

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.1 Rationale and Objective

Scope and Factors Leading to Leverage

CA-15.1.1

The requirements in this Chapter are applicable to <u>Bahraini conventional</u> <u>bank licensees.</u>

CA-15.1.2 The use of non-equity funds to fund assets is referred to as financial leverage. It allows a financial institution to increase the potential returns on its equity capital, with a associated increase in the riskiness of the equity capital and its exposure to losses since the non-equity funds are either not, or only partially risk-absorbent. Consequently, leverage is commonly accomplished through the use of borrowed funds, debt capital

or derivative instruments, etc. It is common for banks to engage in leverage by borrowing to fund asset growth, with the aim of increasing their return on equity.

CA-15.1.3 The leverage ratio serves as a supplementary measure to the risk-based capital requirements of the rest of this Module. The leverage ratio is a simple, transparent ratio and is intended to achieve the following objectives:

- (a) To constrain the build-up of leverage in the banking sector, helping avoid destabilising deleveraging processes which can damage the broader financial system and the economy;
- (b) To reinforce the risk-based requirements with a simple, non-risk based "backstop" measure; and
- (c) To serve as a broad measure of both the on and off-balance sheet sources of bank leverage and, thus, its risk profile.

CA: Capital Adequacy
Section CA-15.1: Page 1 of 1

Central Bank of Bahrain	Volume 1:
Rulebook	Conventional Banks

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.2 Definition, Calculation and Scope of the Leverage Ratio

Leverage Ratio Requirement and Computational Details

CA-15.2.1 <u>Bahraini conventional bank licensees</u> must meet a 3% leverage ratio minimum requirement at all times, calculated on a consolidated basis.

**CA-15.2.2** The leverage ratio is expressed as a percentage as follows:

Tier One Capital
Total Exposures

The Numerator is Tier One Capital described in Paragraph CA-1.1.2. The Denominator is Total Exposures described in Section CA-15.3.

- CA-15.2.3 The leverage ratio framework follows the same scope of regulatory consolidation for Tier One Capital and Total Exposures as is used in CA-B.1.2A, except as described in CA-15.2.4 below.
- CA-15.2.4 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 total exposures measure. However, investments in the capital of such entities that are deducted from Tier One Capital must also be deducted from the exposures measure for the purpose of the leverage ratio calculation.
- CA-15.2.5

  Bahraini conventional bank licensees using a proportional consolidation for regulatory capital purposes must apply the same criteria for the purpose of computation of leverage ratio.
- CA-15.2.6

  Bahraini conventional bank licensees identified as DSIBs must also meet a leverage ratio buffer requirement set at 50% of HLA consistent with the capital measure required to meet the requirements of Module DS.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.3 Exposure Measure

#### General Measurement Principles

CA-15.3.1 Total Exposures for the purpose of CA-15.2.2 is the sum of the following exposures:

- (a) On-balance sheet exposures;
- (b) Derivative exposures;
- (c) Securities financing transactions; and
- (d) Off-balance sheet items as identified in this Section.
- CA-15.3.2 For purposes of Paragraph CA-15.3.1 the exposure measures should be consistent with financial statements where appropriate.

#### On-balance Sheet Exposures

- On-balance sheet exposures include all on-balance assets in their exposure measure, including on balance sheet derivatives' collateral and collateral for <u>Securities Financing Transactions (SFTs)</u>, with the exception of on-balance sheet derivative and <u>SFT</u> assets that are covered in Paragraphs CA-15.3.13 to CA-15.3.23 and CA-15.3.24 to CA-15.3.42.
- On-balance sheet assets must be measured using their accounting balance sheet values (i.e. unweighted) less deductions for associated specific provisions. On-balance sheet, non-derivative exposures are net of specific provisions and valuation adjustments (e.g. credit valuation adjustments under IFRS).
- CA-15.3.5 Items (such as goodwill) that are deducted completely from Tier One Capital must be deducted from Total Exposures.

CA: Capital Adequacy Section CA-15.3: Page 1 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

CA-15.3.6

According to the treatment outlined in Paragraphs CA-2.4.20 to CA-2.4.24, where a financial entity is not included in the regulatory scope of consolidation in CA-B.1.2A, 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. The amount of any investment in the capital of that entity that is totally or partially deducted from CET1 or from AT1 capital of the Bahraini conventional bank licensee following the corresponding deduction approach in Paragraphs CA-2.4.20 to CA-2.4.26 must be excluded from the leverage ratio measure.

CA-15.3.7

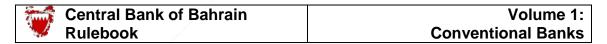
Unless specified differently below, <u>Bahraini conventional bank licensees</u> must not take into account physical guarantees or credit risk mitigation techniques to reduce the leverage ratio exposure measure, nor may banks net assets and liabilities.

CA-15.3.8

Any item deducted from Tier 1 capital according to Module CA and regulatory adjustments other than those related to liabilities must be deducted from the leverage ratio exposure measure. Two examples follow:

a) Where a banking, financial or insurance entity is not included in the regulatory scope of consolidation as set out in Section CA-2.4, 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 therein must also be deducted from the leverage ratio exposure measure; and

CA: Capital Adequacy Section CA-15.3: Page 2 of 20

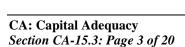


MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

b) Prudent valuation adjustments (PVAs) for exposures to less liquid positions, other than those related to liabilities, that are deducted from Tier 1 capital as per Paragraph CA-16.1.11A must be deducted from the leverage ratio exposure measure.

CA-15.3.9 Gains/losses on fair valued liabilities or accounting value adjustments on derivative liabilities due to changes in the bank's own credit risk are not deducted from the leverage ratio exposure measure.

CA-15.3.10 Netting of loans and deposits is not allowed.



MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

CA-15.3.11

For the purpose of the leverage ratio exposure measure, <u>Bahraini</u> conventional bank licensees 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:

- 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 (See CA-8.1.5); and
- b) The transactions of the financial assets are settled on a delivery-versus-payment (DVP) basis.

<u>Bahraini conventional bank licensees</u> using settlement date accounting will be subject to the treatment set out in Paragraphs CA-15.3.43 to CA-15.3.45 and Paragraphs CA-15.5.7 to CA-15.5.16.

CA-15.3.12

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:

CA: Capital Adequacy Section CA-15.3: Page 4 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

- a) 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;
- b) the <u>Bahraini conventional bank licensees</u>: (i) 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 (ii) at any point in time, the bank must have the discretion and be in a position to exercise this right;
- c) the <u>Bahraini conventional bank licensee</u>'s supervisor does not deem as inadequate the frequency by which the balances of individual participating customer accounts are transferred to a single account;
- d) there are no maturity mismatches among the balances of the individual participating customer accounts included in the cash pooling arrangement or all balances are either overnight or on demand; and
- e) the <u>Bahraini conventional bank licensee</u> charges or pays interest and/or fees based on the combined balance of the individual participating customer accounts included in the cash pooling arrangement.

In the event the abovementioned conditions are not met, the individual balances of the participating customer accounts must be reflected separately in the leverage ratio exposure measure.

CA: Capital Adequacy Section CA-15.3: Page 5 of 20

MODULE	CA: Capital Adequacy
CHAPTER	CA-15: Leverage Ratio and Gearing Requirements

Securities Financing Transaction Exposures (SFTs)

CA-15.3.13

Traditional securitisations must be excluded by the originating bank if the securitisation meets the operational requirements for the recognition of risk transference set out in CA-6, Credit Risk Securitisation Framework. Banks meeting these conditions must include any retained securitisation exposure in the leverage ratio exposure.

CA-15.3.14

<u>SFT</u>s included in the exposure measure must be according to the treatment described in CA-15.3.19 below.

- CA-15.3.15 For purpose of Paragraph CA-15.3.13, 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.
- CA-15.3.16 For SFT assets subject to novation and cleared through Qualifying Central Counterparties, "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.
- CA-15.3.17 Gross SFT assets must not recognise any accounting netting of cash payables against cash receivables.
- CA-15.3.18

Bahraini conventional bank licensees 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 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 (e.g. 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.

CA: Capital Adequacy Section CA-15.3: Page 6 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

General Treatment (Bank Acting as Principal)

CA-15.3.19

The sum of the amounts in subparagraphs (a) and (b) are to be included in the leverage ratio exposure measure:

- (a) Gross <u>SFT</u> assets recognized for accounting purposes (i.e. with no recognition of accounting netting), adjusted as follows:
  - (i) Excluding from the exposure measure the value of any securities received under an <u>SFT</u>, where the <u>Bahraini</u> conventional bank licensee has recognised the securities as an asset on its balance sheet; and
  - (ii) Cash payables and cash receivables in <u>SFTs</u> with the same counterparty may be measured net if the following criteria are met:
    - (A) Transactions have the same explicit final settlement date but which can be unwound at any time by either party to the transaction are not eligible;
    - (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, 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 any issues arising from securities legs of the SFTs do not result in the unwinding of net cash settlement<sup>1</sup>; and

<sup>&</sup>lt;sup>1</sup> This latter condition ensures that any issues arising from the securities leg of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables. If there is a failure of the securities leg of a transaction in such a mechanism at the end of the settlement 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.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

- (b) A measure of Counterparty Credit Risk calculated as the current exposure without an add-on for Potential Future Exposure (PFE), calculated as follows:
  - (i) Where a qualifying Master Netting Agreement<sup>2</sup>(MNA) 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 ( $\Sigma Ei$ ), less the total fair value of cash and securities received from the counterparty for those transactions ( $\Sigma Ci$ ). This is illustrated in the following formula:

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

(ii) 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 is treated as its own netting set, as shown in the following formula:

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

- (ii) Ei\* may be set to zero if (i) Ei 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 Paragraph CA-15.3.20.
- (iii) For the purposes of the above, 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.

CA: Capital Adequacy Section CA-15.3: Page 8 of 20

<sup>&</sup>lt;sup>2</sup> A "qualifying" MNA is one that meets the requirements under Paragraphs CA-15.6.14 and 15.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

#### Sale Accounting Transactions

CA-15.3.20

Leverage may remain with the lender of the security in a SFT whether or not sale accounting is achieved under IFRS. As such, where sale accounting is achieved for a <u>SFT</u> under IFRS, the <u>Bahraini conventional bank licensee</u> must reverse all sales-related accounting entries, and then calculate its exposure as if the <u>SFT</u> had been treated as a financing transaction (i.e. the <u>Bahraini conventional bank licensee</u> must include the sum of amounts in Subparagraphs CA-15.3.19 (a) and (b) for such a <u>SFT</u>) for the purposes of determining its exposure measure.

#### Bank Acting as Agent

CA-15.3.21

A <u>Bahraini</u> conventional bank licensee acting as agent in a <u>SFT</u> 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).

CA-15.3.22

Where a <u>Bahraini conventional bank licensee</u> acting as agent in a <u>SFT</u> 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 <u>Bahraini conventional bank licensee</u> will be required to calculate its exposure measure by applying only Subparagraph 15.3.19(b).<sup>3</sup>

CA: Capital Adequacy Section CA-15.3: Page 9 of 20

<sup>&</sup>lt;sup>3</sup> Where, in addition to the conditions in Paragraphs CA-15.3.21 to 15.3.23, a bank acting as an agent in a 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 exposure measure.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

CA-15.3.23

A <u>Bahraini</u> conventional bank licensee acting as agent in a <u>SFT</u> and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in paragraph CA-15.3.22 only if the <u>Bahraini</u> conventional bank licensee'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 <u>Bahraini</u> conventional bank licensees is further economically exposed (i.e. beyond the guarantee for the difference) to the underlying security or cash in the transaction, <sup>4</sup> a further exposure equal to the full amount of the security or cash must be included in the exposure measure.

CA: Capital Adequacy Section CA-15.3: Page 10 of 20

<sup>&</sup>lt;sup>4</sup> 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 (e.g. by on-lending or managing unsegregated collateral, cash or securities).

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

Derivative Exposures

CA-15.3.24

Exposures to derivatives are included in the leverage ratio exposure by means of two components:

- (a) Replacement cost (RC); and
- (b) Potential Future Exposure (PFE).

CA-15.3.25

<u>Bahraini</u> conventional bank licensees must calculate their exposures associated with all derivative transactions including where a <u>Bahraini</u> conventional bank licensee sells protection using a credit derivative, as the replacement cost (RC)<sup>5</sup> for the current exposure plus an add-on for PFE, as described in Paragraph CA-15.3.26. If the derivative exposure is covered by an eligible bilateral netting contract as specified in Section CA-15.6, the treatment in Chapter CA-4 may be applied.<sup>6</sup> Written credit derivatives are subject to an additional treatment, as set out in Paragraphs CA-15.3.37 to CA-15.3.39.

CA-15.3.26

For derivative transactions not covered by an eligible bilateral netting contract as specified in Paragraphs CA-15.5.1 to CA-15.5.3, the amount to be included in the exposure measure is determined as follows:

Exposure measure = alpha \* (RC+PFE) where

alpha = 1.4

*RC* = the replacement cost of the contract (obtained by marking to market), where the contract has a positive value. RC is determined in accordance with CA-15.3.27

PFE = an amount for PFE calculated in accordance with CA-15.3.28.

<sup>&</sup>lt;sup>5</sup> If 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.

<sup>&</sup>lt;sup>6</sup> These are netting rules in Chapter CA-4 excepting the rules for cross-product netting in Appendix CA-2, Section III (i.e. cross-product netting is not permitted in determining the leverage ratio exposure measure).

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

CA-15.3.27

The replacement cost of a transaction or netting set is measured as follows:

$$RC = \max \{V - CVMr, + CVMp, 0\}$$

where (i) V is the market value of the individual derivative transaction or of the derivative transactions in a netting set; (ii) CVMr is the cash variation margin received that meets the conditions set out in Paragraph CA-15.3.33 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 (iii) CVMp is the cash variation margin provided by the bank and that meets the same conditions.

CA-15.3.28

The potential future exposure (PFE) for derivative exposures must be calculated in accordance with Appendix CA-2 (SA-CCR framework). Mathematically:

For the purposes of the leverage ratio framework, the multiplier is fixed at one. Moreover, when calculating the add-on component, for all margined transactions the maturity factor set out in Appendix CA-2 (SA-CCR framework) may be used. Further, as written options create an exposure to the underlying, they must be included in the leverage ratio exposure measure by applying the treatment described herein, even if certain written options are permitted the zero exposure at default (EAD) treatment allowed in the risk-based framework.

Bilateral Netting

CA-15.3.29

When an eligible bilateral netting contract is in place (see Paragraphs CA-15.5.1 to CA-15.5.3), the RC for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on will be *ANet* as calculated in Paragraphs CA-15.3.27 and CA-15.3.28.

CA: Capital Adequacy Section CA-15.3: Page 12 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

#### Treatment of Related Collateral

CA-15.3.30 Collateral received in connection with derivative contracts has two countervailing effects on leverage:

- (a) It reduces counterparty exposure; but
- (b) It can also increase the economic resources at the disposal of the <u>Bahraini</u> conventional bank licensees, as the bank can use the collateral to leverage itself.

CA-15.3.31

Collateral received in connection with derivative contracts does not necessarily reduce the leverage inherent in a <u>Bahraini conventional bank licensee's</u> 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 IFRS or in Chapter CA-4. Hence, when calculating the exposure amount by applying Paragraphs CA-15.3.25 to CA-15.3.27, a <u>Bahraini conventional bank licensee</u> must not reduce the exposure amount by any collateral received from the counterparty.

CA-15.3.32

With regard to collateral provided, <u>Bahraini conventional bank licensees</u> 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 IFRS.

#### Treatment of Cash Variation Margin

CA-15.3.33

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:

(a) For trades not cleared through a <u>qualifying central counterparty</u> (QCCP) the cash received by the recipient counterparty is not segregated;

CA: Capital Adequacy Section CA-15.3: Page 13 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

- (b) Variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivatives positions;
- (c) The cash variation margin is received in the same currency as the currency of settlement of the derivative contract;
- (d) 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; and
- (e) Derivatives transactions and variation margins are covered by a single master netting agreement (MNA)<sup>7,8</sup> between the legal entities that are the counterparties 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 in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.

CA-15.3.34

If the conditions in Paragraph CA-15.3.33 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:

(a) 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 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 <u>Bahraini conventional bank licensee's</u> operative accounting standard; and

CA: Capital Adequacy Section CA-15.3: Page 14 of 20

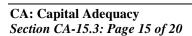
<sup>&</sup>lt;sup>7</sup> A Master MNA may be deemed to be a single MNA for this purpose.

<sup>&</sup>lt;sup>8</sup> 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 account of the fact that for netting agreements employed by CCPs, no standardisation has currently emerged that would be comparable with respect to OTC netting agreements for bilateral trading.

Central Bank of Bahrain	Volume 1:
Rulebook	Conventional Banks

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

(b) In the case of cash variation margin provided to a counterparty, the posting <u>Bahraini conventional bank licensee</u> may deduct the resulting receivable from its leverage ratio exposure measure, where the cash variation margin has been recognised as an asset under the <u>Bahraini conventional bank licensee's</u> operative accounting framework and instead include the cash variation margin in the calculation of derivative replacement cost.



MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

Add-on Factors for Determining PFE

CA-15.3.35

The following add-on factors apply to financial derivatives, based on residual maturity:

	Interest rates	FX 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:

- For contracts with multiple exchanges of principal, the factors are to be multiplied by the number of remaining payments in the contract.
- 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%.
- 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 on these contracts would be evaluated solely on the basis of their mark-to-market value.

CA-15.3.36

Add-ons must be 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, <u>Bahraini conventional bank licensees</u> must use the effective notional amount when determining PFE.

CA: Capital Adequacy Section CA-15.3: Page 16 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

Treatment of Clearing Services

CA-15.3.37

Where a <u>Bahraini conventional bank licensee</u> acting as clearing member (CM)<sup>9</sup> offers clearing services to clients, the clearing member's trade exposures<sup>10</sup> to the central counterparty (CCP) that arise when the 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.

CA-15.3.38

Where a client enters directly into a derivatives transaction with the CCP and the CM guarantees the performance of its clients' derivative trade exposures to the CCP, the <u>Bahraini conventional bank licensee</u> 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 CA-15.3.25 to CA-15.3.34, as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

CA: Capital Adequacy Section CA-15.3: Page 17 of 20

<sup>&</sup>lt;sup>9</sup> For the purposes of this Paragraph, a clearing member (CM) is defined as 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 a CCP for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and other market participants.

<sup>&</sup>lt;sup>10</sup> "Trade exposure" includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

Additional Treatment for Written Credit Derivatives

CA-15.3.39

In addition to the 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. Written credit derivatives must be treated consistently with cash instruments (e.g. loans, bonds) for the purposes of the exposure measure.

CA-15.3.40

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 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 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, 11,12 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;<sup>13</sup>

CA: Capital Adequacy Section CA-15.3: Page 18 of 20

<sup>&</sup>lt;sup>11</sup> 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 a bank were to purchase protection on an entire securitisation structure). If a bank 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.

<sup>&</sup>lt;sup>12</sup> The effective notional amount of a written credit derivative may be reduced by any negative change in fair value reflected in the bank's Tier 1 capital provided the effective notional amount of the offsetting purchased credit protection is also reduced by any resulting positive change in fair value reflected in Tier 1 capital. Where a bank 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.

<sup>13</sup> For transhed products, the purchased protection must be on a reference obligation with the same level of seniority.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

- (c) The remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative;
- (d) the credit protection purchased through credit derivatives is not from a counterparty whose credit quality is highly correlated with the value of the reference obligation; 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
- (e) 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 CA-15.3.37 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.

CA-15.3.41

For the purposes of CA-15.3.40, 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 CA-15.3.40. For example, the condition of same or more conservative material terms as those in the corresponding written credit derivatives as referenced in CA-15.3.40 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.

CA: Capital Adequacy Section CA-15.3: Page 19 of 20

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

CA-15.3.42

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 written credit derivatives may be overstated. Bahraini conventional bank licensees must deduct the individual PFE add-on amount relating to a written credit derivative (which is not offset according to Paragraph CA-15.3.40 and whose effective notional amount is included in the exposure measure) from their gross add-on in Paragraphs CA-15.3.25 to CA-15.3.27.

CA-15.3.43

Where a bank 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.

Off-balance Sheet Items (OBS)

CA-15.3.44

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 for the purpose of the accounting, then the item must be measured as a derivative exposure for the purpose of leverage ratio exposure.

CA-15.3.45

In the risk-based capital framework, OBS items are converted under the standardised approach 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 CA-15.4 must be applied to the notional amount.

CA-15.3.46

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 (i.e. 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.

CA: Capital Adequacy Section CA-15.3: Page 20 of 20

- Tunk	Central Bank of Bahrain	Volume 1:
	Rulebook	Conventional Banks

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

## CA-15.4 Additional Detail for Computation Purposes

#### Bilateral Netting



For the purpose of the leverage ratio measure, bilateral netting is allowed subject to the following conditions:

- (a) <u>Bahraini conventional bank licensees</u> 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; or
- (b) <u>Bahraini conventional bank licensees</u> may also net transactions subject to any legally valid form of bilateral netting not covered in (b), including other forms of novation.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.4 Additional Detail for Computation Purposes (continued)

CA-15.4.2

In both cases in CA-15.5.1 (b) and (c), a <u>Bahraini conventional bank</u> <u>licensee</u> will need to satisfy the CBB that it has:

- (a) A netting contract or agreement with the counterparty that creates a single legal obligation, covering all included transactions, such that the <u>Bahraini conventional bank licensee</u> 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;
- (b) Written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the <u>Bahraini conventional bank licensee's</u> exposure to be such a net amount under:
  - (i) The law of the home jurisdiction in which the counterparty is incorporated and, if the foreign branch of a counterparty is involved, then also under the law of jurisdiction in which the branch is located;
  - (ii) The law that governs the individual transactions; and
  - (iii) The law that governs any contract or agreement necessary to effect the netting.

The CBB, 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>14</sup>; and

(c) 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.

CA-15.4.3

Contracts containing walkaway clauses are not eligible for netting for the purpose of calculating the leverage ratio requirements. 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

CA: Capital Adequacy Section CA-15.4: Page 2 of 5

<sup>&</sup>lt;sup>14</sup> Thus, if any of the concerned supervisors are dissatisfied about enforceability under their laws, the netting contract or agreement will not meet the condition and neither counterparty could obtain supervisory benefit.

A	Central Bank of Bahrain Rulebook
	Rulebook

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

#### CA-15.4 Additional Detail for Computation Purposes (continued)

Securities Financing Transaction Exposures<sup>15</sup>

CA-15.4.4

Where a qualifying master netting agreement is in place, the effects of bilateral netting agreements for SFTs are 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. addition, netting agreements must:

- Provide the non-defaulting party with the right to terminate and (a) 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;
- Provide for the netting of gains and losses on transactions (b) (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;
- Allow for the prompt liquidation or setoff of collateral upon the (c) 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.

CA-15.4.5

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

- All transactions are marked to market daily; and (a)
- The collateral instruments used in the transactions are recognised (b) as eligible financial collateral in the banking book.

#### Off-balance Sheet Items

CA-15.4.6

For the purpose of the leverage ratio, OBS items must be converted into credit exposure equivalents through the use of credit conversion factors (CCFs).

<sup>&</sup>lt;sup>15</sup> 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 CA-15.5.4) only.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

# CA-15.4 Additional Detail for Computation Purposes (continued)

CA-15.4.7

Commitments other than securitisation liquidity facilities with an original maturity up to one year and commitments with an original maturity over one year receive a CCF of 20% and 50%, respectively. However, any commitments that are unconditionally cancellable at any time by the <u>Bahraini conventional bank licensee</u> without prior notice, or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness, receive a 10% CCF<sup>16</sup>.

CA-15.4.8

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) receive a CCF of 100%.

CA-15.4.9

The exposure amount associated with unsettled financial asset purchases where regular-way unsettled trades are accounted for at settlement date, a 100% CCF applies.

CA-15.4.10

Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown, will receive a CCF of 100%.

CA-15.4.11

The following transaction-related contingent items (performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) receive a CCF of 50%.

CA-15.4.12

Note issuance facilities (NIFs), and revolving underwriting facilities (RUFs) receive a CCF of 50%.

<sup>&</sup>lt;sup>16</sup> In Bahrain, retail commitments such as credit cards and overdrafts are considered unconditionally cancellable where the terms permit the bank to cancel them without notice.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.4 Additional Detail for Computation Purposes (continued)

- CA-15.4.13 A 40% CCF will be applied to commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF.
- CA-15.4.14

  A 20% CCF will be applied to both the issuing and confirming banks of short-term<sup>17</sup> self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment).
- 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.
- CA-15.4.16 National supervisors shall 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.
- 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. 18
- All off-balance sheet securitisation exposures, except an eligible liquidity facility or an eligible servicer cash advance facility as set out in Paragraphs CA-6.4.17 and CA-6.4.19 of this Module, receive a CCF of 100% conversion factor. All eligible liquidity facilities receive a CCF of 50%. Undrawn servicer cash advances or facilities that are unconditionally cancellable without prior notice are eligible for a 10% CCF.

<sup>&</sup>lt;sup>17</sup> .That is, with a maturity below one year. For further details see Basel Committee on Banking Supervision, *Treatment of trade finance under the Basel capital framework*, October 2011, <a href="https://www.bis.org/publ/bcbs205.pdf">www.bis.org/publ/bcbs205.pdf</a>.

<sup>&</sup>lt;sup>18</sup> .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 to issue direct credit substitutes, a 10% CCF will be applied (instead of a 100% CCF).

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

# **CA-15.5** Effective Date and Transitional Arrangements

CA-15.5.1

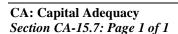
<u>Bahraini Conventional Bank Licensees</u> shall implement the requirements of this Module with effect from 1<sup>st</sup> January 2019. Quarterly reporting of Leverage ratio to the CBB and in public disclosures shall commence with reference to the quarter ending on 31<sup>st</sup> March 2019.

MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

## CA-15.6 Additional Requirements

CA-15.6.1 A higher ratio may be required for any <u>Bahraini conventional bank licensee</u> if warranted by its risk profile or circumstances. The CBB may use stress testing as a complementing tool to adjust the leverage ratio requirement at the macro- and/or individual <u>Bahraini conventional bank licensee</u>-level.

CA-15.6.2 The leverage ratio can be used for both micro- and macro prudential surveillance; for example, as a macro prudential tool, a consistent leverage ratio can be applied for all <u>Bahraini conventional bank licensees</u> as an indicator for monitoring vulnerability. As a micro prudential tool, it can be used as a trigger for increased surveillance or capital requirements for specific licensees under the supervisory review process.



MODULE	CA:	Capital Adequacy
CHAPTER	CA-15:	Leverage Ratio and Gearing Requirements

### CA-15.7 Gearing

CA-15.7.1 The content of this Section is applicable to all <u>overseas conventional retail bank</u> licensees.

#### Measurement

- CA-15.7.2 The gearing ratio is measured with reference to the ratio of deposit liabilities against the bank's capital and reserves as reported in the PIR.
- For <u>overseas conventional retail bank licensee</u>, the reference to capital and reserves in Paragraph CA-15.7.2 includes the following items reported in Section A Balance Sheet of the PIR:
  - (a) Paid up share capital (net of treasury shares);
  - (b) General (disclosed reserves);
  - (c) Retained earnings (or losses) brought forward; and
  - (d) Net profit (or loss) for the current period.
- Under Paragraph CA-15.7.3, item (a) refers to the capital provided by the head office to the <u>overseas conventional retail bank licensee</u>, also referred to as endowment capital.
- CA-15.7.5

  The reference to deposit liabilities in Paragraph CA-15.7.2 includes the following items reported in Section A Balance Sheet of the PIR:
  - (a) Deposits from banks; and
  - (b) Deposits from non-banks.

#### Gearing Limit

CA-15.7.6 Deposit liabilities must not exceed 20 times the respective bank's capital and reserves at all times.