agent in an SFT and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in paragraph 55 *only* if the institution's exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided. In situations where the institution is further economically exposed (i.e., beyond the guarantee for the difference) to the underlying security or cash in the transaction, a further exposure equal to the full amount of the security or cash must be included in the exposure measure. For example, due to the institution managing collateral received in the institution'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). [BCBS Jan 2014 par 37]

(d) Off balance sheet exposures

57. For the purpose of the leverage ratio, off balance sheet (OBS) items will be converted into credit exposure equivalents by applying credit conversion factors (CCFs) to the notional amount of the exposure. The amount after applying the applicable CCF will be included in the exposure measure. Institutions should refer to section 3.2 of the CAR Guideline for a more detailed description of off balance sheet items. [BCBS Jan 2014 Annex par 14]

[35] Where, in addition to the conditions in paragraphs 54 to 56, an institution acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the institution is not exposed to the SFT and therefore need not recognise those SFTs in its exposure measure. [BCBS Jan 2014 par 36, footnote 24]

58. Commitments other than securitisation liquidity facilities with an original maturity up to one year and commitments with an original maturity over one year will receive a CCF of 20% and 50%, respectively. However, any commitments that are unconditionally cancellable at any time by the institution without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, will receive a 10% CCF. Retail commitments are considered unconditionally cancellable if the terms permit the institution to cancel them to the full extent allowable under consumer protection and related legislation. [BCBS Jan 2014 Annex par 15]

59. Direct credit substitutes, e.g., general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances) will receive a CCF of 100%. [BCBS Jan 2014 Annex par 16]

60. Forward asset purchases, forward forward deposits and partly paid shares and securities, which represent commitments with certain drawdown, will receive a CCF of 100%. [BCBS Jan 2014 Annex par 17]

61. Certain transaction-related contingent items (e.g., performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) will receive a CCF of 50%. [BCBS Jan 2014 Annex par 18]

62. Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) will receive a CCF of 50%. [BCBS Jan 2014 Annex par 19]

63. For short-term self-liquidating trade letters of credit arising from the movement of goods (e.g., documentary credits collateralised by the underlying shipment), a 20% CCF will be applied to both issuing and confirming institutions. [BCBS Jan 2014 Annex par 20]

64. Where there is an undertaking to provide a commitment on an OBS item, institutions are to apply the lower of the two applicable CCFs. [BCBS Jan 2014 Annex par 21]

65. All off-balance sheet securitisation exposures, except an eligible liquidity facility or an eligible servicer cash advance facility as set out in paragraphs 65 and 67 of Chapter 7 of the CAR Guideline, will receive a CCF of 100% conversion factor. All eligible liquidity facilities will receive a CCF of 50%. Undrawn servicer cash advances or facilities that are unconditionally cancellable without prior notice are eligible for a 10% CCF. [BCBS Jan 2014 Annex par 22]