

# Basel Committee on Banking Supervision

LEV

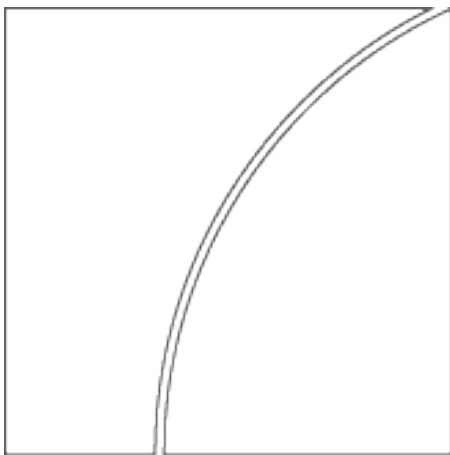
Leverage ratio

LEV30

Exposure measurement

**Version effective as of  
01 Jan 2023**

Refinements particularly affecting derivatives and off-balance-sheet exposures and a national discretion on the treatment of central bank reserves, as set out in the December 2017 publication of Basel III and the June 2019 publication on client cleared derivatives. Takes account of the revised implementation date announced on 27 March 2020.



BANK FOR INTERNATIONAL SETTLEMENTS



## Introduction

**30.1** The leverage ratio exposure measure generally follows gross accounting values.

FAQ

FAQ1 *How should long settlement transactions (LSTs) and failed trades be treated in the Basel III leverage ratio?*

*LSTs and “failed trades” are terms that are in use in the risk-based framework. For the purposes of the Basel III leverage ratio framework, such transactions have to be treated according to their accounting classification. For example, if an LST is classified as a derivative according to the applicable accounting standards, the Basel III leverage ratio exposure measure has to be calculated according to [LEV30.13](#) to [LEV30.35](#). Similarly, if a failed trade is classified as a receivable according to the applicable accounting standards, the exposure measure has to be calculated according to [LEV30.8](#) to [LEV30.12](#) related to “on-balance sheet exposures”. Securities financing transactions that have failed to settle are excluded from the described treatment and their exposure measure must be calculated according to [LEV30.36](#) to [LEV30.44](#) on securities financing transaction exposures.*

**30.2** Unless specified differently below, banks must not take account of physical or financial collateral, guarantees or other credit risk mitigation techniques to reduce the leverage ratio exposure measure, nor may banks net assets and liabilities.

**30.3** To ensure consistency, any item deducted from Tier 1 capital according to the Basel III framework and regulatory adjustments other than those related to liabilities may be deducted from the leverage ratio exposure measure. Three examples follow:

- (1) where a banking, financial or insurance entity is not included in the regulatory scope of consolidation as set out in [LEV10](#), the amount of any investment in the capital of that entity that is totally or partially deducted from Common Equity Tier 1 (CET1) capital or from Additional Tier 1 capital of the bank following the corresponding deduction approach in [CAP30.29](#) to [CAP30.34](#) may also be deducted from the leverage ratio exposure measure;

- (2) for banks using the internal ratings-based (IRB) approach to determining capital requirements for credit risk, [CAP10.19](#) requires any shortfall in the stock of eligible provisions relative to expected loss amounts to be deducted from CET1 capital. The same amount may be deducted from the leverage ratio exposure measure; and
- (3) prudent valuation adjustments for exposures to less liquid positions, other than those related to liabilities, that are deducted from Tier 1 capital as in [CAP50](#) may be deducted from the leverage ratio exposure measure.

**30.4** Liability items must not be deducted from the leverage ratio exposure measure. For example, gains/losses on fair valued liabilities or accounting value adjustments on derivative liabilities due to changes in the bank's own credit risk as described in [CAP30.15](#) must not be deducted from the leverage ratio exposure measure.

**30.5** With regard to traditional securitisations, an originating bank may exclude securitised exposures from its leverage ratio exposure measure if the securitisation meets the operational requirements for the recognition of risk transference according to [CRE40.24](#). Banks meeting these conditions must include any retained securitisation exposures in their leverage ratio exposure measure. In all other cases, eg traditional securitisations that do not meet the operational requirements for the recognition of risk transference or synthetic securitisations, the securitised exposures must be included in the leverage ratio exposure measure.

**30.6** Banks and supervisors should be particularly vigilant to transactions and structures that have the result of inadequately capturing banks' sources of leverage. Examples of concerns that might arise in such leverage ratio exposure measure minimising transactions and structures may include: securities financing transactions (SFTs) where exposure to the counterparty increases as the counterparty's credit quality decreases or securities financing transactions in which the credit quality of the counterparty is positively correlated with the value of the securities received in the transaction (ie the credit quality of the counterparty falls when the value of the securities falls); banks that normally act as principal but adopt an agency model to transact in derivatives and SFTs in order to benefit from the more favourable treatment permitted for agency transactions under the leverage ratio framework; collateral swap trades structured to mitigate inclusion in the leverage ratio exposure measure; or use of structures to move assets off the balance sheet. This list of examples is by no means exhaustive. Where supervisors are concerned that such transactions are not

adequately captured in the leverage ratio exposure measure or may lead to a potentially destabilising deleveraging process, they should carefully scrutinise these transactions and consider a range of actions to address such concerns. Supervisory actions may include requiring enhancements in banks' management of leverage, imposing operational requirements (eg additional reporting to supervisors) and/or requiring that the relevant exposure is adequately capitalised through a Pillar 2 capital charge. These examples of supervisory actions are merely indicative and by no means exhaustive.

**30.7** At national discretion, and to facilitate the implementation of monetary policies, a jurisdiction may temporarily exempt central bank reserves from the leverage ratio exposure measure in exceptional macroeconomic circumstances. To maintain the same level of resilience provided by the leverage ratio, a jurisdiction applying this discretion must also increase the calibration of the minimum leverage ratio requirement commensurately to offset the impact of exempting central bank reserves. In addition, in order to maintain the comparability and transparency of the Basel III leverage ratio framework, banks will be required to disclose the impact of any temporary exemption alongside ongoing public disclosure of the leverage ratio without application of such exemption.

## **On-balance sheet exposures**

**30.8** Banks must include all balance sheet assets in their leverage ratio 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 [LEV30.13](#) to [LEV30.44](#).<sup>1</sup>

## Footnotes

1

*Where a bank according to its operative accounting framework recognises fiduciary assets on the balance sheet, these assets can be excluded from the leverage ratio exposure measure provided that the assets meet the IFRS 9 criteria for derecognition and, where applicable, IFRS 10 for deconsolidation.*

## FAQ

FAQ1

*Where the underlying asset being leased is a tangible asset, should a right of use (ROU) asset be included in risk-based capital and leverage ratio denominators?*

*Yes, a ROU asset should be included in the risk-based capital and leverage denominators. The intent of the revisions to the lease accounting standards was to more appropriately reflect the economics of leasing transactions, including both the lessee's obligation to make future lease payments, as well as a ROU asset reflecting the lessee's control over the leased item's economic benefits during the lease term.*

**30.9** On-balance sheet, non-derivative assets are included in the leverage ratio exposure measure at their accounting values less deductions for associated specific provisions. In addition, general provisions or general loan-loss reserves as defined in [CAP10.18](#) which have reduced Tier 1 capital may be deducted from the leverage ratio exposure measure.<sup>2</sup>

## Footnotes

2

*Although [CAP10.18](#) specifies the treatment of general provisions /general loan-loss reserves for banks using the standardised approach for credit risk, for the purposes of the leverage ratio exposure measure the definition of general provisions/general loan-loss reserves specified in [CAP10.18](#) applies to all banks regardless of whether they use the standardised approach or the IRB approach for credit risk for their risk-based capital calculations.*

**30.10** The accounting for regular-way purchases or sales<sup>3</sup> of financial assets that have not been settled (hereafter “unsettled trades”) differs across and within accounting frameworks, with the result that those unsettled trades can be accounted for either on the trade date (trade date accounting) or on the settlement date (settlement date accounting). For the purpose of the leverage ratio exposure measure, banks using trade date accounting must reverse out any

offsetting between cash receivables for unsettled sales and cash payables for unsettled purchases of financial assets that may be recognised under the applicable accounting framework, but may offset between those cash receivables and cash payables (regardless of whether such offsetting is recognised under the applicable accounting framework) if the following conditions are met:

- (1) the financial assets bought and sold that are associated with cash payables and receivables are fair valued through income and included in the bank’s regulatory trading book as specified by [RBC25.1](#) to [RBC25.13](#); and
- (2) the transactions of the financial assets are settled on a delivery-versus-payment (DvP) basis.

*Footnotes*

<sup>3</sup> *For the purposes of this treatment, “regular-way purchases or sales” are purchases or sales of financial assets under contracts for which the terms require delivery of the assets within the time frame established generally by regulation or convention in the marketplace concerned.*

**30.11** Banks using settlement date accounting will be subject to the treatment set out in [LEV30.45](#) to [LEV30.49](#).

**30.12** Cash pooling refers to arrangements involving treasury products whereby a bank 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. For purposes of the leverage ratio exposure measure, where a cash pooling 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 bank is not liable for the balances on an individual basis upon the transfer. Thus, the basis of the leverage ratio exposure measure for such a cash pooling arrangement is the single account balance and not the individual participating customer accounts. When the transfer of credit and/or debit balances of the individual participating customer accounts does not occur daily, for purposes of the leverage ratio exposure measure, extinguishment and transformation into a single account balance is deemed to occur and this single account balance may serve as the basis of the leverage ratio exposure measure provided all of the following conditions are met. In the event the conditions below are not met, the individual balances of the participating customer accounts must be reflected separately in the leverage ratio exposure measure.

- (1) In addition to providing for the several individual 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.
- (2) The bank
  - (a) has a legally enforceable right to transfer the balances of the individual participating customer accounts into a single account so that the bank is not liable for the balances on an individual basis; and
  - (b) at any point in time, the bank must have the discretion and be in a position to exercise this right.
- (3) The bank's supervisor does not deem as inadequate the frequency by which the balances of individual participating customer accounts are transferred to a single account.
- (4) 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.



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

## Derivative exposures

**30.13** For the purpose of the leverage ratio exposure measure, exposures to derivatives are included by means of two components:

- (1) replacement cost (RC); and
- (2) potential future exposure (PFE).

**30.14** Banks must calculate their exposures associated with all derivative transactions, including where a bank sells protection using a credit derivative, as a scalar multiplier alpha set at 1.4 times the sum of the RC<sup>4</sup> and the PFE, as described in [LEV30.15](#) to [LEV30.16](#). If the derivative exposure is covered by an eligible bilateral netting contract as specified in [LEV30.17](#) to [LEV30.20](#), a specific treatment may be applied. Written credit derivatives are subject to an additional treatment, as set out in [LEV30.30](#) to [LEV30.35](#).

### Footnotes

<sup>4</sup> *If, under a bank's national accounting standards, there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the bank must use the sum of positive fair values of these derivatives as the replacement cost.*

**30.15** The amount to be included in the leverage ratio exposure measure is calculated according to the formula below. For derivative transactions not covered by an eligible bilateral netting contract as specified in [LEV30.17](#) to [LEV30.20](#), the amount to be included in the leverage ratio exposure measure is determined, for each transaction separately. When an eligible bilateral netting contract is in place as specified in [LEV30.17](#) to [LEV30.20](#), the formula below is applied at the netting set level as described in [LEV30.16](#).

$$\text{exposure measure} = \text{alpha} \times (\text{RC} + \text{PFE})$$

**30.16** In the formula in [LEV30.15](#):

- (1) alpha is 1.4;
- (2) RC is the replacement cost measured as follows, where:
  - (a) V is the market value of the individual derivative transaction or of the derivative transactions in a netting set;
  - (b)  $CVM_r$  is the cash variation margin received that meets the conditions set out in [LEV30.24](#) and for which the amount has not already reduced the market value of the derivative transaction V under the bank's operative accounting standard; and
  - (c)  $CVM_p$  is the cash variation margin provided by the bank and that meets the same conditions.

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

- (3) PFE is an amount for PFE calculated according to [CRE52.20](#) to [CRE52.76](#).
  - (a) For the purposes of the leverage ratio framework, the multiplier is fixed at one.
  - (b) When calculating the aggregate add-on component, for all margined transactions the maturity factor set out in [CRE52.48](#) to [CRE52.53](#) may be used.
  - (c) As written options create an exposure to the underlying, they must be included in the leverage ratio exposure measure, even if certain written options are permitted the zero exposure at default treatment allowed in the risk-based framework.

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

**30.17** Banks may net transactions subject to novation under which any obligation between a bank 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.

**30.18** Banks may also net transactions subject to any legally valid form of bilateral netting not covered in [LEV30.17](#), including other forms of novation.

**30.19** In both cases described in [LEV30.17](#) and [LEV30.18](#), a bank will need to satisfy its national supervisors that it has:

- (1) a netting contract or agreement with the counterparty that creates a single legal obligation, covering all included transactions, such that the bank 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 that a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;
- (2) written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:
  - (a) 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;
  - (b) the law that governs the individual transactions; and
  - (c) the law that governs any contract or agreement necessary to effect the netting.
- (3) The national supervisor, 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;<sup>5</sup> and
- (4) 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.

*Footnotes*

<sup>5</sup> *Thus, if any of these supervisors are dissatisfied about enforceability under its laws, the netting contract or agreement will not meet the condition and neither counterparty could obtain supervisory benefit.*

**30.20** Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating the leverage ratio exposure measure pursuant to this framework. 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.

**30.21** Collateral received in connection with derivative contracts has two countervailing effects on leverage:

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

**30.22** Collateral received in connection with derivative contracts does not necessarily reduce the leverage inherent in a bank's derivative position, which is generally the case if the settlement exposure arising from the underlying derivative contract is not reduced. As a general principle of the Basel III leverage ratio framework, collateral received may not be netted against derivative exposures whether or not netting is permitted under the bank's operative accounting or risk-based framework. Hence, when calculating the exposure amount by applying [LEV30.14](#) to [LEV30.16](#), a bank must not reduce the leverage ratio exposure measure amount by any collateral received from the counterparty. This implies that the RC cannot be reduced by collateral received and that the multiplier referenced in [LEV30.16](#) is fixed at one for the purpose of the PFE calculation. However, the maturity factor in the PFE add-on calculation can recognise the PFE-reducing effect from the regular exchange of variation margin as specified in [LEV30.16](#).

**30.23** Similarly, with regard to collateral provided, banks must gross up their leverage ratio 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.

**30.24** In the treatment of derivative exposures for the purpose of the leverage ratio exposure measure, 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:

- (1) For trades not cleared through a qualifying central counterparty (QCCP)<sup>6</sup> the cash received by the recipient counterparty is not segregated. Cash variation margin would satisfy the non-segregation criterion if the recipient counterparty has no restrictions by law, regulation, or any agreement with the counterparty on the ability to use the cash received (ie the cash variation margin received is used as its own cash).
- (2) Variation margin is calculated and exchanged on at least 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 at least daily to the counterparty or to the counterparty's account, as appropriate. 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.

- (3) The variation margin is received in a currency specified in the derivative contract, governing master netting agreement (MNA), credit support annex to the qualifying MNA or as defined by any netting agreement with a central counterparty (CCP).
- (4) Variation margin exchanged is the full amount that would be necessary to extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.<sup>7</sup>
- (5) Derivative transactions and variation margins are covered by a single MNA between the legal entities that are the counterparties in the derivative 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 (ie it satisfies the conditions in [LEV30.19](#) to [LEV30.20](#)) in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency. For the purposes of this paragraph, the term "MNA" includes any netting agreement that provides legally enforceable rights of offset<sup>8</sup> and a Master MNA may be deemed to be a single MNA.

#### Footnotes

<sup>6</sup> A QCCP is defined as in [CRE50.3](#).

<sup>7</sup> In situations where a margin dispute arises, the amount of non-disputed variation margin that has been exchanged can be recognised.

<sup>8</sup> This is to take into account the fact that, for netting agreements employed by CCPs, no standardisation has currently emerged that would be comparable with respect to over-the-counter netting agreements for bilateral trading.

**30.25** If the conditions in [LEV30.24](#) 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:

- (1) In the case of cash variation margin received, the receiving bank may reduce the replacement cost (but not the PFE component) of the exposure amount of the derivative asset as specified in [LEV30.16](#).

- (2) In the case of cash variation margin provided to a counterparty, the posting bank may deduct the resulting receivable from its leverage ratio exposure measure where the cash variation margin has been recognised as an asset under the bank's operative accounting framework, and instead include the cash variation margin provided in the calculation of the derivative replacement cost as specified in [LEV30.16](#).

**30.26** Where a bank acting as clearing member (CM)<sup>9</sup> offers clearing services to clients, the CM's trade exposures to the CCP that arise when the CM is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults must be captured by applying the same treatment that applies to any other type of derivative transaction. However, if the CM, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered in the event that a QCCP defaults, the CM need not recognise the resulting trade exposures to the QCCP in the leverage ratio exposure measure. In addition, where a bank provides clearing services as a "higher-level client" within a multi-level client structure,<sup>10</sup> the bank need not recognise in its leverage ratio exposure measure the resulting trade exposures to the CM or to an entity that serves as a higher-level client to the bank in the leverage ratio exposure measure if it meets all of the following conditions:

- (1) The offsetting transactions are identified by the QCCP as higher-level client transactions and collateral to support them is held by the QCCP and/or the CM, as applicable, under arrangements that prevent any losses to the higher level client due to:
  - (a) the default or insolvency of the CM,
  - (b) the default or insolvency of the CM's other clients, and
  - (c) the joint default or insolvency of the CM and any of its other clients.<sup>11</sup>
- (2) The bank 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).

- (3) 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.<sup>12</sup> In such circumstances, the higher-level client positions and collateral with the QCCP will be transferred at market value unless the higher-level client requests to close out the position at market value.
- (4) The bank is not obligated to reimburse its client for any losses suffered in the event of default of either the CM or the QCCP.

#### Footnotes

<sup>9</sup> *For the purposes of this paragraph, the terms “clearing member”, “trade exposures”, “central counterparty” and “qualifying central counterparty” are defined as in [CRE50](#). In addition, for the purposes of this paragraph, the term “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.*

<sup>10</sup> *A multi-level client structure is one in which banks can centrally clear as indirect clients; that is, when clearing services are provided to the bank by an institution which is not a direct clearing member, but is itself a client of a CM or another clearing client. The term “higher-level client” refers to the institution that provides clearing services.*

<sup>11</sup> *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 clients of a defaulting CM to the QCCP, to one of more other surviving CMs or to the client or the client’s nominee.*

<sup>12</sup> *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 sufficient to say they are highly likely to be ported.*

**30.27** Pursuant to [LEV30.26](#), for derivative exposures associated with the bank's offering of client clearing services, the RC and the PFE of the exposure to the client (or the exposure to the "lower level client" in the case of a multi-level client structure) may be calculated according to [CRE52.13](#) to [CRE52.77](#).<sup>13</sup> For the determination of RC and PFE, the amount of initial margin received by the bank from its client that may be included in the values of C and NICA should be limited to the amount that is subject to appropriate segregation by the bank as defined in the relevant jurisdiction.

*Footnotes*

<sup>13</sup> *The term "lower level client" refers to the institution that clears through that client.*

**30.28** Where a client enters directly into a derivative transaction with the CCP and the CM guarantees the performance of its client's derivative trade exposures to the CCP, the bank acting as the CM 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 [LEV30.14](#) to [LEV30.25](#), as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

**30.29** For the purposes of [LEV30.26](#) and [LEV30.28](#), an entity affiliated to the bank acting as a CM may be considered a client if it is outside the relevant scope of regulatory consolidation at the level at which the leverage ratio is applied. 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 CCP. In this case, the transaction with the CCP will be considered proprietary and the exemption in [LEV30.26](#) will not apply.

**30.30** 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 Committee therefore believes that it is appropriate to treat written credit derivatives consistently with cash instruments (eg loans, bonds) for the purposes of the leverage ratio exposure measure.



**30.31** In order to capture the credit exposure to the underlying reference entity, in addition to the above treatment for derivatives and related collateral, the effective notional amount referenced by a written credit derivative is to be included in the leverage ratio exposure measure unless the written credit derivative is included in a transaction cleared on the behalf of a client of the bank acting as a CM (or acting as a clearing services provider in a multi-level client structure as referenced in [LEV30.26](#)) and the transaction meets the requirements of [LEV30.26](#) for the exclusion of trade exposures to the QCCP (or, in the case of a multi-level client structure, the requirements of [LEV30.26](#) 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. Further, 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 written credit derivative.<sup>14</sup> The resulting amount may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name, provided that:

- (1) the credit protection purchased through credit derivatives is otherwise subject to the same or more conservative material terms as those in the corresponding written credit derivative. This ensures that if a bank provides written protection via some type of credit derivative, the bank may only recognise offsetting from another purchased credit derivative 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;<sup>15</sup>
- (2) the remaining maturity of the credit protection purchased through credit derivatives is equal to or greater than the remaining maturity of the written credit derivative;
- (3) the credit protection purchased through credit derivatives is not purchased from a counterparty whose credit quality is highly correlated with the value of the reference obligation in the sense specified in [CRE53.48](#);<sup>16</sup>
- (4) in the event that the effective notional amount of a written credit derivative is reduced by any negative change in fair value reflected in the bank's Tier 1 capital, the effective notional amount of the offsetting credit protection purchased through credit derivatives must also be reduced by any resulting positive change in fair value reflected in Tier 1 capital; and

- (5) the credit protection purchased through credit derivatives is not included in a transaction that has been cleared on behalf of a client (or that has been cleared by the bank in its role as a clearing services provider in a multi-level client services structure as referenced in [LEV30.26](#)) and for which the effective notional amount referenced by the corresponding written credit derivative is excluded from the leverage ratio exposure measure according to this paragraph.

## Footnotes

[14](#)

*For example, if a written credit derivative 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 derivative may be reduced by 10. The effective notional amount cannot be reduced by 30. However, if on the subsequent reporting date the credit derivative has a positive fair value of five, 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 derivative minus any negative fair value that has already reduced Tier 1 capital.*

[15](#)

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

[16](#)

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

FAQ

FAQ1

*Please confirm the following interpretations for the purposes of offsetting: (a) when a purchased credit derivative transaction exists, the effective notional amount of the written credit derivative may be reduced by any negative change in fair value reflected in Tier 1 capital provided that the effective notional amount of the offsetting purchased credit derivative is also reduced by any resulting positive change in fair value reflected in Tier 1 capital; and (b) when a purchased credit derivative transaction exists, and the effective notional amount of the purchased credit derivative has not been reduced by any resulting positive change in fair value reflected in Tier 1 capital, then the effective notional amount of the written credit derivative may only be offset if the effective notional amount of that written credit derivative has not been reduced by any negative change in fair value reflected in Tier 1 capital.*

*The interpretations in the question are correct.*

FAQ2

*Would tranching junior position hedges through credit derivatives that meet the following criteria be eligible for offsetting: (i) the junior and senior tranches are on the same pool of reference entities; (ii) the level of seniority of the debt of each of the reference entities in the portfolio is the same; (iii) the designated credit events for the credit protection sold on the senior tranche, and purchased on the junior tranche, are the same; and (iv) the anticipated economic recovery on the junior tranching protection purchased is equal to or greater than the anticipated economic loss on the senior tranching protection sold?*

*No. As described in [LEV30.33](#), credit protection purchased through a credit derivative on a pool of reference assets cannot offset a written credit derivative unless both instruments reference the same pool of reference assets and the level of subordination of both transactions is identical.*

FAQ3

*If a bank writes credit protection through a credit derivative for a client and enters into a back-to-back trade with a CCP whereby it purchases credit protection through a credit derivative on the same name, may that purchased credit protection be used to offset the written protection for the purposes of the Basel III leverage ratio?*

*Yes. A bank may offset the effective notional amount of a written credit derivative sold to a client by means of a credit derivative on the same underlying name purchased from a CCP provided that the criteria in [LEV30.31](#) are met.*

- 30.32** For the purposes of [LEV30.31](#), the term "written credit derivative" refers to a broad range of credit derivatives through which a bank effectively provides credit protection and is not limited solely to credit default swaps and total return swaps. For example, all options where the bank has the obligation to provide credit protection under certain conditions qualify as "written credit derivatives". The effective notional amount of such options sold by the bank may be offset by the effective notional amount of options by which the bank has the right to purchase credit protection which fulfils the conditions of [LEV30.31](#). For example, the condition of same or more conservative material terms as those in the corresponding written credit derivatives as referenced in [LEV30.31](#) 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.
- 30.33** For the purposes of [LEV30.31](#), 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 derivatives 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 a bank were to purchase credit protection on an entire securitisation structure). If a bank purchases credit protection on a pool of reference names through credit derivatives, but the credit protection purchased does not cover the entire pool (ie 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 the written credit derivatives on the individual reference names may not be offset. However, such purchased credit protection may offset written credit derivatives on a pool provided that the credit protection purchased through credit derivatives covers the entirety of the subset of the pool on which the credit protection has been sold.
- 30.34** Where a bank purchases 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 derivative (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 derivatives.

**30.35** Since written credit derivatives are included in the leverage ratio exposure measure at their effective notional amounts, and are also subject to amounts for PFE, the leverage ratio exposure measure for written credit derivatives may be overstated. Banks may therefore choose to exclude from the netting set for the

PFE calculation the portion of a written credit derivative which is not offset according to [LEV30.31](#) and for which the effective notional amount is included in the leverage ratio exposure measure.

FAQ

FAQ1 *What does the phrase “which is not offset according to [LEV30.31](#)” in [LEV30.35](#) mean? Does it refer to the case where neither of the two deductions in the effective notional amount from an offsetting purchased credit derivative, detailed in [LEV30.31](#), is included?*

*The condition in [LEV30.35](#) regarding the removal of a PFE add-on associated with a written credit derivative from the Basel III leverage ratio exposure measure refers only to the offset by credit protection purchased through a credit derivative according to [LEV30.31](#) 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.*

## Securities financing transaction exposures

**30.36** SFTs<sup>17</sup> are included in the leverage ratio 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.

Footnotes

<sup>17</sup> *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.*

### 30.37

General treatment (bank acting as principal): the sum of the amounts in [LEV30.37](#) (1) and [LEV30.37](#)(2) is to be included in the leverage ratio exposure measure:

- (1) Gross SFT assets<sup>18</sup> recognised for accounting purposes (ie with no recognition of accounting netting),<sup>19</sup> adjusted as follows:
  - (a) excluding from the leverage ratio exposure measure the value of any securities received under an SFT, where the bank has recognised the securities as an asset on its balance sheet;<sup>20</sup> and
  - (b) cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:
    - (i) 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;
    - (ii) 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 default, insolvency or bankruptcy; and
    - (iii) 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 intraday 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. 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.<sup>21</sup>

(2) A measure of CCR calculated as the current exposure without an add-on for PFE, calculated as follows. For the purposes of this subparagraph, 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.

(a) Where a qualifying MNA<sup>22</sup> is in place, the current exposure ( $E^*$ ) is the greater of zero and the total fair value of securities and cash lent to a counterparty for all transactions included in the qualifying MNA ( $\sum E_i$ ), less the total fair value of cash and securities received from the counterparty for those transactions ( $\sum C_i$ ). This is illustrated in the following formula:

$$E^* = \max\left(0, \left(\sum E_i - \sum C_i\right)\right)$$

(b) Where no qualifying MNA is in place, the current exposure 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 shown in the following formula:

$$E_i^* = \max\left(0, \left(E_i - C_i\right)\right)$$

(c)  $E_i^*$  may be set to zero if:

- (i)  $E_i$  is the cash lent to a counterparty;
- (ii) this transaction is treated as its own netting set; and
- (iii) the associated cash receivable is not eligible for the netting treatment in [LEV30.37\(1\)](#).



## Footnotes

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*For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognised for accounting purposes" are replaced by the final contractual exposure, ie 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, banks can only net cash receivables and cash payables with a QCCP if the criteria in [LEV30.37\(1\)](#) are met. Any other netting permitted by the QCCP is not permitted for the purposes of the Basel III leverage ratio.*

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*Gross SFT assets recognised for accounting purposes must not recognise any accounting netting of cash payables against cash receivables (eg 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.*

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*This may apply, for example, under US GAAP where securities received under an SFT may be recognised as assets if the recipient has the right to rehypothecate but has not done so.*

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*Specifically, the criteria in [LEV30.37\(1\)\(b\)\(iii\)](#) 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 [LEV30.37\(1\)\(b\)\(iii\)](#). For example, a settlement mechanism may meet these functional requirements if any failed transactions (ie 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.*

22

*A "qualifying" MNA is one that meets the requirements under [LEV30.38](#) to [LEV30.39](#).*

**30.38** The effects of bilateral netting agreements<sup>23</sup> 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:

- (1) 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;
- (2) 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;
- (3) allow for the prompt liquidation or setoff of collateral upon the event of default; and
- (4) be, together with the rights arising from provisions required in [LEV30.38\(1\)](#) and [LEV30.38\(3\)](#) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.

*Footnotes*

<sup>23</sup> *The provisions related to qualifying MNAs for SFTs are intended for the calculation of the CCR measure of SFTs as set out in [LEV30.37\(2\)](#) only.*

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

- (1) all transactions are marked to market daily; and
- (2) the collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

**30.40** Leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework. As such, where sale accounting is achieved for an SFT under the bank's operative accounting framework, the bank 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 (ie the bank must include the sum of amounts in [LEV30.37\(1\)](#) and [LEV30.37\(2\)](#) for such an SFT) for the purpose of determining its leverage ratio exposure measure.

**30.41** A bank 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 bank 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 bank is one of the principals in the transaction).

**30.42** Where a bank 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 and the bank does not own or control the underlying cash or security resource, then the bank will be required to calculate its leverage ratio exposure measure by applying only [LEV30.37\(2\)](#).<sup>24</sup>

*Footnotes*

<sup>24</sup>

*Where, in addition to the conditions in [LEV30.37](#) to [LEV30.43](#), a bank acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the bank is not exposed to the SFT and therefore need not recognise those SFTs in its leverage ratio exposure measure.*

**30.43** A bank 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 [LEV30.42](#) only if the bank'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 bank is further economically exposed (ie beyond the guarantee for the difference) to the underlying security or cash in the transaction, <sup>25</sup> a further exposure equal to the full amount of the security or cash must be included in the leverage ratio exposure measure.

## Footnotes

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*For example, 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 (eg 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 bank calculates the exposure on a client-by-client basis.*

**30.44** Where a bank acting as agent provides an indemnity or guarantee to both parties involved in an SFT (ie securities lender and securities borrower), the bank will be required to calculate its leverage ratio exposure measure in accordance with [LEV30.37](#) to [LEV30.43](#) separately for each party involved in the transaction.

## Off-balance sheet items

**30.45** This section explains the treatment of off-balance sheet (OBS) items for inclusion in the leverage ratio exposure measure. These treatments reflect those defined in [CRE20](#) and [CRE52](#), as well as treatments unique to the leverage ratio framework. OBS items include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit. If the OBS item is treated as a derivative exposure per the bank's relevant accounting standard, then the item must be measured as a derivative exposure for the purpose of the leverage ratio exposure measure. In this case, the bank does not need to apply the OBS item treatment to the exposure.

**30.46** In [CRE20](#), OBS items are converted under the standardised approach for credit risk into credit exposure equivalents through the use of credit conversion factors (CCFs). For the purpose of determining the exposure amount of OBS items for the leverage ratio, the CCFs set out in [LEV30.49](#) to [LEV30.56](#) must be applied to the notional amount.

**30.47** For the purposes of the leverage ratio, OBS items will be converted into credit exposures by multiplying the committed but undrawn amount by a CCF. For these purposes, commitment means any contractual arrangement that has been offered by the bank and accepted by the client to extend credit, purchase assets or issue credit substitutes. It includes any such arrangement that can be unconditionally cancelled by the bank at any time without prior notice to the obligor.<sup>26</sup> It also includes any such arrangement that can be cancelled by the

bank if the obligor fails to meet conditions set out in the facility document, including conditions that must be met by the obligor prior to any initial or subsequent drawdown arrangement.

#### *Footnotes*

<sup>26</sup>

*At national discretion, a jurisdiction may exempt certain arrangements from the definition of commitments provided that the following conditions are met: (i) the bank receives no fees or commissions to establish or maintain the arrangements; (ii) the client is required to apply to the bank for the initial and each subsequent drawdown; (iii) the bank has full authority, regardless of the fulfilment by the client of the conditions set out in the facility documentation, over the execution of each drawdown; and (iv) the bank's decision on the execution of each drawdown is only made after assessing the creditworthiness of the client immediately prior to drawdown. Exempted arrangements that met the above criteria are confined to certain arrangements for corporates and small or medium-sized entities, where counterparties are closely monitored on an ongoing basis.*

**30.48** In addition, specific and general provisions set aside against OBS exposures that have decreased Tier 1 capital may be deducted from the credit exposure equivalent amount of those exposures (ie the exposure amount after the application of the relevant CCF). However, the resulting total off-balance sheet equivalent amount for OBS exposures cannot be less than zero.

**30.49** A 100% CCF will be applied to the following items:

- (1) Direct credit substitutes, eg 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).

- (2) Forward asset purchases, forward forward deposits and partly paid shares and securities, which represent commitments with certain drawdown.
- (3) The exposure amount associated with unsettled financial asset purchases (ie the commitment to pay) where regular-way unsettled trades are accounted for at settlement date. Banks may offset commitments to pay for unsettled purchases and cash to be received for unsettled sales provided that the following conditions are met:
  - (a) the financial assets bought and sold that are associated with cash payables and receivables are fair valued through income and included in the bank's regulatory trading book as specified by [RBC25.1](#) to [RBC25.13](#); and
  - (b) the transactions of the financial assets are settled on a DvP basis.
- (4) Off-balance sheet items that are credit substitutes not explicitly included in any other category.

**30.50** A 50% CCF will be applied to note issuance facilities and revolving underwriting facilities regardless of the maturity of the underlying facility.

**30.51** A 50% CCF will be applied to certain transaction-related contingent items (eg performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).

**30.52** A 40% CCF will be applied to commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF.

**30.53** A 20% CCF will be applied to both the issuing and confirming banks of short-term self-liquidating trade letters of credit arising from the movement of goods (eg documentary credits collateralised by the underlying shipment).

**30.54** A 10% CCF will be applied to commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness. National supervisors should evaluate various factors in the jurisdiction, which may constrain banks' ability to cancel the commitment in practice, and consider applying a higher CCF to certain commitments as appropriate.

**30.55** Where there is an undertaking to provide a commitment on an off-balance sheet item, banks are to apply the lower of the two applicable CCFs.<sup>27</sup>

Footnotes

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*For example, if a bank has a commitment to open short-term self-liquidating trade letters of credit arising from the movement of goods, a 20% CCF will be applied (instead of a 40% CCF); and if a bank has an unconditionally cancellable commitment described in [CRE20.100](#) to issue direct credit substitutes, a 10% CCF will be applied (instead of a 100% CCF).*

**30.56** OBS securitisation exposures must be treated as per [CRE40.20\(2\)](#).