

Central Bank of Trinidad & Tobago

# Leverage Ratio Guideline

October 2023

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#### 1. INTRODUCTION

- 1.1 The financial crisis of 2007-2009 highlighted the impact of excessive leverage on the viability of financial institutions. Pre-crisis, while banks maintained healthy risk based regulatory capital ratios, they built up excessive on and off balance sheet leverage which had adverse consequences for many institutions. Attempts at deleveraging during the crisis also had knock-on effects for the financial system as a whole. For example, this action exacerbated downward pressure on asset prices and eroded bank capital.
- 1.2 While it is common for financial institutions to engage in leverage by borrowing to fund asset growth with the aim of increasing return on equity, it can also be accomplished through the use of debt capital or derivative instruments etc. The build-up of excessive leverage however can cause banks to become vulnerable to changes in market and economic conditions.
- 1.3 The Basel committee on Banking Supervision (BCBS), in recognition of the risk associated with excessive leverage and the limitations of the risk based capital framework to capture this risk, issued the leverage ratio as part of its suite of Basel III post-crisis reforms for the banking sector. This guideline in based on the BCBS 2014 version of the standard, which is the current version at the time of writing.
- 1.4 The Central Bank of Trinidad and Tobago ("Central Bank"/ "Bank") is introducing the BCBS's leverage ratio requirement as a non-risk based back stop measure for the local banking sector with the aim of:
  - i. restricting the build-up of excessive levels of leverage in banking institutions;
  - ii. avoiding destabilizing deleveraging processes that can damage the broader financial system; and
  - iii. supplementing the Pillar 1 risk-based capital adequacy framework.

# 2. PURPOSE, APPLICATION AND SCOPE

- 2.1 This Leverage Ratio Guideline ("Guideline") is made pursuant to regulation 19 of the Financial Institutions (Capital Adequacy) Regulations, 2020 ("the Regulations") and pursuant to regulation 2 comes into effect upon publication of a Notice in the Gazette by the Minister of Finance. The Notice was made by the Minister on September 30, 2023, published in the Gazette on published on October 12, 2023 and has an effective commencement date of January 1, 2024.
- 2.2 The purpose of this Guideline is to provide directions to licensees and financial holding companies (FHCs) under the Financial Institutions Act, 2008 ("FIA") on the calculation of the leverage ratio and to establish rules for the determination of the respective components of the ratio.
- 2.3 The Guideline applies to licensees on both an individual and consolidated basis and to FHCs on a consolidated basis only in accordance with regulation 4 of the Regulations.
- 2.4 Financial institutions are required to report to the Central Bank on the leverage ratio monthly on an individual basis and quarterly on a consolidated basis using the prescribed reporting format which is posted on the Bank's website.

# 3. **DEFINITIONS**

bilateral netting	means the consolidation of agreements between a financial organization and a counterparty, which results in a single legally enforceable arrangement between a financial organization and a counterparty covering all, including individual contracts and master netting agreements.
central counterparty / CCP	means a clearinghouse that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts.
clearing member	means 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.
<b>CPSS-IOSCO Principles for Financial Market Infrastructures</b>	are international standards for financial market infrastructures including payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories
initial margin	means collateral that is posted at the outset of a derivative transaction, in over-the-counter (OTC) transactions or to a CCP, to mitigate the potential future exposure of counterparties from the possible future change in the value of their transactions.
FIA	Financial Institutions Act, 2008
financial institution	means a licensee or financial holding company (FHC) as defined in the FIA.
qualifying central / counterparty/ QCCP	means an entity that is licensed to operate as a CCP and is permitted by the appropriate regulator/overseer to operate as such with respect to the products offered. The CCP should be domiciled and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that the CCP is subject, on an ongoing basis, to domestic rules and regulations that are consistent with the CPSS-IOSCO Principles for Financial Market Infrastructures.
Regulations	means the Financial Institutions (Capital Adequacy) Regulations, 2020.

securities financing	means transactions such as repurchase agreements, reverse
transactions / SFTs	repurchase agreements, security lending and borrowing, and margin lending transactions where the value of the transactions depends on the market valuations and the transactions are often
	subject to margin agreements.
variation margin / VM	means the amount of collateral posted in derivative markets on a daily or intraday basis, based upon price movements, to cover the credit risk relating the entire portfolio of transactions between the trading parties. VM payments are usually made in cash, from the party whose position has lost value to the party whose position has gained value. The payments ensure mark-to-market losses from
	default are limited to the period since the previous VM payment.
	For centrally cleared trades, counterparties post VM to the CCP in
	non-cleared trades, to each other.

# 4. CALCULATION OF THE LEVERAGE RATIO

4.1 Financial institutions are required to maintain a minimum leverage ratio of no less than 3% calculated as follows:

 $\frac{\text{Tier 1 Capital}}{\text{Exposure Measure}} \ge Leverage \ ratio \ (3\%)$ 

4.2 Notwithstanding the minimum leverage ratio referred to in paragraph 4.1, the Central Bank may require a financial institution to hold a higher leverage ratio, having regard to its risk profile and the safety and soundness of the financial system.

# Tier 1 Capital

4.3 Tier 1 capital for the purposes of the leverage ratio will be the same as that calculated for the purposes of the Pillar 1 risk based capital ratios. Specifically, Tier 1 capital is to be calculated in accordance with regulation 10 of the Regulations subject to the relevant deductions set out in regulation 12 and the limits and restrictions set out in regulation 13 of the Regulations.

#### Exposure Measure (EM)

- 4.4 The exposure measure (EM) for the leverage ratio should generally follow the accounting measure of exposure (i.e. following gross accounting values) and be calculated as the sum of:
  - 4.4.1 on-balance sheet exposures (excluding on-balance sheet derivative and securities financing transaction exposures);
  - 4.4.2 derivative exposures;
  - 4.4.3 securities financing transaction(SFTs) exposures; and

- 4.4.4 off-balance sheet (OBS) exposures.
- 4.5 General Measurement Principles in respect of the EM
  - 4.5.1 On-balance sheet, non-derivative exposures are to be included in the EM, net of specific provisions and accounting valuation adjustments (e.g. accounting credit valuation adjustments).
  - 4.5.2 Netting of loans and deposits is not allowed.
  - 4.5.3 Unless otherwise specified in the guidance set out in the paragraphs below, physical or financial collateral, guarantees or other credit risk mitigation techniques must not be taken into account for reducing the EM.
  - 4.5.4 With regard to traditional securitizations, an originating bank may exclude securitized exposures from its leverage ratio exposure measure if the securitization meets the operational requirements for the recognition of risk transference according to *Part VII of the Regulations Provisions Relating to Operational Requirements for the Purpose of Securitization Exposures*. Banks meeting these conditions must include any retained securitization exposures in their leverage ratio exposure measure. In all other cases, e.g. traditional securitizations that do not meet the operational requirements for the recognition of risk transference or synthetic securitizations, the securitized exposures must be included in the leverage ratio exposure measure.
- 4.6 The methods for calculating the EM in respect of the four main exposure categories referred to in paragraph 4.4 are described in the following sections 4.7 to 4.10.

# 4.7 *On-Balance Sheet Exposures*

- 4.7.1 All on-balance sheet assets (excluding on-balance sheet derivative assets and SFTs) should be included in the EM in accordance with paragraph 4.5 (a) above. However, on balance sheet collateral for derivatives and for SFTs shall be included in the EM calculation for on-balance sheet exposures.
- 4.7.2 Balance sheet assets deducted from Tier 1 capital should also be deducted from the EM.
- 4.7.3 Liability items must not be deducted from the measure of exposure. For example, gains/losses on fair valued liabilities, or accounting value adjustments on derivative liabilities due to changes in the financial institution's own credit risk, must not be deducted from EM.

#### 4.8 *Derivative Exposures*

4.8.1 The EM for derivative contracts consists of two components: (i) exposure arising from the underlying obligation of the derivative contract and (ii) a counter party credit risk (CCR) exposure. The leverage ratio framework uses the method set out below to capture both of these exposure types.

# 4.8.2 **Derivative Contracts not covered by bilateral netting contracts**

- a. Financial institutions must calculate their exposures associated with all derivative transactions including where it sells protection using a credit derivative, as the replacement cost (RC) for the current exposure plus an add-on for potential future exposure (PFE),
- b. For these derivative transactions not covered by eligible bilateral netting contracts, the amount to be included in the leverage ratio EM is determined, for each transaction separately, as follows:

# **exposure measure (EM) = RC + add-on,** where

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

**add-on** = an amount for PFE over the remaining life of the contract calculated by applying an add-on factor to the notional principal amount of the derivative. The add-on factors are included at paragraphs 1 and 3 of <u>Appendix 1</u>.

# 4.8.3 **Derivative Contracts covered by bilateral netting contracts**

a. When an eligible bilateral netting contract is in place as specified in paragraphs 4 of the <u>Appendix 1</u>, the RC for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on will be  $A_{Net}$  as calculated in paragraph 4 (d) of the <u>Appendix 1</u>.

# 4.8.4 Treatment of Collateral<sup>1</sup>

#### Collateral Received

As a general rule, collateral (cash or non-cash) received should not be netted against derivatives exposures whether or not netting is permitted under the operative accounting or risk-based framework. When calculating the exposure amount a financial institution must not reduce the exposure amount by any collateral received from the counterparty.

# **Collateral Provided**

Collateral (cash or non-cash) must not reduce a financial institution's EM. Where the provision of such collateral under the terms of a derivative contract has reduced a financial institution's on-balance sheet assets under the applicable accounting standard, the financial institution must gross up its EM by the amount of collateral provided.

<sup>&</sup>lt;sup>1</sup> Collateral received in connection with derivative contracts has two countervailing effects on leverage i.e. (1) it reduces counterparty exposure; but (2) it can also increase the economic resources at the disposal of the financial institution, as the financial institution can use the collateral to leverage itself.

## 4.8.5 **Treatment of cash variation margin**

- a. In the treatment of derivative exposures for the purpose of the leverage ratio, the cash portion of variation margin exchanged between counterparties may be viewed as a form of pre-settlement payment, if the following conditions are met:
  - i. For trades not cleared through a QCCP, the cash received by the recipient counterparty is not segregated<sup>2</sup>;
  - ii. Variation margin is calculated and exchanged on a daily basis based on markto-market valuation of derivatives positions;
  - iii. The cash variation margin is received in the same currency as the currency of settlement of the derivative contract;
  - iv. Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty;
  - v. Derivatives transactions and variation margins are covered by a single master netting agreement (MNA) between the legal entities that are the counterparties in the derivatives transaction. In this regard the MNA must:
    - a) 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;
    - b) be legally enforceable and effective in all relevant jurisdictions, including in the event of default and bankruptcy or insolvency.
  - where the conditions outlined at v. above are met, the cash portion of the variation margin <u>received</u> may be used to reduce the replacement cost portion of the leverage ratio EM, and the receivables assets from cash variation margin <u>provided</u> may be deducted from the leverage ratio EM as follows:
    - a) in the case of cash variation margin <u>received</u>, the receiving financial institution may reduce the replacement cost (but not the add-on portion) of the exposure amount of the derivative asset by the amount of cash received if the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the financial institution's operative accounting standard;

 $<sup>^{2}</sup>$  Cash variation margin would satisfy the non-segregation criterion if the recipient counterparty has no restrictions on the ability to use the cash received (i.e. the cash variation margin received is used as its own cash).

- b) in the case of cash variation margin **provided** to a counterparty, the posting financial institution may deduct the resulting receivable from its leverage ratio EM, where the cash variation margin has been recognized as an asset under the financial institution's operative accounting framework.
- c) Cash variation margin may not be used to reduce the PFE amount (including the calculation of the net-to-gross ratio (NGR) as defined in paragraph 4(d) of <u>Appendix 1</u>).

#### 4.8.6 **Treatment of clearing services**

- a. A financial institution that is a clearing member of a CCP which offers clearing services to clients:
  - i. must calculate a trade exposure<sup>3</sup> to the CCP, if the clearing member is obligated to reimburse the clients for any losses suffered due to changes in the value of its derivative transactions in the event the CCP defaults; and
  - ii. is not required to recognize the resulting trade exposure to a CCP in its leverage ratio EM, if the clearing member is not obligated to reimburse the clients for any losses suffered due to changes in the value of its transactions in the event the QCCP defaults, based on its contractual arrangements with its client.
- b. Where a client enters directly into a derivatives transaction with the CCP and the clearing member guarantees the performance of its clients' derivative trade exposures to the CCP, the financial institution acting as the clearing member for the client to the CCP must calculate its related leverage ratio exposure resulting from the guarantee as a derivative exposure as set out in sections 4.8.2 to 4.8.5 above, as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

# 4.8.7 Additional treatment of written credit derivatives

a. In addition to the CCR exposure arising from the fair value of the contracts, written credit derivative contracts create a notional credit exposure arising from the creditworthiness of the reference entity that has to be incorporated into the EM<sup>4</sup>.

<sup>&</sup>lt;sup>3</sup> Trade exposures include initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP. Trade exposures should be included in the EM.

<sup>&</sup>lt;sup>4</sup> In addition to the treatments for derivative contracts, netting and collateral are discussed in the preceding paragraphs.

- b. Where a financial institution provides credit protection through a written credit derivative, to capture the credit exposure to the reference entity and in addition to the treatment for derivative contracts, netting and collateral outlined under this section, it must include the effective notional amount<sup>5</sup> referenced by the written credit derivative in the EM.
- c. A financial institution may reduce the effective notional amount of a written credit derivative 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.
- d. The resulting amount at c. above may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name provided that:
  - i. the purchased credit derivative 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>6</sup>;
  - ii. the remaining maturity of the purchased credit derivative is equal to or greater than the remaining maturity of the written credit derivative; or
  - iii. in the event that the effective notional amount of a written credit derivative is reduced by any negative fair value reflected in Tier 1 Capital, the effective notional amount of the purchased credit derivative is also reduced by any resulting positive fair value reflected in Tier 1 Capital
- e. For the purposes of d. above:
  - i. Two reference names are considered identical only if they refer to the same legal entity;
  - ii. 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;
  - iii. 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 be the case, for example, if a financial institution were to purchase protection on an entire securitisation structure);

<sup>&</sup>lt;sup>5</sup> For credit derivative contracts where the stated notional amount differs from the effective notional amount, financial institutions must use the greater of the effective notional amount and the notional amount. The effective notional amount is obtained by adjusting the notional amount to reflect the true exposure of contracts that are leveraged or otherwise enhanced by the structure of the transaction.

<sup>&</sup>lt;sup>6</sup> For tranched products, the purchased protection must be on a reference obligation with the same level of seniority.

- iv. If a financial institution purchases protection on a pool of reference names, but the credit protection does not cover the entire pool (i.e. the protection covers only a subset of the pool, as in the case of an nth-to-default credit derivative or a securitization tranche), then offsetting is not permitted for the protection sold on individual reference names;
- v. Purchased protection as referred to at (iv.) above 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. Specifically, offsetting may only be recognized when the pool of reference entities and the level of subordination in both transactions are identical.
- f. The effective notional amount of a written credit derivative must not be offset against credit protection purchased through a total return swap (TRS), if the financial institution records the net payments received under the TRS as net income but does not record offsetting deterioration in the value of the written credit derivative in Tier 1 Capital (either through reductions in fair value or by additions to reserves).
- g. 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. To avoid overstatement of the EM, a financial institution may:
  - i. deduct from the gross PFE of all derivative contracts the PFE of the written credit derivative contract if the contract is not offset by an eligible purchased credit derivative contract and the notional amount of the former contract is already included in the EM;
  - ii. where the written credit derivative contract is subject to a valid bilateral netting agreement (as set out in <u>Appendix 1</u>-paragraph 4 (d)) and when calculating the " $A_{Net}$ ", reduce " $A_{Gross}$ " by the PFE of the written credit derivative contract if its notional amount is already included in the EM. However, no adjustments should be made to the net to gross ratio ("NGR"). Where effective bilateral netting contracts are not in place, the PFE add-on may be set to zero in order to avoid the double counting described in this paragraph.

# 4.9 Securities Financing Transactions (SFTs)

- 4.9.1 The EM calculations for SFTs distinguish between situations where a financial institution is:
  - a. acting as principal; and
  - b. acting as an agent and provides an indemnity or guarantee to one or both counterparties to the SFTs.

# **Financial Institution acting as Principal**

- 4.9.2 A financial institution must calculate its leverage ratio EM for its SFT exposures as the sum of:
  - a. adjusted gross SFT assets recognised for accounting purposes<sup>7</sup> (i.e. without recognition of accounting netting); and
  - b. a measure of counterparty credit risk (CCR) calculated as the current exposure without an add-on for PFE.

# 4.9.3 Adjusted gross SFT assets

- a. Financial institutions are to adjust their gross SFT assets as follows:
  - i. the value of any security received under an SFT may be excluded from the leverage ratio EM where the security has been recognized as an asset on the balance sheet of the financial institution; and
  - ii. cash payables and cash receivables in SFTs with the same counterparty may be netted if all the following criteria are met:
    - a) the SFTs have the same explicit final settlement date<sup>8</sup>;
    - b) the financial institution has a legally enforceable right to set off the amounts owed to, and owed by, the counterparty, both in the normal course of business and in the event of the counterparty's default, insolvency or bankruptcy; and
    - c) the financial institution and its counterparty intend to settle net or settle simultaneously, or the SFTs are subject to a settlement mechanism that results in the functional equivalent of net settlement (i.e. the cash flows of the SFTs are equivalent, in effect, to a single net amount on the settlement date).
    - d) For the purpose of c. above, a settlement mechanism will not result in the functional equivalent of net settlement, unless:-
      - 1) the SFTs are settled through the same settlement system; and
      - 2) the settlement arrangements are supported by cash or intraday credit facilities intended to ensure that the SFTs are settled by the end of the business day and that 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.

<sup>&</sup>lt;sup>7</sup> For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognized 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.

<sup>&</sup>lt;sup>8</sup> SFTs with no explicit end date but which can be unwound at any time by either party to the SFT are not eligible to be measured net.

# 4.9.4 Counterparty credit risk

- a. Where a qualifying Master Netting Agreement (MNA)<sup>9</sup> is in place, the current exposure (E\*) must be calculated as the greater of–
  - i. zero; and
  - ii. total fair value of securities and cash that the financial institution has **provided** to the counterparty for all SFTs included in the qualifying MNA i.e.  $(\Sigma E_i)$ , less the total fair value of cash and securities that the financial institution has **received** from the counterparty for all SFTs included in the qualifying MNA i.e.  $(\Sigma C_i)$  illustrated as follows:

 $\mathbf{E}^* = \max \{\mathbf{0}, [\sum \mathbf{E}_i - \sum \mathbf{C}_i]\}$ 

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. Each transaction i should be treated as netting set, as shown in the following formula:

$$E_i^* = \max\{0, [E_i - C_i]\}$$

#### 4.9.5 Sale accounting transactions

- a. Leverage may remain with the <u>lender</u> of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework. Where an SFT is recognized as a sale under the financial institution's operative accounting framework, the financial institution must reverse all accounting entries related to this sale, and then calculate its total exposure as if the SFT had been treated as a financing transaction under its accounting framework.
- b. Accordingly, for such transactions the financial institution must sum the amounts calculated under 4.9.2 above for such an SFT for the purposes of determining the EM.

# **Financial Institution acting as Agent**

- 4.9.6 A financial institution acting as agent in an SFT generally provides an indemnity or guarantee to only one of the two parties involved, and only for the difference between the value of the security or cash its customer has lent and the value of collateral the borrower has provided. In this situation, the financial institution is exposed to the counterparty of its customer for the difference in values rather than to the full exposure to the underlying security or cash of the transaction<sup>10</sup>.
- 4.9.7 A financial institution acting as agent in an SFT that provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or

<sup>&</sup>lt;sup>9</sup> A "qualifying" MNA is one that meets the requirements in paragraph 8 of Appendix 1.

<sup>&</sup>lt;sup>10</sup> Where the financial institution does not own/control the underlying cash or security resource, that resource cannot be leveraged by the financial institution

cash the customer has lent and the value of collateral the borrower has provided must calculate its EM by applying the formula at paragraph 4.9.4. for CCR

- 4.9.8 A financial institution acting as agent in an SFT and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in paragraph 4.9.6 *only if* the financial institution's exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided.
- 4.9.9 In situations where the financial institution is further economically exposed (i.e. beyond the guarantee for the difference) to the underlying security or cash in the transaction<sup>11,</sup> a further exposure equal to the full amount of the security or cash must be included in the EM.
- 4.9.10 Where, in addition to the conditions in paragraphs 4.9.6 to 4.9.9, a financial institution acting as an agent in an SFT does not provide an indemnity or guarantee to any of the involved parties, the financial institution is not exposed to the SFT and therefore need not recognize those SFTs in its EM.
- 4.10 Off-Balance Sheet Exposures
  - 4.10.1 OBS items include commitments (such as liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit.
  - 4.10.2 To determine the exposure amount of off-balance sheet exposures for the purposes of the leverage ratio, the CCFs set out in Appendix 3 must be applied to the notional amount.

<sup>&</sup>lt;sup>11</sup> For example, due to the financial institution managing collateral received in the financial institution's name or on its own account rather than on the customer's or borrower's account (e.g. by on-lending or managing unsegregated collateral, cash or securities).

# **APPENDIX 1 - Derivative Exposures**

	Residual Maturity of Contracts		
	1 year or	Over 1 year to 5	Over 5 years
	less	years	
Interest Rates	0%	0.5%	1.5%
Foreign Exchange Rates and Gold	1%	5%	7.5%
Equities	6%	8%	10%
Precious Metals Except Gold	7%	7%	8%
Other Commodities	10%	12%	15%

# 1. Add-on factors for determining the Potential Future Exposure (PFE):-

- a. For contracts with multiple exchanges of principal, the factors in the table above shall be multiplied by the number of remaining payments in the contract.
- b. The residual maturity of over the counter derivative contracts shall be equal to the time until the next reset date where:
  - i. the contracts are structured to settle outstanding exposure following specified payment dates; and
  - ii. the terms are reset such that the market value of the contract is zero on these specified payment dates.
- c. Where interest rate contracts with remaining maturities of more than one year meet the criteria at point b (ii). above, the add-on factor is subject to a floor of 0.5 %.
- d. Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns of the table above shall be treated as "other commodities".
- e. No potential future credit exposure shall be calculated for single currency floating or floating interest rate swaps and the credit exposure on these contracts shall be evaluated solely on the basis of their mark-to-market value.
- 2. Add-on factors should be based on the effective notional amounts.

	Protection Buyer	Protection Seller
Total Return Swap		
"Qualifying" reference obligation	5%	5%
"Non-qualifying" reference		
obligation	10%	10%
Credit Default Swap		
"Qualifying" reference obligation	5%	5%
"Non-qualifying" reference	100/	100/
obligation	10%	10%

# 3. Add-on factors for Single Name Credit Derivatives:-

- a. Residual maturities shall not be considered for the purposes of the calculation of the potential future credit exposure add-on factors for single name credit derivatives.
- b. The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying obligation is still solvent. Where this applies the maximum add-ons shall be no more than the amount of the unpaid premiums.
- c. Where the credit derivative is a first-to-default transaction, the add-on will be determined by the lowest credit quality underlying the basket, i.e. if there are any non-qualifying items in the basket, the non-qualifying reference obligation add-on should be used.
- d. For second and subsequent nth-to-default transactions, underlying assets should continue to be allocated according to the credit quality, i.e. the second or, respectively, nth lowest credit quality will determine the add-on for a second-to-default or a nth-to-default transaction, respectively.
- e. The "qualifying" category referred to in the table above includes:
  - i. investment grade rated securities issued by or fully guaranteed by:
    - a) Public sector entities; and
    - b) Multilateral development banks;
  - ii. securities issued by other entities that are investment grade rated by a credit rating agency and that are subject to supervisory and regulatory arrangements comparable to those set out under the Financial Institutions (Capital Adequacy) Regulations, 2020; or
  - iii. other securities that are:
    - a) rated investment grade by at least two internationally recognized credit rating agencies recognized by the Central Bank; or
    - b) rated investment grade by at least two credit rating agencies one of which must be recognized by Central Bank; or

c) subject to the approval of the Central Bank, unrated but deemed to be of comparable investment grade quality by the reporting financial institution, provided that the issuer has securities listed on a recognized stock exchange.

#### 4. Bilateral Netting

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

- a. Financial institutions may:
  - i. net transactions subject to novation under which any obligation between a financial institution 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; and
  - ii. net transactions subject to any legally valid form of bilateral netting not covered in paragraph (i) above including other forms of novation.
- b. In both instances referred to (i) and (ii) above, the financial institution shall satisfy the Central Bank that they have:
  - i. netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that the financial institution would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to default, bankruptcy, liquidation or similar circumstances; and
  - ii. written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the financial institutions exposure to be such a net exposure 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 the jurisdiction in which the foreign branch is located;
    - b) the law that governs the individual transactions;
    - c) the law that governs any contract or agreement necessary to effect the netting;
  - iii. procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.
  - iv. The Central Bank must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions.
  - v. In making its determination in paragraph(iv.) the Central Bank shall consult with other relevant supervisors and where any of the supervisors with whom the Central Bank has consulted is dissatisfied about enforceability under its laws, the netting contract or agreement shall be deemed to not meet this condition and neither counterparty shall obtain supervisory benefit.

- c. Contracts containing walkaway clauses which permit 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 shall not be eligible for netting for the purpose of calculating the leverage ratio requirements.
- d. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (A<sub>Net</sub>) will equal the weighted average of the gross add-on (A<sub>Gross</sub>) and the gross add-on adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

 $\mathbf{A}_{Net} = (0.4 \text{ x } \mathbf{A}_{Gross}) + (0.6 \text{ x } NGR \text{ x } \mathbf{A}_{Gross})$ , where,

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

 $A_{Gross}$  = sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors set out in paragraphs 1 to 3) of all transactions subject to legally enforceable netting agreements with one counterparty

e. For the purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts, where the notional principal amount is equivalent to cash flows, the notional principal is defined as the net receipts falling due on each value date in each currency<sup>12</sup>.

<sup>&</sup>lt;sup>12</sup> The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.

# **APPENDIX 2 - Securities Financing Transactions**

#### a. Qualifying master netting agreements

The effects of bilateral netting agreements for covering SFTs will be recognized 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:

- i. 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;
- ii. 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;
- iii. allow for the prompt liquidation or setoff of collateral upon the event of default; and
- iv. together with the rights arising from provisions required in (i) and (iii) above, be legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.
- b. **Netting across positions held in the banking book and trading book** will only be recognized when the netted transactions fulfil the following conditions:
  - i. all transactions are marked to market daily; and
  - ii. the collateral instruments used in the transactions are recognized as eligible financial collateral in the banking book.

#### **APPENDIX 3 - Off-Balance Sheet Items<sup>13</sup>**

a. Of	f-Balance Sheet Exposure (excluding securitization transactions)	Credit
		Conversion
		Factor (CCF)
i.	Commitments that are unconditionally cancellable without prior notice	10%
	or that effectively provide for automatic cancellation due to the	
	deterioration in a borrower's credit worthiness	
i.	Commitments other than securitization liquidity facilities with an	20%
	original maturity up to one year.	
ii.	Short-term self-liquidating trade letters of credit arising from the	
	movement of goods (e.g. documentary credits collateralized by the	
	underlying shipment) <sup>14</sup> .	
i.	Commitments with an original maturity exceeding one year, including	50%
	underwriting commitments and commercial credit lines.	
ii.	Certain transaction-related contingent items (e.g. performance bonds,	
	bid bonds, warranties and standby letters of credit related to particular	
	transactions).	
iii.	Note issuance facilities (NIFs) and revolving underwriting facilities	
	(RUFs).	
i.	Direct credit substitutes, e.g. general guarantees of indebtedness	100%
	(including standby letters of credit serving as financial guarantees for	
	loans and securities) and acceptances (including endorsements with the	
	character of acceptances).	
ii.	Forward asset purchases, forward deposits and partly-paid shares and	
	securities <sup>15</sup> , which represent commitments with certain drawdown.	

- b. Where there is an undertaking to provide a commitment on an off-balance sheet item, financial institutions are to apply the lower of the two applicable CCFs.
- c. The CCF presented in the Table above correspond to the CCFs of the standardized approach for credit risk under the Regulations, subject to a floor of 10%. The floor of 10% affect commitments

<sup>&</sup>lt;sup>13</sup> The CCFs align with the rules set out under the Part VI-Schedule 2 of the Financial Institutions (Capital Adequacy) Regulations, 2020, except for the CCF floor of 10%.

<sup>&</sup>lt;sup>14</sup> The 20% CCF will be applied to both issuing and confirming banks.

<sup>&</sup>lt;sup>15</sup> These items are to be weighted according to the type of asset and not according to the type of counterparty with whom the transaction has been entered into.

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.

#### a. Off-balance sheet (securitization transactions)

- i. All off-balance sheet securitization exposures, except an eligible liquidity facility or an eligible servicer cash advance facility, will receive a CCF of 100% conversion factor.
- ii. All eligible liquidity facilities will receive a CCF of 50%.
- iii. Undrawn servicer cash advances or facilities that are unconditionally cancellable without prior notice may be eligible for a 10% CCF.
- iv. Banks are permitted to treat off-balance sheet securitization exposures as eligible liquidity facilities if the following minimum requirements are satisfied:

(a) The facility documentation must clearly identify and limit the circumstances under which it may be drawn. Draws under the facility must be limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any sellerprovided credit enhancements. In addition, the facility must not cover any losses incurred in the underlying pool of exposures prior to a draw, or be structured such that draw-down is certain (as indicated by regular or continuous draws);

(b) The facility must be subject to an asset quality test that precludes it from being drawn to cover credit risk exposures that are in default as defined in the Financial Institutions (Capital Adequacy Regulations, 2020). In addition, if the exposures that a liquidity facility is required to fund are externally rated securities, the facility can only be used to fund securities that are externally rated investment grade at the time of funding;

(c) The facility cannot be drawn after all applicable (e.g. transaction-specific and programme-wide) credit enhancements from which the liquidity would benefit have been exhausted; and

(d) Repayment of draws on the facility (i.e. assets acquired under a purchase agreement or loans made under a lending agreement) must not be subordinated to any interests of any note holder in the programme (e.g. asset-backed commercial paper programme) or subject to deferral or waiver.

v. Eligible servicer cash advance facilities - subject to national discretion, if contractually provided for, servicers may advance cash to ensure an uninterrupted flow of payments to investors so long as the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures.