

MODULE 11

Guidance to completing the Leverage Ratio module of BSL/2

Glossary

The following abbreviations are used within the document:

CCF	Credit Conversion Factors	
CCP	Central Counterparty	
СМ	Clearing Member	
MNA	Master Netting Agreement	
OBS	Off Balance Sheet	
PFE	Potential Future Exposure	
QCCP	Qualifying Central Counterparty	
RC	Replacement Cost	
SFT	Securities Financing Transaction	

LEVERAGE RATIO CALCULATION

Module 11, Leverage Ratio Calculation is to be used by locally incorporated banks to calculate and report the Leverage Ratio. The Leverage Ratio is intended as a complementary measure to the risk-based capital adequacy framework under Pillars 1 and 2 and addresses potential model risk and measurement error under Pillar 1 by complementing the risk-based measure with a simple, transparent and independent measure of risk.

Detailed guidance

ltem	Description	Guidance
	On-balance sheet exposures	
1	On-balance sheet items (exclude derivatives and SFTs; include collateral)	Report all on-balance sheet assets including on- balance sheet derivative collateral and collateral for securities financing transactions ("SFTs") ¹ (but excluding on-balance sheet derivative and SFT assets which are addressed further below)
2	(Assets deducted in determining Basel III Tier 1 capital)	Report on-balance sheet assets deducted from Tier 1 capital. To ensure consistency, on-balance sheet assets deducted from Tier 1 capital (as set out in items A.8 to A.27 and items B.8 to B.13 of Module 6) should be deducted from the Exposure Measure. It should be noted that liability items (e.g. gains and losses due to changes in own credit risk on fair valued liabilities) should not be deducted from the Exposure Measure. This number should be input as a negative number.
3	Total on-balance sheet exposures (excluding derivatives and SFTs)	The figure is automatically completed as the sum of items 1 and 2.
	Derivative exposures	

¹ Securities Financing Transactions are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depend on market valuations and the transactions are often subject to margin agreements.

Item	Description	Guidance
4	Replacement cost (net of eligible cash variation margin)	Report the bank's Replacement Cost ("RC") for all of its derivatives exposures (equivalent to the "Positive Mark-to-Market" element of the Credit Equivalent Amount as calculated under the Standardised Approach to Credit Risk - see section N of Module 1). This figure should be reported net of cash variation margin received.
		Where an eligible bilateral netting contract is in place, as described in Annex 1 below, then the RC for the set of derivative exposures covered by the contract will be the net replacement cost.
		Note - Collateral received does not necessarily reduce the economic leverage inherent in a bank's derivatives position and, therefore, as a general rule, collateral received may not be netted against derivatives exposures whether or not netting is permitted under the bank's operative accounting or risk-based framework. When calculating the exposure amount a bank must not reduce the exposure amount by any collateral received from the counterparty. Furthermore, the RC must be grossed up by any collateral amount used to reduce its value, including when collateral received by a bank has reduced the derivatives assets reported on-balance sheet under its operative accounting framework.
		Cash variation margin received - In the case of cash variation margin received, if the conditions listed under guidance for Item 7 are met, the receiving bank may reduce the RC of the exposure amount of the derivative asset by the amount of cash received if the RC of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the bank's operative accounting standard.

Item	Description	Guidance
5	Add-on amount	Report the add-on for Potential Future Exposure (equivalent to the "Add-on Amount" element of the Credit Equivalent Amount as calculated under the Standardised Approach to Credit Risk - see section N of Module 1).
		Where an eligible bilateral netting contract is in place, as described in the Annex below, then the add-on for the set of derivative exposures covered by the contract will be A_{Net} as described in Annex 1.
		Note - cash variation margin may not be used to reduce the PFE amount.
6	Gross up for derivatives collateral provided	With regard to collateral provided, banks must gross up their exposure measure by the amount of any derivatives collateral provided where the provision of that collateral has reduced the value of their balance sheet assets under their operative accounting framework. Item 6 should be used to report this amount.

7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	Report, as a negative number, adjustments permitted regarding the treatment of cash variation margin.
		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 (and hence not as collateral), if the following conditions are met:
		 (i) For trades not cleared through a qualifying central counterparty (QCCP)² the cash received by the recipient counterparty is not segregated. (ii) Variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivatives positions. (iii) The cash variation margin is received in the same currency as the currency of settlement of the derivative contract. (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. 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.
		In the case of cash variation margin provided to a counterparty, the posting bank may deduct the resulting receivable from its leverage ratio exposure measure, using Item 7, where the cash variation margin has been recognised as an asset under the bank's operative accounting framework.

Item	Description	Guidance
8	(Exempted CCP leg of client-cleared trade exposures)	Report here, as a negative number, certain deductions relating to the treatment of clearing services.
		Where a bank acting as clearing member (CM) ³ offers clearing services to clients, the clearing member's trade exposures 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. Hence it should include the exposure in Items 4 and 5 but enter an offsetting negative amount in Item 8.
		<i>Note</i> - 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 bank 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 if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin, and include the amounts within Items 4 to 7.

² A qualifying central counterparty (QCCP) is an entity that is licensed to operate as a central counter party (CCP) (including a license granted by way of confirming an exemption), and is permitted by the appropriate regulator/overseer to operate as such with respect to the products offered. This is subject to the provision that the CCP is based and prudentially supervised in a jurisdiction where the relevant regulator/overseer has established, and publicly indicated that it applies to the CCP on an ongoing basis, domestic rules and regulations that are consistent with the CPSS-IOSCO Principles for Financial Market Infrastructures.

³ A clearing member is a member of, or a direct participant in, a CCP that is entitled to enter into a transaction with the CCP, regardless of whether it enters into trades with 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.

Item	Description	Guidance
9	Gross notional credit derivatives sold	Report the full effective notional value ⁴ referenced by a written credit derivative. This amount is in addition to any exposure amount reported in relation to the same derivative in Items 4, 5 and 6 and represents the credit exposure arising from the credit worthiness of the reference entity.
10	(Notional offsets and add-on deductions for written credit derivatives)	 Report a negative amount with amount determined as the sum of: (i) the effective notional amounts which may be reduced by purchased credit protection. The effective notional amount of a written credit derivative may be reduced by the effective notional amount of a purchased credit derivative on the same reference name provided: 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; and the remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative; (ii) the effective notional amounts, which 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; and (iii) the individual add-on amount relating to a written credit derivative (not offset by eligible purchased credit protection) reported under litem 5.
11	Total derivative exposures	The figure is automatically completed as the sum of Items 4 to 10.
	Securities financing tra	nsaction (SFT) exposures
12	Gross SFT assets (with no recognition of accounting netting), after adjusting for sale accounting transactions	Report gross SFT assets recognised for accounting purposes (i.e. with no recognition of accounting netting), adjusted to exclude the value of securities received in an SFT where the bank has recognised the securities as an asset on its balance sheet (e.g. under IFRS US GAAP).

⁴ 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.

Item	Description	Guidance
Item 13	Description (Netted amounts of cash payables and cash receivables of gross SFT assets)	 Report gross SFTs cash payables and cash receivables in SFTs with the same counterparty measured net, if all the following criteria are met: a) Transactions have the same explicit final settlement date; 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 settlement
		system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.

Item	Description	Guidance
14	SFT counterparty exposure	This item is used to report a measure of counterparty credit risk as current exposure, to be calculated as follows:
		• Where no qualifying MNA is in place, the current exposure (E*) 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:
		$E^* = \max \{0, [(E) - (C)]\}$
		where E is the total fair value of securities and cash lent and C is the total fair value of cash and securities received under the transaction.
		 Where a qualifying MNA is in place (see Annex 2) 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 (Σ(E)) less the total fair value of cash and securities received from the counterparty for those transactions (Σ(C)). This is illustrated in the following formula:
		$E^* = \max \{0, [\Sigma(E) - \Sigma(C)]\}$
15	Agent transaction exposures	Report exposures arising where a bank acts as an agent in an SFT and provides a 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. This exposure should be calculated using the same methodology as that used for Item 14.
16	Total securities financing transaction exposures	Automatically completed as the sum of Items 12 to 15.
	Other off-balance sheet	exposures
17	Off-balance sheet exposure at gross notional amount	Report total off-balance sheet ("OBS") exposure on a gross notional basis, before any adjustment for credit conversation factors according to item 18.

ltem	Description	Guidance
18	Adjustments for conversion to credit equivalent amount	Report a negative amount representing the reduction in gross amount of OBS exposures due to the application of credit conversion factors ("CCFs"). The CCFs are those that apply under the Standardised Approach to Credit Risk (Module M), except that they are subject to a floor of 10% (applicable to Commitments that are unconditionally cancellable without prior notice, see Module M, item M9c).
19	Other off-balance sheet exposures	The figure is automatically completed as the sum of Items 17 and 18
	Capital and Total Exposures	
20	Tier 1 capital (end of reporting period value)	Used to report Tier 1 capital. The figure is automatically completed from Item B.16 in Module 6.
21	Total Exposures (end of reporting period value)	Automatically completed as the sum of Items 3, 11, 16 and 19.
	Leverage Ratio	
22	Basel III leverage ratio (%)	Automatically completed as Item 20 divided by Item 21 with the ratio expressed as a percentage.

ANNEX 1

Bilateral netting

- 1. For the purposes of the leverage ratio, the following will apply:
 - a) Banks may net transactions subject to novation under which any obligation between a bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations.
 - b) Banks may also net transactions subject to any legally valid form of bilateral netting not covered in (a), including other forms of novation.
 - c) In both cases (a) and (b), a bank will need to satisfy the Commission that it has:
 - (i) a netting contract or agreement with the counterparty that creates a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark-to-market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;

- (ii) written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the bank's exposure to be such a net amount under:
 - the law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of jurisdiction in which the branch is located;
 - · the law that governs the individual transactions; and
 - the law that governs any contract or agreement necessary to effect the netting.

The Commission, 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; and

- (iii) procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.
- 2. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating the leverage ratio requirements pursuant to this framework. A walkaway clause is a provision that permits a non-defaulting counterparty to make only limited payments, or no payment at all, to the estate of a defaulter, even if the defaulter is a net creditor.
- 3. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (A_{Net}) will equal the weighted average of the gross add-on (A_{Gross}) 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:

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

where:

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

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

4. For the purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which the notional principal amount is equivalent to cash flows, the notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency

maturing on the same date will have lower potential future exposure as well as lower current exposure.

ANNEX 2

Qualifying master netting agreement: the effects of bilateral netting agreements covering repo-style transactions will be recognised on a counterparty-bycounterparty basis if the agreements are legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of whether the counterparty is insolvent or bankrupt. In addition, netting agreements must:

- a) provide the non-defaulting party with the right to terminate and close out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
- b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
- c) allow for the prompt liquidation or setoff of collateral upon the event of default; and
- d) be, together with the rights arising from provisions required in (a) and (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.

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

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