

# Basel Committee on Banking Supervision



## Instructions for Basel III monitoring

Version for banks providing data for the trading book  
part of the exercise

REVISED – 13 February 2015



**BANK FOR INTERNATIONAL SETTLEMENTS**

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ISSN 92-9197- 870-1 (print)

ISSN 92-9131- 870-1 (online)

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# Instructions for Basel III monitoring

## 1. Introduction

The Basel Committee on Banking Supervision (“the Committee”) is monitoring the impact of *Basel III: A global regulatory framework for more resilient banks and banking systems* (“the Basel III standards”), the *Basel III leverage ratio framework and disclosure requirements* (“the Basel III leverage ratio framework”), *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools* (“the Basel III LCR standards”) and *Basel III: The Net Stable Funding Ratio* (“Basel III NSFR standards”)<sup>1</sup> on participating banks. The exercise will be repeated semi-annually with end-December and end-June reporting dates.

In addition to these recurring items, worksheets have been added to collect data on four ongoing policy initiatives of the Committee, the fundamental review of the trading book conducted by the Committee’s Trading Book Group,<sup>2</sup> the review of the standardised approaches for credit risk<sup>3</sup> and operational risk,<sup>4</sup> and the design of a capital floors framework based on standardised approaches.<sup>5</sup> Furthermore, data is being collected on the proposal for a common international standard on Total Loss-Absorbing Capacity (TLAC) for global systemic banks by the Financial Stability Board.<sup>6</sup>

The Committee will treat all individual bank data collected in this exercise strictly confidential and will not attribute them to individual banks.

**The descriptions of data items in these instructions intend to facilitate the completion of the monitoring questionnaire and are not to be construed as an official interpretation of other documents published by the Committee.**

**This version of the instructions refers to versions 3.0.1 or later of the reporting template which should be used for the 31 December 2014 reporting date.** Changes compared to the previous version of the reporting template are highlighted in the Annex.

The remainder of this document is organised as follows. Sections 2 and 3 discuss general issues such as the scope of the exercise, the process and the overall structure of the quantitative questionnaire. Section 4 discusses the worksheets for data collection on the definition of capital, capital requirements and the floors based on the standardised approaches including the new standardised approach to operational risk. Sections 5 and 6 discuss the Basel III leverage ratio and liquidity, respectively. Section 7 presents the worksheets for collecting data for the Committee’s fundamental review of the trading book

<sup>1</sup> Basel Committee on Banking Supervision, *Basel III: A global regulatory framework for more resilient banks and banking systems (revised June 2011)*, June 2011, [www.bis.org/publ/bcbs189.htm](http://www.bis.org/publ/bcbs189.htm); Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, [www.bis.org/publ/bcbs270.htm](http://www.bis.org/publ/bcbs270.htm); Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.htm](http://www.bis.org/publ/bcbs238.htm); Basel Committee on Banking Supervision, *Basel III: The Net Stable Funding Ratio*, October 2014, [www.bis.org/bcbs/publ/d295.htm](http://www.bis.org/bcbs/publ/d295.htm).

<sup>2</sup> Basel Committee on Banking Supervision, *Fundamental review of the trading book: outstanding issues – consultative document*, December 2014, [www.bis.org/publ/d305.htm](http://www.bis.org/publ/d305.htm).

<sup>3</sup> Basel Committee on Banking Supervision, *Revisions to the standardised approach for credit risk – consultative document*, December 2014, [www.bis.org/publ/d307.htm](http://www.bis.org/publ/d307.htm).

<sup>4</sup> Basel Committee on Banking Supervision, *Operational risk – Revisions to the simpler approaches – consultative document*, October 2014, [www.bis.org/publ/bcbs291.htm](http://www.bis.org/publ/bcbs291.htm).

<sup>5</sup> Basel Committee on Banking Supervision, *Capital floors: the design of a framework based on standardised approaches*, December 2014, [www.bis.org/publ/d306.htm](http://www.bis.org/publ/d306.htm).

<sup>6</sup> Financial Stability Board, *Adequacy of loss-absorbing capacity of global systemically important banks in resolution, consultative document*, November 2014, [www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf](http://www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf).

while Section 8 describes the worksheet for the collection of data relevant to the Committee's proposed new standardised approach to credit risk. Section 9 introduces the worksheets to collect data on the proposed standard on Total Loss-Absorbing Capacity (TLAC).

## 2. General

### 2.1 Scope of the exercise

Participation in the monitoring exercise is voluntary. The Committee expects both large internationally active banks and smaller institutions to participate in the study, as all of them will be materially affected by some or all of the revisions of the various standards. Where applicable and unless noted otherwise, data should be reported for consolidated<sup>7</sup> groups.

The monitoring exercise is targeted at both banks under the Basel II/III frameworks and at those still subject to Basel I.<sup>8</sup> However, as outlined in the remainder of these instructions some parts of the questionnaire are only relevant for banks subject to Basel II or to banks applying a particular approach. If **Basel I** figures are used, they should be calculated based on the **national implementation**, referred to as "Basel I" in this document. In some countries supervisors may have implemented additional rules beyond the 1988 Accord or may have made modifications to the Accord in their national implementation, and these should be considered in the calculation of "Basel I" capital requirements for the purposes of this exercise. **Unless stated otherwise**, if a bank has implemented **Basel II** at a particular reporting date, it should calculate capital requirements based on the **national implementation** of the Basel II framework, referred to as "Basel II" in this document. **Unless stated otherwise**, the changes to the risk-weighted asset calculation of the Basel II framework introduced in 2009 which are collectively referred to as "Basel 2.5" (*Revisions to the Basel II market risk framework*<sup>9</sup> ("the Revisions")) and *Enhancements to the Basel II framework*<sup>10</sup> ("the Enhancements")) and through the Basel III framework should only be reflected if they are part of the applicable regulatory framework at the reporting date.

**When providing data on Basel III, banks should also take into account the frequently asked questions on capital, counterparty credit risk and the leverage ratio published by the Committee.**<sup>11</sup>

This data collection exercise should be completed on a best-efforts basis. Ideally, banks should include all their assets in this exercise. However, due to data limitations, inclusion of some assets (for example the portfolio of a minor subsidiary) may turn out to be an unsurpassable hurdle. In these cases, banks should consult their relevant national supervisor to determine how to proceed.

<sup>7</sup> This refers to the consolidation for regulatory rather than accounting purposes.

<sup>8</sup> Basel Committee on Banking Supervision, *International convergence of capital measurement and capital standards (updated to April 1998)*, 1998, [www.bis.org/publ/bcbsc111.htm](http://www.bis.org/publ/bcbsc111.htm).

<sup>9</sup> Basel Committee on Banking Supervision, *Revisions to the Basel II market risk framework - updated as of 31 December 2010*, February 2011, [www.bis.org/publ/bcbs193.htm](http://www.bis.org/publ/bcbs193.htm).

<sup>10</sup> Basel Committee on Banking Supervision, *Enhancements to the Basel II framework*, July 2009, [www.bis.org/publ/bcbs157.htm](http://www.bis.org/publ/bcbs157.htm).

<sup>11</sup> Basel Committee on Banking Supervision, *Basel III definition of capital – Frequently asked questions*, December 2011, [www.bis.org/publ/bcbs211.htm](http://www.bis.org/publ/bcbs211.htm); Basel Committee on Banking Supervision, *Basel III counterparty credit risk – Frequently asked questions*, December 2012, [www.bis.org/publ/bcbs237.htm](http://www.bis.org/publ/bcbs237.htm); Basel Committee on Banking Supervision, *Frequently asked questions on the Basel III leverage ratio framework*, [www.bis.org/publ/bcbs293.htm](http://www.bis.org/publ/bcbs293.htm).

## 2.2 Filling in the data

The Basel III monitoring workbook available for download on the Committee’s website is for information purposes only. While the structure of the workbooks used for the Basel III monitoring exercise is the same in all participating countries, **it is important that banks only use the workbook obtained from their respective national supervisory agency to submit their returns.** Only these workbooks are adjusted to reflect the particularities of the regulatory frameworks in participating countries. National supervisory agencies may also provide additional instructions if deemed necessary.

**Data should only be entered in the yellow and green shaded cells.** There are also some pink cells which will be completed by the relevant national supervisory agency. **It is important to note that any modification to the worksheets might render the workbook unusable both for the validation of the final results and the subsequent aggregation process.**

Cell colours used in the Basel III monitoring reporting template

Colour	Worksheet(s)	Content
Yellow	All	Input cell.
Green	Requirements	To be completed if requested by the national supervisor or in order to calculate the capital ratios in panel C.
	DefCap	To be filled in if necessary based on the national implementation of the definition of capital.
	DefCap-MI	Worksheet is optional, can be used by banks to generate inputs for the “DefCap” worksheet.
	Leverage Ratio	Additional information needed to monitor the leverage ratio and its components during the transition period, in accordance with the transitional arrangements set out in paragraphs 165 to 167 of the Basel III standards. Banks are encouraged to fill in green cells on a best-efforts basis as well.
	LCR, NSFR	To be completed if requested by the national supervisor in light of national discretion choices.
	TB, Standardised approach BB	Additional information to be completed on a best efforts basis.
Pink	All	To be completed by the supervisor.
White, orange	All	Calculation result. Must not be changed.

**Where information is not available, the corresponding cell should be left empty. No text such as “na” should be entered in these cells. Also, banks must not fill in any arbitrary numbers to avoid error messages or warnings which may be provided by their supervisors. However, leaving a cell empty could trigger exclusion from some or all of the analyses if the respective item is required,** ie it should be aimed at providing data for **all yellow** cells. The automated calculations in the workbook indicate whether or not a certain item can be calculated using the data provided. The national supervisor will provide guidance on which of the **green** cells should be filled in by a particular bank.

Data can be reported in the most convenient currency. The currency which has been used should be recorded in the “General Info” worksheet. Supervisors will provide the relevant exchange rate for converting the reporting currency to euros. If 1,000 or 1,000,000 currency units are used for reporting, this should also be indicated in this worksheet. When choosing the reporting unit, it should be considered that the worksheet shows all amounts as integers. **The same currency and unit should be used for all amounts throughout the workbook,** irrespective of the currency of the underlying exposures.

Percentages should be reported as decimals and will be converted to percentages automatically. For example, 1% should be entered as 0.01.<sup>12</sup>

Banks using the Basel II internal ratings-based (IRB) approaches should, where applicable, report risk-weighted assets after applying the scaling factor of 1.06 to credit risk-weighted assets.

The reporting template includes checks in several of the worksheets. If one of these checks shows "No" or "Fail", please refer to the explanatory text and the formula in the check cell and correct the input data to which the check refers. An overview of the results of all checks is provided on the "Checks" worksheet.

The Committee is aware that some banks might not yet have implemented some of the models and processes required for the calculations. In such cases banks may provide quantitative data on a "best-efforts" basis. In case of doubt, they should discuss with the relevant national supervisor how to proceed. Where the approach used for the Basel III monitoring differs materially from the final implementation, this should be explained in a separate note.

**Unless noted otherwise**, banks should only report data for the approach they are currently using or are intending to use. Cells provided for various approaches are in general intended to facilitate partial use and do **not** require banks to conduct alternative calculations for the same set of exposures.

## 2.3 Process

The Basel Committee or its Secretariat will not collect any data directly from banks. Therefore, banks in participating countries should contact their supervisory agency to discuss how the completed workbooks should be submitted. National supervisors will forward the relevant data to the Secretariat of the Basel Committee where individual bank data will be treated strictly confidential and will not be attributed to individual banks.

Similarly, banks should direct all questions related to this study, the related rules, standards and consultative documents to their national supervisory agencies. Where necessary, they will coordinate their responses through the Secretariat of the Basel Committee to provide responses that are consistent across countries. A document with responses to frequently asked questions will be maintained on the Basel Committee's website.<sup>13</sup>

Banks should specify any instance where they had to deviate from the instructions provided in an additional document.

## 2.4 Reporting date

If possible, and unless the national supervisor has provided different guidance, generally all data should be reported as of end-December or end-June, as applicable. If data availability does not allow a bank to use these reporting dates or if the financial year differs from the calendar year, suitable alternatives should be discussed with the relevant national supervisor.

<sup>12</sup> Depending on the regional options of the operating system used, it might be necessary to use a different decimal symbol. It might also be necessary to switch off the option "Enable automatic percent entry" in the Tools/Options/Edit dialog of Excel if percentages cannot be entered correctly.

<sup>13</sup> [www.bis.org/bcbs/qis/](http://www.bis.org/bcbs/qis/).

## 2.5 Structure of the Excel questionnaire

The Excel workbook consists of 20 worksheets. All banks participating in the impact study should generally complete them. Some banks may be directed by their supervisor to complete only certain parts of the workbook. Finally, the "Checks" worksheet provides an overview of all the checks included on the other worksheets. The worksheets requiring data input are the following:

- The worksheet "General Info" is intended to capture **general information** regarding the bank, eligible capital and deductions as well as capital distribution data. This worksheet should be completed by all banks.
- The worksheet "Requirements" captures overall capital requirements and actual capital ratios. This worksheet should be completed by all banks.
- The "DefCap" worksheet is related to the **definition of capital**. It captures more detailed information on the Basel III definition of capital and its impact on risk-weighted assets. The "DefCap-MI" worksheet helps banks with the calculation of regulatory adjustments for minority interest which is an input required on the "DefCap" worksheet; providing data on this worksheet is optional.
- The "Floors" worksheet collects some additional data which will allow the Committee to assess the impact of the proposed **capital floors** based on the standardised approaches and the proposed new standardised approach to **operational risk**.
- The **leverage ratio** worksheet ("Leverage Ratio") captures data necessary for the calculation of the leverage ratio.
- The **liquidity** worksheets ("LCR" and "NSFR") are intended to capture key data regarding the liquidity coverage ratio and net stable funding ratio measures.
- The "BB" worksheets collect data for the Committee's QIS on the proposed **new standardised approach to credit risk** in the banking book.
- The "TB" worksheets collect data for the Committee's QIS on the fundamental review of the trading book. **These worksheets should be completed by banks which currently use either the internal models approach or the standardised approach to market risk.**
- The "**TLAC**" worksheets collect data on the proposal for a common international standard on Total Loss-Absorbing Capacity (TLAC) for global systemic banks by the Financial Stability Board. Non G-SIBs should only complete the worksheet "TLAC holdings (non-G-SIBs)", while G-SIBs should leave this worksheet empty and only complete the three worksheets "G-SIB TLAC External", "G-SIB TLAC Internal" and "G-SIB TLAC location". Certain G-SIBs will also be asked by their supervisors to provide additional data on separate templates.

## 3. General information

The "General Info" worksheet gathers basic information that is needed to process and interpret the survey results. Banks only providing data for liquidity, the fundamental review of the trading book or the standardised approach to credit risk are only required to fill in panels A and B.

### 3.1 General bank data (panel A)

Panel A of the "General Info" worksheet deals with bank and reporting data conventions.

Row	Column	Heading	Description
<b>A1) Reporting data</b>			
5	C	Country code	Leave blank
6	C	Region code	Leave blank
7	C	Bank number	Leave blank
8	C	CMG-relevant	Leave blank
9	C	Data validation only	Leave blank
10	C	Bank is a single legal entity	Leave blank
11	C	Bank is a subsidiary of a banking group	Leave blank
12	C	Bank is a subsidiary with a non-EU parent (EU only)	Leave blank
13	C	Bank type	Leave blank
14	C	Bank group	Leave blank
15	C	Bank type (numeric)	Leave blank
16	C	G-SIB surcharge	Leave blank
17	C	Domestic surcharges, CET1 capital	Leave blank
18	C	Domestic surcharges, Tier 1 capital	Leave blank
19	C	Domestic surcharges, total capital	Leave blank
20	C	Conversion rate (in euros/reporting currency)	Leave blank
21	C	Submission date (yyyy-mm-dd)	Leave blank
22	C	Use capital data	Leave blank
23	C	Comparable to the previous period	Leave blank
24	C	Use floors data	Leave blank
25	C	Comparable to the previous period	Leave blank
26	C	Use Leverage ratio data	Leave blank
27	C	Comparable to the previous period	Leave blank
28	C	Use LCR data	Leave blank
29	C	Comparable to the previous period	Leave blank
30	C	Use NSFR data	Leave blank
31	C	Comparable to the previous period	Leave blank
32	C	Use banking book SA data	Leave blank
33	C	Comparable to the previous period	Leave blank
34	C	Use trading book general data	Leave blank
35	C	Comparable to the previous period	Leave blank
36	C	Use trading book SBA data	Leave blank

Row	Column	Heading	Description
37	C	Comparable to the previous period	Leave blank
38	C	Use trading book IMA data	Leave blank
39	C	Comparable to the previous period	Leave blank
40	C	Use trading book IMA P&L attribution data	Leave blank
41	C	Comparable to the previous period	Leave blank
42	C	Use operational risk data	Leave blank
43	C	Comparable to the previous period	Leave blank
44	C	Use TLAC holdings data	Leave blank
45	C	Comparable to the previous period	Leave blank
46	C	Use G-SIB TLAC data	Leave blank
47	C	Comparable to the previous period	Leave blank
48	C	Reporting date (yyyy-mm-dd)	Date as of which all data are reported in worksheets.
49	C	Reporting currency (ISO code)	<b>Three-character</b> ISO code of the currency in which all data are reported (eg USD, EUR).
50	C	Unit (1, 1000, 1000000)	Units (single currency units, thousands, millions) in which results are reported.
51	C	Accounting standard	Indicate the accounting standard used.

#### **A2) Approaches to credit risk**

Banks using more than one approach to calculate risk-weighted assets for credit risk should select **all** those approaches in rows 53 to 56. However, if a bank uses the foundation IRB approach for all non-retail portfolios subject to the PD/LGD approach and the IRB approach to retail for the retail portfolio, "foundation IRB" should be selected as the only IRB approach (and additionally Basel I or the standardised approach if applicable). If an IRB bank has only a retail portfolio and no other exposures subject to a PD/LGD approach, then "advanced IRB" should be selected as the only IRB approach (and additionally Basel I or the standardised approach if applicable).

53	C	Basel I	Indicate whether Basel I is used to calculate capital requirements for a portion of the exposures reported in this study.
54	C	Basel II/III standardised approach	Indicate whether the standardised approach of Basel II or III is used to calculate capital requirements for a portion of the exposures reported in this study.
55	C	Basel II/III FIRB approach	Indicate whether the foundation IRB approach of Basel II or III is used to calculate capital requirements for a portion of the exposures reported in this study.
56	C	Basel II/III AIRB approach	Indicate whether the advanced IRB approach of Basel II or III is used to calculate capital requirements for a portion of the exposures reported in this study.

#### **A3) Accounting information**

58	C	Accounting total assets	Total assets following the relevant accounting balance sheet (considering the regulatory consolidation).
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## 3.2 Current capital (panel B)

Panel B of the "General Info" worksheet deals with information on eligible capital and deductions. While the relevant amounts under the fully phased-in Basel III standards and under the fully phased-in national implementation of these standards are calculated automatically based on input on the "DefCap" worksheet, banks should enter the capital amounts eligible at the reporting date in column C according to the national implementation of the Basel standards. This calculation should be conducted in the same way as the calculation of eligible capital for solvency reporting to the national supervisory agency at the reporting date.

The regulatory adjustments should be assigned to the tier of capital **from which they are actually taken**. For example, if a bank has not enough additional Tier 2 capital to make all those regulatory adjustments which can be made to Tier 2 capital, the adjustment should be reported as an adjustment to the relevant higher tier of capital.

Row	Column	Heading	Description
<b>Total Common Equity Tier 1 capital</b>			
For reporting dates on which the bank is not yet subject to Basel III, those elements of Tier 1 capital which are <b>not</b> subject to a limit under the national implementation of Basel I or Basel II should be reported in column C of these rows.			
65	C	Prior to regulatory adjustments, national rules as at reporting date	Amount of gross Common Equity Tier 1 capital. This line should not include any regulatory adjustments.
66	C	Regulatory adjustments, national rules as at reporting date	Enter all regulatory adjustments to Common Equity Tier 1 capital elements. Banks should generally <b>not</b> report regulatory adjustments in this row that are applied to total Tier 1 capital as these should generally be reported in row 69. The only exception to this is in cases where the deductions in row 69 would otherwise exceed the Additional Tier 1 instruments reported in row 68.
<b>Additional Tier 1 capital</b>			
For reporting dates on which the bank is not yet subject to Basel III, those elements of Tier 1 capital which are subject to a limit under the national implementation of Basel I or Basel II (eg hybrid capital) should be reported in column C of these rows.			
68	C	Prior to regulatory adjustments, national rules as at reporting date	Enter the amount of gross Additional Tier 1 capital. This line should not include any regulatory adjustments.
69	C	Regulatory adjustments, national rules as at reporting date	Enter all regulatory adjustments to Additional Tier 1 capital elements. If the sum of the regulatory adjustments exceeds the amount reported in row 68 the excess should be reported in row 66 (ie the regulatory adjustments reported in row 69 must not exceed the capital reported in row 68).
<b>Tier 2 capital</b>			
73	C	Prior to regulatory adjustments, national rules as at reporting date	Enter the amount of gross Tier 2 capital. This line should not include any regulatory adjustments.
74	C	Regulatory adjustments, national rules as at reporting date	Enter all regulatory adjustments to Tier 2 capital elements and to total capital elements. If the sum of the regulatory adjustments exceeds the amount reported in row 73 the excess should be reported in row 69 (ie the regulatory adjustments reported in row 74 must not exceed the capital reported in row 73).
<b>Tier 3 capital</b>			
76	C	Tier 3 capital	Enter the amount of Tier 3 capital. For banks which are subject to Basel III at the reporting date, this cell should be 0.

### 3.3 Capital distribution data (panel C)

Panel C of the "General Info" worksheet deals with data on banks' income, capital distributions and capital raised. All data should be provided for the six-month period ending on the reporting date. Distributions should be reported in the period in which they are recognised on the balance sheet.

Row	Column	Heading	Description
<b>Income</b>			
81	C	Profit after tax	Enter the total amount of profit (loss) after tax. This should include profits attributable to minority shareholders.
82	C	Profit after tax prior to the deduction of relevant (ie expensed) distributions below	Enter the total amount of profit (loss) after tax including profits attributable to minority shareholders, but prior to the relevant distributions listed in the section below. The <b>relevant</b> distributions are only those which were included in the income statement in such a way as to reduce profit after tax as set out in row 81 (ie items that were expensed), and thus the relevant distributions are not necessarily the sum of the items listed below. The line seeks to collect the profit after tax which would have been reported had none of the distributions listed below been paid. As such any tax impact of making such payments should also be reversed in this line.
<b>Distributions</b>			
84	C	Common share dividends	Enter the total common share dividend payments. The amount entered should be the amount paid in cash, not stock.
85	C	Other coupon/dividend payments on Tier 1 instruments	Enter the total coupon/dividend payments paid to other Tier 1 instruments. The amount entered should be the amount paid in cash, not stock. It should include both amounts which were reported in the income statement as an interest expense and amounts which were reported as a distribution of profits.
86	C	Common stock share buybacks	Enter the total common stock share buybacks (effective amounts).
87	C	Other Tier 1 buyback or repayment (gross)	Enter the total gross buyback or repayment of other Tier 1 instruments (effective amounts).

Row	Column	Heading	Description
88	C	Discretionary staff compensation/bonuses	<p>Enter the total amount of discretionary staff bonuses and other discretionary staff compensation. These amounts should be included if and when they result in a reduction of Tier 1 capital.</p> <p>For purposes of the Basel III monitoring exercise, discretionary staff bonuses and other discretionary compensation include all variable compensation to staff that the bank is not contractually obliged to make. Banks should only include such amounts if they result in a reduction in Tier 1 capital or would have resulted in an increase in Tier 1 capital if they had not been made. For example, under US GAAP, a bank is required to classify as a liability certain shares that give employees the right to require their employer to repurchase shares in exchange for cash equal to the fair value of the shares. As such discretionary compensation results in a reduction in GAAP equity and consequently Tier 1 capital, it would be included in row 88 of the "General Info" worksheet. Similarly, discretionary compensation made out of retained net income would have resulted in an increase in Tier 1 capital if it had not been made and therefore should also be included in row 88. By contrast, compensation to employees in the form of newly issued shares may in certain circumstances result in an increase in the number of outstanding shares with no change in GAAP equity and consequently no reduction in Tier 1 capital. These amounts should not be included in row 88 of the "General Info" worksheet.</p>
89	C	Tier 2 buyback or repayment (gross)	Enter the total gross buyback or repayment of Tier 2 instruments (effective amounts).
<p>Capital raised (gross)</p> <p>Since these are cells to report newly issued capital amounts, the amounts of capital raised must always be positive or zero. Banks should apply the Basel III definition of capital in all reporting periods. <b>Even if Basel III is not yet in force in a jurisdiction at the reporting date, all amounts in rows 88 to 90 should be reported based on Basel III definitions, including the 13 January 2011 press release on loss absorbency at the point of non-viability. Profit retention should not be included in the amounts of capital raised reported in this panel.</b></p>			
91	C	CET1	Enter the total gross Common Equity Tier 1 capital issued.
92	C	Additional Tier 1	Enter the total gross Additional Tier 1 capital issued.
93	C	Tier 2	Enter the total gross Tier 2 capital issued.

## 4. Risk-weighted assets, exposures and fully phased-in eligible capital

### 4.1 Overall capital requirements and actual capital ratios (worksheet "Requirements")

The "Requirements" worksheet deals with overall capital requirements and actual capital ratios. **It is not strictly required to fill in the green cells on this worksheet unless a bank has been asked to do so by their supervisor. However, filling in the green cells allows for calculation of the capital ratios in panel C of the "Requirements" worksheet which is a useful check.**

Row	Column	Heading	Description
<b>A) Risk-weighted assets according to the framework in place at the reporting date</b>			
<p>In rows 6 to 10, banks have to report in column C risk-weighted assets for their exposures subject to the Basel I credit risk framework, in column D risk-weighted assets from the Basel II/III standardised approach to credit risk and in column E risk-weighted assets from the foundation or advanced internal ratings-based approach. The yellow cells for all approaches a bank is using according to the information provided in rows 53 to 56 of the "General Info" worksheet must be filled in completely. For example, a bank using the IRB approach and partial use of the standardised approach must fill in both columns D and E. If a bank does not have a particular portfolio, risk-weighted assets should be reported as 0.</p> <p><b>The sets of exposures for which RWA are reported in columns C, D and E must be mutually exclusive.</b></p> <p>Risk-weighted assets should reflect the 1.06 scaling factor to IRB credit risk-weighted assets where relevant and, unless noted otherwise, be calculated using the standards in place at the reporting date.</p>			
6	C-E	Credit risk (including CCR and non-trading credit risk); of which:	Overall credit risk-weighted assets including counterparty credit risk exposures and non-trading credit risk, but not including CVA capital charges or exposures to CCPs, after applying the 1.06 scaling factor to IRB credit risk-weighted assets.
7	C-E	Counterparty credit risk exposures (not including CVA charges or charges for exposures to CCPs)	Of the amount reportable in row 6, risk-weighted assets for counterparty credit risk exposures.
8	C-E	Sovereign exposures; of which; RWA	Of the credit risk-weighted asset amount reportable in row 6, amount for sovereign exposures.
8	F-H	Sovereign exposures; of which; Exposure amount	Exposure amount post credit risk mitigation for which risk-weighted assets have been reported in cell C8 to E8.
9	C-E	Domestic sovereign exposures; RWA	Of the risk-weighted asset amount reported in cells C8 to E8, amount for <b>domestic</b> sovereign exposures.
9	F-H	Domestic sovereign exposures; Exposure amount	Of the exposure amount reported in cells F8 to H8, amount for <b>domestic</b> sovereign exposures.
10	D, E	Securitisations	Of the amount reported in row 6, risk-weighted assets for securitisation exposures.
15	C	Qualifying central counterparties; Trade exposures (including client cleared trades); RWA	This includes any risk-weighted assets for trade exposures under Method 1 or Method 2, including RWA for SFT cleared through QCCPs. Of note, this includes risk-weighted assets for QCCPs subject to Method 2 where the cap of 20% of trade exposures is binding. Banks should enter a 0 in years in which this capital charge is not yet in force.
16	C	Qualifying central counterparties; Default fund exposures; RWA	This includes any risk-weighted assets for default fund contributions to QCCPs. Of note, this excludes risk-weighted assets for QCCPs subject to Method 2 where the cap of 20% of trade exposures is binding. Banks should enter a 0 in years in which this capital charge is not yet in force.
18	C	CVA capital charge (risk-weighted asset equivalent); Advanced CVA risk capital charge	Risk-weighted asset equivalent of the advanced CVA risk capital charge (ie the advanced CVA risk capital charge times 12.5). Banks should enter a 0 in years in which this capital charge is not yet in force.
19	C	CVA capital charge (risk-weighted asset equivalent); Standardised CVA risk capital charge	Risk-weighted asset equivalent of the standardised CVA risk capital charge (ie the standardised CVA risk capital charge times 12.5). Banks should enter a 0 in years in which this capital charge is not yet in force.
19	D	CVA capital charge (risk-weighted asset equivalent); standardised CVA risk capital charge	The <b>exposure amount</b> subject to the standardised CVA risk capital charge under Basel III as per paragraph 99 of the Basel III document which is externally rated.

Row	Column	Heading	Description
19	E	CVA capital charge (risk-weighted asset equivalent); standardised CVA risk capital charge	The <b>exposure amount</b> subject to the standardised CVA risk capital charge under Basel III as per paragraph 99 of the Basel III document which is unrated.
20	C	Market risk	Total market risk capital requirements. The capital charge <b>should</b> be converted to risk-weighted assets.
21	F	Amount of sovereign exposures in the trading book; of which	Amount of sovereign exposures in the trading book.
22	F	Domestic sovereign exposures in the trading book	Amount of domestic sovereign exposures in the trading book.
23	C	Operational risk	Total operational risk capital requirements. The capital charge <b>should</b> be converted to risk-weighted assets.
24	C	Settlement risk	Risk-weighted assets for settlement risk. The capital charge <b>should</b> be converted to risk-weighted assets.
25	C	Other Pillar 1 requirements	Risk-weighted assets for other <b>Pillar 1</b> capital requirements according to national discretion. The capital charge <b>should</b> be converted to risk-weighted assets. If no such requirements exist, 0 should be entered.
<b>B) RWA effects from Basel III definition of capital and other national phase-in arrangements</b>			
31	C	RWA impact of applying future definition of capital rules	RWA impact of applying fully the phased-in national implementation of the Basel III definition of capital. If items which will be deducted in the fully phased-in treatment are currently risk-weighted, this amount should be reported as a <b>negative</b> number.
33	C	RWA impact of national phase-in arrangements for CVA if any	Incremental RWA impact of full implementation of the national CVA capital requirements. If the CVA capital requirements have already been fully phased-in, banks should report 0.
34	C	RWA impact of any other national phase-in arrangements	Incremental RWA impact of full implementation of the national implementation of Basel III capital requirements. If the capital requirements have already been fully phased-in or no phase-in agreements exist, banks should report 0.

## 4.2 Definition of capital

The "DefCap" worksheet collects the data necessary to calculate the definition of capital under the fully phased-in nationally implemented rules ("2022 national implementation", column D) and according to the fully phased-in Basel III standards ("2022 Basel III pure", column E).

**The column headers in row 3 inform participating banks which of the columns they have to fill in depending on their jurisdiction.** If one of the cells shows "No", then both the green and the yellow cells in that column can be left empty.

All data should be provided in the yellow and, where relevant, green cells and the **data provided should reflect the application of the final Basel III standards or fully phased-in national rules and not the transitional arrangements (eg those set out in paragraphs 94 to 96 of the Basel III framework).**

To be reported in the Basel III pure column of this worksheet instruments must comply with both the relevant entry criteria set out in the December 2010 Basel III standards and the 13 January 2011 press release on loss absorbency at the point of non-viability.

While some additional guidance on completing the worksheets is set out below, the worksheets themselves include detailed descriptions of each item to be provided and references to the relevant paragraphs of the Basel III standards. The instructions for completing the worksheets are therefore the combination of the Basel III standards, national rules, the descriptions included in the worksheets themselves and the additional guidance below.

#### 4.2.1 Panel A: Provisions and expected losses

The data collected in panel A are the provisions and expected losses for exposures in the IRB portfolios, for exposures subject to the standardised approach and for exposures subject to the Basel I approach to credit risk, respectively. The “2022 national implementation” column provides two additional cells which should only be filled in by IRB banks in the EU where a separate calculation is conducted for defaulted and non-defaulted assets. As with all other sections, banks should contact their national supervisory agency if they are unclear as to how to complete this panel.

#### 4.2.2 Panels B1, C1 and D1: Positive elements of capital

Panels B1, C1 and D1 collect the positive elements of capital (eg issued instruments and related reserves) that meet the criteria set out in the national rules and the Basel III standards, respectively, for inclusion in Common Equity Tier 1, Additional Tier 1 and Tier 2 capital.

Amounts are to be reported gross of all regulatory adjustments and follow the measurement approach that applies under the relevant accounting standards (ie reported amounts should equal the amounts reported on the balance sheet in respect of each item). This means that retained earnings and other reserves should include interim/final profits and losses to the extent that they are permitted or required to be included on the balance sheet under the prevailing accounting standards (eg if a bank reports its capital position for 30 June, this should be based on its balance sheet on 30 June, which will reflect profits earned and losses incurred up to and including 30 June). Similarly retained earnings and other reserves should exclude dividends only to the extent that these are required to be excluded from the relevant balance sheet under the prevailing accounting standards.

Banks must report data on shares and capital instruments issued by the parent of the consolidated group separately from data on shares and capital instruments issued by subsidiaries of the consolidated group. Shares and capital instruments issued by the parent of the consolidated group should be reported in rows 25, 66 and 84. These rows should not include any capital that has been issued out of subsidiaries of the group irrespective of whether the capital represents equity accounted instruments that appear in the consolidated accounts as minority interest or liability accounted instruments that appear as liabilities. The only exception to this rule is where capital has been raised by the parent of the consolidated group through an SPV that meets the criteria set out in paragraph 65 of the Basel III standards. Such amounts may be included in rows 66 and 84 as appropriate.

Shares and capital instruments issued by subsidiaries<sup>14</sup> of the consolidated group that are held by third parties should be reported in rows 29, 67 and 85. The amount to be included in each cell should exclude amounts in accordance with the procedure set out in paragraphs 62 to 65 of the Basel III standards.

#### 4.2.3 Panels B2, C2 and D2: Regulatory adjustments

Panels B2, C2 and D2 collect the data necessary to calculate the various regulatory adjustments required by paragraphs 66 to 89 of the Basel III standards and the related national rules. Set out below is some additional guidance on certain of the regulatory adjustments to supplement the information provided in

<sup>14</sup> Subsidiaries includes all consolidated subsidiaries of the group, irrespective of whether they are fully owned or partially owned.

the relevant section of the Basel III standards, the related national rules and the description provided in the “DefCap” worksheet.

In addition to the regulatory adjustments under the fully phased-in national rules (column D) and the fully phased-in Basel III framework (column E), banks should also enter the marginal impact on risk-weighted assets if they would apply Basel III pure rather than the national implementation. For example, if a country is risk weighting a certain item while Basel III requires deduction, the relevant cell in column F should include the risk-weighted asset amount under the national rules as a **negative** number. Alternatively, if the national rules for a line item are exactly equivalent to the Basel III standard, banks should enter zero in the relevant cell of column F.

Cells D47 to D50 and D61 are only mandatory for banks in the EU and capture optional deductions for certain items which are subject to a 1,250% risk weighting treatment under the Basel III standards. For these items, the risk-weighted asset impact in column F is calculated automatically.

Furthermore, column D of rows 51, 62, 78 and 98 captures deductions according to national rules which are not based on the Basel III standards. The risk-weighted asset amount applicable under the Basel III framework if these items were not deducted should be entered in the relevant cell of column F (as a **positive** number).

#### 4.2.4 Panel E: Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and below the threshold for deduction

For investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and below the threshold for deduction, banks should report both the amount and the related risk-weighted asset amount in panel E. The risk-weighted asset amount should **also** be included in the relevant item on the “Requirements” worksheet.

#### 4.2.5 Capital issued out of subsidiaries to third parties (paragraphs 62 to 65)

The “DefCap-MI” worksheet can be used to calculate the amount of each subsidiary’s capital that will be permitted to be included in the consolidated capital of the group and the amount that will be excluded due to the application of paragraphs 62 to 65 of the Basel III standards. Annex 4 of the Basel III standards sets out an illustrative example of the treatment of capital issued out of subsidiaries.

The amounts reported in respect of each consolidated subsidiary that has issued capital instruments to third parties should reflect the application of the final standards set out in paragraphs 49 to 90 of the Basel III standards to that subsidiary and not the transitional arrangements set out in paragraphs 94 to 96.

For each subsidiary that has issued capital to third parties, the relevant data can be included in the green cells in the “DefCap-MI” worksheet. A separate column can be completed for each subsidiary. The aggregated amount to be included in consolidated capital in respect of all consolidated subsidiaries of the group is calculated automatically in cells D29, D30 and D31. These amounts should be reported in the “DefCap” worksheet in cells E32, E70 and E88 respectively. Alternatively, banks can also calculate the relevant numbers outside the reporting template without filling in the “DefCap-MI” worksheet.

## 4.3 Impact of the revised floors including the new standardised approach to operational risk

The “Floors” worksheet collects some additional data which, together with the data collected on other worksheets, will allow the Committee to assess the impact of the proposed capital floors based on the standardised approaches and the new standardised approach to operational risk.<sup>15</sup>

### 4.3.1 Credit risk (panel A)

Row	Column	Heading	Description
<b>1) Counterparty credit risk</b>			
8	C	Counterparty credit risk exposures (not including CVA charges or charges for exposures to CCPs); Using the proposed new standardised approach to credit risk and SA-CCR for counterparty credit risk; Exposures currently subject to the standardised approach	Banks should report the risk-weighted assets if the proposed new standardised approach to credit risk and the SA-CCR for counterparty credit risk were applied to the set of exposures for which current risk-weighted assets have been reported in cell D7 of the “Requirements” worksheet.
8	D	Counterparty credit risk exposures (not including CVA charges or charges for exposures to CCPs); Using the proposed new standardised approach to credit risk and SA-CCR for counterparty credit risk; Exposures currently subject to IRB approaches	Banks should report the risk-weighted assets if the proposed new standardised approach to credit risk and the SA-CCR for counterparty credit risk were applied to the set of exposures for which current risk-weighted assets have been reported in cell E7 of the “Requirements” worksheet.
<b>2) Securitisation</b>			
Data are collected both for the current securitisation framework and for the revised hierarchy of approaches if the <i>Revisions to the securitisation framework</i> <sup>16</sup> are applied. The set of exposures reported in cells C16 to C18 should be the same for which risk-weighted assets are shown or reported in cells C12 to C14. Similarly, the set of exposures reported in cell C18 should be the same for which risk-weighted assets are shown or reported in cells C12 to C14.			
14	C	Current risk-weighted assets; of which: RWA equivalent of exposures subject to deduction treatment	Banks should report the risk-weighted asset equivalent of securitisation exposures which are subject to a deduction treatment <b>at the reporting date</b> and, therefore, not included in the risk-weighted assets reported in row 10 of the “Requirements” worksheet. If no such exposures exist, banks should enter 0 in this cell.
16	C	Risk-weighted assets under the revised hierarchy of approaches; Standardised approach	Banks should report the risk-weighted assets for exposures which will become subject to the standardised approach under the revised hierarchy of approaches.

<sup>15</sup> Basel Committee on Banking Supervision, *Capital floors: the design of a framework based on standardised approaches - consultative document*, December 2014, [www.bis.org/bcbs/publ/d306.htm](http://www.bis.org/bcbs/publ/d306.htm).

<sup>16</sup> Basel Committee on Banking Supervision, *Revisions to the securitisation framework*, December 2014, [www.bis.org/bcbs/publ/d303.htm](http://www.bis.org/bcbs/publ/d303.htm).

Row	Column	Heading	Description
17	C	Risk-weighted assets under the revised hierarchy of approaches; External ratings-based approach	Banks should report the risk-weighted assets for exposures which will become subject to the external ratings-based approach under the revised hierarchy of approaches.
18	C	Risk-weighted assets under the revised hierarchy of approaches; Internal ratings-based approach	Banks should report the risk-weighted assets for exposures which will become subject to the internal ratings-based approach under the revised hierarchy of approaches.
19	C	Risk-weighted assets when applying the standardised approach to all exposures	Banks should report the risk-weighted assets for exposures if the new standardised approach is applied to <b>all</b> securitisation exposures.
<b>3) CCPs</b>			
24	C	Capital charge for trade exposures (including client cleared trades); Using SA-CCR	Banks should report the risk-weighted asset amount if SA-CCR was applied to calculate the capital charge for trade exposures, including client cleared trades. The set of exposures for which risk-weighted assets are reported in cell C24 should be the same as the one for which risk-weighted assets are shown in cell C23.
<b>4) CVA</b>			
29	C	CVA capital charge (risk-weighted asset equivalent); Using SA-CCR; RWA	Banks should report the risk-weighted asset amount if SA-CCR was applied to calculate the CVA capital charge. The set of exposures for which risk-weighted assets are reported in cell C29 should be the same as the one for which risk-weighted assets are shown in cell C28.
29	D	CVA capital charge (risk-weighted asset equivalent); Using SA-CCR; Externally rated exposures	Banks should report the exposures for which risk-weighted assets are reported in cell C29 and which are externally rated.
29	E	CVA capital charge (risk-weighted asset equivalent); Using SA-CCR; Unrated exposures	Banks should report the exposures for which risk-weighted assets are reported in cell C29 and which are unrated.

#### 4.3.2 Operational risk (panel B)

Panel B1 collects data on the current approaches to operational risk, while panel B2 collects data aimed at revising the standardised approaches on operational risk and introducing the new standardised approach (NSA), as set out in the consultative document issued in October 2014.

The data necessary for building the business indicator (BI), the proxy indicator that will replace the gross income in the NSA, had been collected in the QIS launched in July 2014. However, some of the items requested in the previous exercise may have been misunderstood by the respondents, in all likelihood because the business indicator and its structure had not yet been made public. Furthermore, during the consultation of the proposal on the NSA, a few respondents requested that some of the business indicator components were more clearly defined and/or slightly amended.

In light of the above, panel B2 in this QIS collects again the data necessary for building the business indicator, although for a shorter period, and the instructions for filling its items are enriched or slightly amended in light of comments received. The information that will be collected will serve to confirm or fine tune the current proposal on the NSA for operational risk and may be also useful for floors calculation, in case these will be based on NSA figures.

Panel B2 consists of two parts: balance sheet and other items (panel B2a) and income statement (panel B2b). These panels should be completed by all the banks on a best-effort basis, regardless of how banks currently calculate operational risk capital (ie AMA, TSA/ASA, BIA).

As for other parts of the reporting template, the data should be reported on a group-wide consolidated basis (ie data should be consolidated for all entities which are consolidated by the bank for risk-based regulatory purposes).

Data should be reported in the reporting currency and unit as specified in the "General Info" worksheet as of end-December of the reference years. For each reference year, year T refers to the fiscal years closed in the period from end-September T to end-June T+1. For example the reference year 2012 encompasses all the fiscal years closed between end-September 2012 and end-June 2013.

### Current approaches (panel B1)

Row	Column	Heading	Description
If a particular approach to operational risk is not applicable or not used by a bank, <b>risk-weighted assets should be reported as 0.</b>			
35	C	Basic indicator approach	Risk-weighted assets for operational risk of the parts under the basic indicator approach. The capital charge <b>should</b> be converted to risk-weighted assets.
36	C	Standardised approach	Risk-weighted assets for operational risk of the parts under the standardised approach. The capital charge <b>should</b> be converted to risk-weighted assets.
37	C	Alternative standardised approach	Risk-weighted assets for operational risk of the parts under the alternative standardised approach. The capital charge <b>should</b> be converted to risk-weighted assets.
38	C	Advanced measurement approach	Risk-weighted assets for operational risk of the parts under the advanced measurement approach. The capital charge <b>should</b> be converted to risk-weighted assets.

### New standardised approach (panel B2)

Row	Column	Heading	Description
<b>2a) Balance sheet and other items</b>			
Panel 2a collects information on specific items of the Balance Sheet and a few other items.			
42	C-G	Total assets	Total on-balance sheet assets.
43	C-G	Interest-earning assets	Total on-balance sheet assets generating interest income.
44	C-G	Interest-bearing liabilities	Total on-balance sheet liabilities bearing interest expenses.

Row	Column	Heading	Description	Typical sub-items
<b>2b) Income statement</b>				
Panel 2b collects information on specific items of the income statement.				
47	C-G	Gross income	Gross income as defined in paragraph 650 of the Basel II framework. The definition used for regulatory purposes or as defined by the relevant national supervisor should be adopted (for instance, in the EU the "Relevant Indicator" definition should be used).	

Row	Column	Heading	Description	Typical sub-items
48	C–G	Interest income	Interest income coming from all financial assets, both primary financial instruments (included either in trading or non-trading books) and hedge accounting derivatives, as well as other interest income (eg from financial leasing).	Interest income from Loans and Advances, Available For Sales, Held to Maturity, Fair Value Option, Held for Trading Interest income from hedge accounting derivatives Other interest income
49	C–G	Interest expenses	Interest expense coming from all financial liabilities, both primary financial instruments (included either in trading or non-trading books) and hedge accounting derivatives, as well as other interest expenses (eg from financial leasing).	Interest expenses from deposits Interest expenses from debt securities issued Interest expenses from hedge accounting derivatives Other interest expenses
50	C–G	Fee and commission income	Income received for providing fee-based advices and services referring to both on-balance and off-balance sheet activities. The item includes income received by the bank as outsourcer of financial services.	Fee and commission income from: <ul style="list-style-type: none"> <li>• Securities (issuance/ origination or reception/ transmission/execution of orders on behalf of customers)</li> <li>• Clearing and settlement</li> <li>• Asset management</li> <li>• Custody</li> <li>• Fiduciary transactions</li> <li>• Payment services</li> <li>• Structured finance</li> <li>• Servicing from securitisation activities</li> <li>• Loan commitments and guarantees given</li> <li>• Foreign transactions</li> </ul>
51	C–G	Fee and commission expenses	Expenses paid for receiving fee-based advices and services referring to both on-balance and off-balance sheet activities. The item includes outsourcing fees paid by the bank for the supply of financial services (eg clearing and settlement, custody, etc) but not outsourcing fees paid for the supply of non-financial services (ie logistical, IT, human resources)	Fee and commission expenses from: <ul style="list-style-type: none"> <li>• Clearing and settlement</li> <li>• Custody</li> <li>• Servicing fees for securitisation activities</li> <li>• Loan commitments and guarantees received</li> <li>• Foreign transactions</li> </ul>
52	C–G	Net profit (loss) on financial operations (trading book)	To distinguish trading from non-trading books items, the same criteria as those adopted to fill	Net gains/losses on financial assets and liabilities held for trading (derivatives, debt

Row	Column	Heading	Description	Typical sub-items
53	C–G	Net profit (loss) on financial operations (non-trading book)	the TB worksheets should be followed (see Section 7).	<p>securities, equity securities, loans and advances, short positions, other assets and liabilities)</p> <p>Net gains/losses on financial assets or liabilities measured at fair value through profit or loss</p> <p>Realised net gains/losses on financial assets and liabilities not measured at fair value through profit or loss (available for sale financial assets, loans and advances, held to maturity investments, financial liabilities measured at amortised cost)</p> <p>Net gains and losses from hedge accounting</p> <p>Net exchange differences</p>
54	C–G	Other operating income	Income from ordinary banking operations not classified in other business indicators' items but of similar nature.	<p>Rental income from investment properties</p> <p>Income from operating leasing</p> <p>Gains from non-recurrent assets and disposal group classified as held for sale not qualifying as discontinued operations (IFRS 5.37)</p>
55	C–G	Other operating income; of which: due to operating leasing	Income from operating leasing.	Indicate the amount of other operating income that is due to operating leasing, according to the relevant accounting criteria (eg IFRS)
56	C–G	Other operating expenses	<p>Expenses and losses from:</p> <p>i) ordinary banking operations not classified in other business indicators' items but of similar nature;</p> <p>ii) operational risk events (not provisioned for in previous financial years)</p>	<p>Expenses for operating leasing</p> <p>Losses from non-recurrent assets and disposal group classified as held for sale not qualifying as discontinued operations (IFRS 5.37)</p> <p>Direct charges to the P&amp;L and costs incurred as a consequence of operational risk events (eg fines, penalties and litigation settlements), which have not been provisioned for in previous financial years</p>
57	C–G	Other operating expenses; of which: due to operating leasing	Expenses from operating leasing.	Indicate the amount of other operating expenses that is due to operating leasing, according to the relevant accounting criteria (eg IFRS)
58	C–G	Dividend income	Dividend income from investment in stocks and funds not consolidated in the bank's financial statements, including that from non-consolidated subsidiaries, associates and joint ventures.	

The following sub-items should not contribute to any of the items requested in panel B2b:

- Income and expenses from insurance or reinsurance business;
- Premium paid and reimbursement/payment received for insurance or reinsurance policies purchased;
- Administrative expenses: staff expenses (including salaries, pension and similar benefits), outsourcing fees paid for the supply of non-financial services (ie logistical, IT, human resources), other administrative expenses (including expenses for IT, utilities, telephone, travel, office supplies, postage etc);
- Recovery of administrative expenses, including recovery of payments on behalf of customers (eg taxes debited to customers);
- Expenses on share capital repayable on demand;
- Net gains/losses on derecognition of financial assets, non-financial assets, liabilities not measured at fair value through profit or loss;
- Depreciation/amortisation (eg on properties, tangible assets, intangible assets);
- Provisions/reversal of provisions (eg on pensions, commitments and guarantees given, legal issues);
- Impairment/reversal of impairment (eg on financial assets, non-financial assets, investments in subsidiaries, joint ventures and associates);
- Negative goodwill recognised in profit or loss;
- Share of the profit or loss of investments in subsidiaries, joint ventures and associates;
- Income tax, corporate tax (tax based on profits, including current tax and deferred tax).

## 5. Leverage ratio

### 5.1 Introduction

The "Leverage Ratio" worksheet collects data on the exposure measure of the Basel III leverage ratio (the denominator of the ratio) as defined by the Basel III leverage ratio framework and the *Frequently asked questions on the Basel III leverage ratio framework* (referred to as "the FAQs on the Basel III leverage ratio framework").<sup>17</sup>

**As for other parts of the reporting template, exposures are to be reported in the worksheet on a group-wide consolidated basis for all entities which are consolidated by the bank for risk-based regulatory purposes.**

Yellow cells are fundamental to the calculation of the Basel III leverage ratio based on the design agreed by the Group of Governors and Heads of Supervision on 12 January 2014 and will serve as the basis for testing during the parallel run period. The yellow cells are in (i) panel A, which covers on-balance sheet items; (ii) panel B, which covers the add-on for potential future exposure for derivatives calculated in accordance with paragraphs 19 to 21 of the Basel III leverage ratio framework and off-

<sup>17</sup> Basel Committee on Banking Supervision, *Frequently asked questions on the Basel III leverage ratio framework*, [www.bis.org/publ/bcbs293.htm](http://www.bis.org/publ/bcbs293.htm).

balance sheet items calculated in accordance with paragraph 39 of the Basel III leverage ratio framework; (iii) panel E, which includes data on the offsetting of credit derivatives in accordance with paragraphs 29 to 31 of the Basel III leverage ratio framework.

The green cells collect additional information necessary to monitor the Basel III leverage ratio and its components during the transition period. Green cells are in (i) panels A, B, and E as described above; (ii) panel C, which provides an additional breakdown of on- and off-balance sheet exposures, according to their risk weights under the Basel II framework;<sup>18</sup> (iii) panel D, which allows for a reconciliation of accounting standards; (iv) panel G which requests data on alternative methods for calculating derivative exposures; (v) panel H, which requests additional data on cash variation margin associated with derivative transactions subject to *currency mismatches*; (vi) panel I, which requests additional data on initial margin associated with centrally cleared derivative transactions; (vii) panel J, which provides additional data for the purposes of the categorisation of business models.

Data on the capital measure of the Basel III leverage ratio (the numerator of the ratio) are collected in the "General Info" and "DefCap" worksheets.

The Basel III leverage ratio standards ensure consistency between the capital and exposure measures in the design of the leverage ratio, and paragraph 16 of the Basel III leverage ratio framework by stating that any deductions from regulatory capital may also be made from the exposure measure. However, when reporting data for the "Leverage Ratio" worksheet, banks should not make these deductions from the exposure measure as these will be made during the calculation phase, in panel F.

The worksheet should be compiled on a quarterly basis<sup>19</sup> by including end-of-quarter exposures (cf Basel III leverage ratio framework, paragraph 53). **The data for the most recent quarter, ending as of the reporting date, should be entered in columns J through N (labelled "Reporting date"); the data for the preceding quarter should be entered in columns D through H (labelled "Previous quarter").**

## 5.2 On-balance sheet items (panel A)

In panel A for on-balance sheet items, there are four columns for the exposure value of derivatives, securities financing transactions (SFTs) and other assets. The first three columns require, respectively, the accounting value, the gross value, and – for SFT and derivatives only – the counterparty credit risk exposure according to the Basel II framework. The fourth column applies to SFT exposures only and asks for the adjusted gross SFT assets.

### 5.2.1 Accounting values as reported in the banks' financial statements

Column D (and J) requires data as reported in the banks' financial statements prepared in accordance with the applicable accounting standards. Data in these columns should correspond to figures as reported in the financial statements (considering the regulatory scope of consolidation). These data should be net of specific provisions and valuation adjustments and include the effects of balance sheet offsetting as a result of netting agreements and credit risk mitigation only when permitted under the applicable accounting standards.

<sup>18</sup> References to the Basel II framework include the July 2009 Basel II enhancements.

<sup>19</sup> Since the Basel III monitoring exercise is carried out on a semiannual basis, each exercise will collect data covering the two quarters included in the relevant six-month period.

## Derivatives

Rows 10, 11 and 12 collect data on the positive fair values of derivatives, as reported on the bank's financial statement, which may reflect the effect of balance sheet offsetting as a result of netting agreements and credit risk mitigation only when permitted under the applicable accounting standards.

## Securities financing transactions (SFT)<sup>20</sup>

Rows 16 and 17 collect data on the on-balance sheet amounts for SFTs, as reported in accordance with the applicable accounting standards separating out those agent transactions eligible for the exceptional treatment as set out in paragraphs 36 and 37 of the Basel III leverage ratio framework from all other SFT assets. Amounts may reflect the effect of balance sheet offsetting as a result of netting agreements and credit risk mitigation only when permitted under the applicable accounting standards.

### 5.2.2 Gross values

Column E (and K) requires data to be entered using the sum of accounting values (net of specific provisions and valuation adjustments), assuming no accounting netting or credit risk mitigation effects (ie gross values).<sup>21</sup> Items that are not eligible for accounting netting or subject to credit risk mitigation should be the same as those reported in column D (and J).

## Derivatives

Rows 10, 11 and 12 include gross value of **all** derivative exposure amounts,<sup>22</sup> assuming no accounting netting and no credit risk mitigation effects.

The amount of any derivatives collateral provided other than initial margin for client-cleared derivative transactions with a *qualifying* CCP (QCCP), and eligible cash variation margin as defined in paragraphs 25 and 26 of the Basel III leverage ratio framework, where the provision of that collateral has reduced the value of the balance sheet under the applicable accounting framework should be reported in row 21. Similarly, the receivable assets for eligible cash variation margin *provided* in derivative transactions according to paragraphs 25 and 26 of the Basel III leverage ratio framework, taking into account the clarification regarding the interpretation of the *currency of settlement* requirement as set out in Q1 of the FAQs on the Basel III leverage ratio framework are to be reported in row 22 if the bank is required under the applicable accounting standard to recognise these receivable assets. Initial margin *provided* to the QCCP as a result of client-cleared derivative transactions with a QCCP where the bank acts as a clearing member and exempts such initial margin from the leverage ratio exposure measure in accordance with paragraph 27 of the Basel III leverage ratio framework is to be reported in row 23 (note additional memo items regarding initial margin in panel I of the template).

## SFT

Rows 16 and 17 require SFT assets to be reported with no recognition of the accounting netting of (cash) payables against (cash) receivables as currently permitted under the applicable accounting standards separating out those agent transactions eligible for the exceptional treatment as set out in paragraphs 36 and 37 of the Basel III leverage ratio framework from all other SFT assets.

<sup>20</sup> SFTs as defined by the Basel II framework include transactions such as repurchase agreements, reverse 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.

<sup>21</sup> For example, if a bank is permitted to net cash collateral against the net derivatives exposure amount under the applicable accounting standards (as reported in columns D and J), then the bank must take that cash collateral out (ie gross up its exposure amount) for purposes of columns E and K.

<sup>22</sup> Including derivatives that are treated off-balance sheet under the applicable accounting standards.

If the applicable accounting standards require a bank to recognise the security received in an SFT as an asset, the asset amount must be reported in row 24.<sup>23</sup> Where SFTs are treated like a sale of asset under the bank's applicable accounting framework, the exposure amount for this SFT is to be reported in row 25 as if it had been treated like a financing transaction according to subparagraphs (i) and (ii) of paragraph 33 of the Basel III leverage ratio framework.

### 5.2.3 Counterparty credit risk exposure after applying the regulatory netting standards

Column F (and L) requires reporting of the counterparty credit risk exposure of derivatives<sup>24</sup> and SFTs after applying the regulatory netting standards based on the Basel II framework (not the accounting rules for netting as applied under column D (and J)).<sup>25</sup> Data should not include any other credit risk mitigation effects.<sup>26</sup>

#### *Derivatives*

In row 9 banks are required to report the replacement cost of their derivative positions gross of cash variation margin and using Basel II netting standards, including positions resulting from paragraph 28 of the Basel III leverage ratio framework. Collateral received should not be netted against the (net) derivatives position.<sup>27</sup>

If a derivatives transaction is not covered under a qualifying Basel II netting agreement, the derivative exposure amount should be reported on a gross basis, the same as the amount reported in column E (and K).

Row 13 asks for the amount of cash variation margin received and eligible for offsetting against the replacement cost portion of the derivative exposures according to paragraphs 25 and 26 of the Basel III leverage ratio framework, taking into account the clarification regarding the interpretation of the currency of settlement requirement as set out in Q1 of the FAQs on the Basel III leverage ratio framework.

Row 14 asks for the replacement cost portion of exempted trade exposures to a *qualifying* CCP (QCCP) from client-cleared derivatives transactions, where the bank acting as clearing member is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event the QCCP defaults as set out in paragraph 27 of the Basel III leverage ratio framework.

#### *SFT*

For SFT, the counterparty credit risk exposure value is determined as the total fair value amount of securities and cash lent to a counterparty for all transactions included in a qualifying Basel II netting agreement<sup>28</sup>, less the total fair value amount of cash and securities received from the counterparty for those transactions, floored at zero.<sup>29</sup>

<sup>23</sup> For example, under US GAAP, a security transferor must recognise a security received in a securities lending transaction as an asset if the transferor has the right to hypothecate the security but has not done so.

<sup>24</sup> Including derivatives that are treated off-balance sheet under the applicable accounting standards.

<sup>25</sup> Banks should always apply Basel II standards for netting (even if they are currently applying the Basel I framework).

<sup>26</sup> This does not relate to the deduction of securities and cash received in a SFT according to paragraph 33(ii) of the Basel III leverage ratio framework.

<sup>27</sup> A net derivatives position is the (positive) difference between positive and negative fair values of derivatives in a netting set.

<sup>28</sup> A qualifying netting agreement is a netting agreement that meets the requirements under paragraphs 173 and 174 of the Basel II framework.

<sup>29</sup> Banks should apply the following part of the formula as set forth in paragraph 33(ii), first bullet of the Basel III leverage ratio framework:  $E^* = \max \{0, [(\sum E_i - \sum C_i)]\}$ .

Where no qualifying Basel II netting agreement is in place, the counterparty exposure value of SFT must be calculated on a transaction by transaction basis (that is, each SFT is treated as its own netting set) as set out in in paragraph 33(ii), second bullet of the Basel III leverage ratio framework.

These amounts have to be reported in rows 16 and 17 separating out those agent transactions eligible for the exceptional treatment as set out in paragraphs 36 and 37 of the Basel III leverage ratio framework from all other SFT assets.

#### 5.2.4 Adjusted gross SFT assets

Row 17 of column G (and M) requires banks to report the adjusted gross SFT asset amounts for all SFTs other than the SFT agent transactions eligible for the exceptional treatment as set out in paragraphs 36 and 37 of the Basel III leverage ratio framework, according to paragraph 33 (i), second bullet of the Basel III leverage ratio framework.

#### 5.2.5 Description of the data

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
8	D, E, J, K	Derivatives	Non entry cells: Items in rows 10 to 12 provide a breakdown of derivatives and should sum to total derivatives.
8	F, L	Derivatives	Non entry cells: The replacement costs associated with all derivatives transactions as they enter the Basel III leverage ratio exposure measure.
9	F, L	Replacement cost associated with all derivatives transactions (gross of variation margin)	The replacement cost of derivatives using Basel II netting standards, with no recognition of collateral (whether cash or non-cash), see paragraphs 19, 20, 21, 23 and 28 of the Basel III leverage ratio framework. Derivatives traded OTC, on an exchange and through a CCP should all be included.
10	D, E, J, K	Credit derivatives (protection sold)	Positive fair values of written credit derivatives (ie where the bank is providing credit protection to a counterparty). Columns D and J must be reported on a net basis (ie reflecting the effect of netting agreements and credit risk mitigation when permitted under the applicable accounting standards); columns E and K must be reported on a gross basis.
11	D, E, J, K	Credit derivatives (protection bought)	Positive fair values of purchased credit derivatives (ie where the bank is buying credit protection from a counterparty). Columns D and J must be reported on a net basis (ie reflecting the effect of netting agreements and credit risk mitigation when permitted under the applicable accounting standards); columns E and K must be reported on a gross basis.
12	D, E, J, K	Financial derivatives	Positive fair values of financial derivatives (eg interest rates derivatives, FX and gold derivatives, equities derivatives, etc). Columns D and J must be reported on a net basis (ie reflecting the effect of netting agreements and credit risk mitigation when permitted under the applicable accounting standards); columns E and K must be reported on a gross basis.

Row	Column	Heading	Description
13	F, L	Eligible cash variation margin offset against derivatives market values	Cash variation margin received eligible for offsetting against the replacement cost portion of the derivatives exposures according to paragraphs 25 and 26 of the Basel III leverage ratio framework, taking into account the clarification regarding the interpretation of the currency of settlement requirement as set out in Q1 of the FAQs on the Basel III leverage ratio framework.
14	F, L	Exempted CCP leg of client-cleared trade exposures (replacement costs)	The replacement cost portion of exempted trade exposures to a QCCP from client-cleared derivatives transactions, where the bank acting as clearing member is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the QCCP defaults, see paragraph 27 of the Basel III leverage ratio framework.
15	D, E, J, K	Securities financing transactions	Non entry cells: Items in rows 16 and 17 provide a breakdown of SFTs and should sum to total SFTs.
15	F, L	Securities financing transactions	Non entry cells: Sum of counterparty credit risk exposure of SFT covered and not covered by eligible netting agreements, see paragraph 33(ii) of the Basel III leverage ratio framework. SFT traded OTC, on an exchange and through a CCP should all be included.
15	G, M	Securities financing transactions	Non entry cells: Sum of the adjusted gross SFT assets, see paragraph 33(i), second bullet of the Basel III leverage ratio framework. SFT traded OTC, on an exchange and through a CCP should all be included.
16	D, E, J, K	SFT agent transactions eligible for the exceptional treatment	<p>Only SFT agent transactions where the bank acting as agent provides an indemnity or guarantee to a customer or counterparty that is limited to the difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided are eligible for this exceptional treatment, see paragraphs 36 and 37 of the Basel III leverage ratio framework.</p> <p>Columns D and J must be reported net of specific provisions and valuation adjustments and include the effects of netting agreements and credit risk mitigation only as per the relevant accounting standards.</p> <p>Columns E and K must be reported with no recognition of accounting netting of (cash) payables against (cash) receivables as permitted under relevant accounting standards.</p> <p>The securities lent in a SFT that remain recognised on the balance sheet must not be included here but in row 19.</p> <p>The value of securities received in a SFT that are recognised as an asset under the applicable accounting standard must be reported in row 24.</p> <p>The securities lent in a SFT that are derecognised due to a sales accounting transaction must not be included here but in row 25.</p> <p>SFT traded OTC, on an exchange and through a CCP should all be included.</p>
16	F, L	SFT agent transactions eligible for the exceptional treatment	The exposure measure of eligible SFT agent transactions calculated by applying subparagraph (ii) of paragraph 33 of the Basel III leverage ratio framework.

Row	Column	Heading	Description
17	D, E, J, K	Other SFTs	<p>SFTs other than SFT agent transactions reported in row 16. Columns D and J must be reported net of specific provisions and valuation adjustments and include the effects of netting agreements and credit risk mitigation only as per the relevant accounting standards.</p> <p>Columns E and K must be reported with no recognition of accounting netting of (cash) payables against (cash) receivables as permitted under relevant accounting standards.</p> <p>The securities lent in a SFT that remain recognised on the balance sheet must not be included here but in row 19.</p> <p>The value of securities received in a SFT that are recognised as an asset under the applicable accounting standard must be reported in row 24.</p> <p>The securities lent in a SFT that are derecognised due to a sales accounting transaction must not be included here but in row 25.</p> <p>SFT traded OTC, on an exchange and through a CCP should all be included.</p>
17	F, L	Other SFTs	The counterparty credit risk exposure of all SFTs other than SFT agent transactions reported in row 16 calculated according to subparagraph (ii) of paragraph 33 of the Basel III leverage ratio framework.
17	G, M	Other SFTs	The adjusted gross SFT assets of all SFTs other than SFT agent transactions reported in row 16 calculated according to subparagraph (i) of paragraph 33 of the Basel III leverage ratio framework.
18	E, K	Other assets	Non entry cells: Other assets as adjusted for the purposes of the Basel III leverage ratio.
19	D, E, J, K	Accounting other assets	Any other assets not specifically identified in any of the rows 8 to 17 above (ie any other accounting assets not included under derivatives or SFT items, eg accounting receivables for cash variation margin provided where recognised under operative accounting framework, liquid assets as defined under the liquidity coverage ratio, failed and unsettled transactions). This includes any instrument (including cash) borrowed or lent through an SFT when it is reported on the accounting balance sheet.
20	E, K	Adjustments to accounting other assets for the purposes of the leverage ratio	Non entry cells: adjustments to accounting other assets for the purposes of the Basel III leverage ratio.
21	E, K	Grossed-up assets for derivatives collateral provided	The amount of any derivatives collateral provided where the provision of that collateral has reduced the value of the balance sheet assets under the applicable accounting framework, see paragraph 24 of the Basel III leverage ratio framework. However, initial margin for client-cleared derivative transactions with a qualifying CCP (QCCP) and eligible cash variation margin, as defined in paragraphs 25 and 26 of the Basel III leverage ratio framework, must not be included.

Row	Column	Heading	Description
22	E, K	Receivables for eligible cash variation margin provided in derivatives transactions	The receivables for eligible cash variation margin <i>provided</i> in derivatives transactions if the bank is required, under the applicable accounting standards, to recognise these receivables as an asset, see paragraphs 25 and 26 of the Basel III leverage ratio framework, taking into account the clarification regarding the interpretation of the currency of settlement requirement as set out in Q1 of the FAQs on the Basel III leverage ratio framework. The amount reported must also be included in the accounting other assets reported in row 19.
23	E, K	Exempted CCP leg of client-cleared trade exposures (initial margin)	The initial margin portion of exempted trade exposures to a QCCP from client-cleared derivatives transactions, where the bank acting as clearing member is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the QCCP defaults, see paragraph 27 of the Basel III leverage ratio framework, taking into account the clarification regarding the interpretation of the currency of settlement requirement as set out in Q1 of the FAQs on the Basel III leverage ratio framework. The amount reported should also be included in the accounting other assets reported in row 19.
24	E, K	Securities received in a SFT that are recognised as an asset	Securities received in a SFT that are recognised as an asset under the applicable accounting standards and therefore included in row 19, see paragraph 33 of the Basel III leverage ratio framework.
25	E, K	Adjustments for SFT sales accounting transactions	The value of securities lent in a SFT that are derecognised due to a sales accounting transaction, see paragraph 34 of the Basel III leverage ratio framework.
26	E, K	Fiduciary assets	Fiduciary assets that are included in row 19 and that meet the IAS 39 criteria for derecognition and, where applicable, IFRS 10 for deconsolidation, see footnote 4 to paragraph 15 of the Basel III leverage ratio framework.
27	D, E, F, G, J, K, L, M	Totals	This is a non-data entry row.
29	F, G, L, M	Memo item: SFT exposures to QCCPs from client-cleared transactions	The SFT exposures to QCCPs from client-cleared SFT transactions, where the bank acting as clearing member is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the QCCP defaults. These exposures must be included in rows 16 and 17.
31	E, K	Check row	This is a non-data entry row. It checks that the sum of single values included in the accounting other assets is lower or equal to the accounting other assets.

### 5.3 Derivatives and off-balance sheet items (panel B)

In panel B for derivatives and off-balance sheet items, there are three columns. The first two columns apply to derivatives solely and require, respectively, the potential future exposure (PFE) assuming no netting or credit risk mitigation, and the PFE with Basel II netting standards. The third column refers to both derivatives and off-balance sheet items and requires the notional values of those exposures.

The PFE and notional amounts excluded from panel B according to paragraph 27 of the Basel III leverage ratio framework must be reported in row 43.

### 5.3.1 Potential future exposure of derivatives measured using the current exposure method without the effect of Basel II netting

Column D (and J) requires potential future exposure of all derivatives, irrespective of whether or not they are centrally cleared, as well as exposures arising from the application of paragraph 28 of the Basel III leverage ratio framework, measured using the current exposure method (CEM) without the effect of Basel II netting.<sup>30</sup> Data in these columns only include the add-on for potential future exposure, since the total replacement cost is already captured in the on-balance sheet panel A. Data on the add-on for derivatives having a negative fair value (thus not reported in panel A) should be included as well.

When compiling the separate line items referred to as “Credit derivatives protection sold” the following criteria should be applied: For sold CDS subject to close out, the full text of paragraph 3 of the Annex of the Basel III leverage ratio framework should be applied; therefore, the add-on should be capped at unpaid premiums. For sold CDS not subject to close out, the treatment provided by the footnote in paragraph 3 of the Annex of the Basel III leverage ratio framework should not be applied and the add-on of 5% or 10% – depending on the nature (qualifying or non-qualifying) of the reference obligation – should always be calculated.<sup>31</sup>

Paragraph 3 of the Annex of the Basel III leverage ratio framework should be applied to all credit derivatives, whether they are included in the banking book or in the trading book.

Data should be reported gross of any netting agreement and credit risk mitigation effect (in line with the criteria for compiling column E (and K) in panel A). All banks should calculate the potential future exposure using the current exposure method, even if they do not apply such a method under the counterparty credit risk framework. For derivatives traded on an exchange or through a CCP the current exposure method is always applied, irrespectively of whether or not an exposure value of zero for counterparty credit risk is attributed under the Basel II framework.

Banks may choose to not include the individual add-on amount relating to a written credit derivative which is not offset by purchased protection with the characteristics described in Section 5.6, letter (c) of the present instructions.

### 5.3.2 Potential future exposure of derivatives with the effect of the Basel II netting

Column E (and K) requires potential future exposure of derivatives with the effect of the Basel II netting as set out in paragraphs 8 to 11 of the Annex of the Basel III leverage ratio framework. As noted above, banks should always apply the CEM netting standards as defined in the Basel II framework, irrespective of their actual approach to credit risk. Data should not include any credit risk mitigation effect other than the said Basel II netting.

The add-on for credit derivatives should be calculated according to the full text of paragraph 3 of the Annex of the Basel III leverage ratio framework, including the footnote. This implies that the add-on of sold CDS subject to close out should be capped at unpaid premiums, while the add-on for sold CDS not subject to close out should not be included.

Paragraph 3 of the Annex of the Basel III leverage ratio framework should be applied to all credit derivatives, whether they are included in the banking book or in the trading book.

<sup>30</sup> See also Annex IV of the Basel II framework.

<sup>31</sup> The footnote in paragraph 3 of the Annex of the Basel III leverage ratio framework states the following: “The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. Add-on should then be capped to the amount of unpaid premiums.”

Banks may choose not to include the individual add-on amount relating to a written credit derivative which is not offset by purchased protection following the criteria described in Section 5.6, letter (c) of the present instructions.<sup>32</sup>

When calculating the add-on for netted transactions ( $A_{Net}$  in the formula in paragraph 10 of Annex of the Basel III leverage ratio framework) and irrespective of the treatment of the collateral by the applicable accounting standards, banks must not recognise the collateral received in the calculation of the net replacement cost.

### 5.3.3 Notional amounts

Column F (and L) requires banks to report the notional amounts of derivatives and off-balance sheet items.

### 5.3.4 Description of the data

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
<b>B1) Derivatives</b>			
38	E, K	Potential future exposure for derivatives entering the leverage ratio exposure measure	Non entry cell: Provides for the total PFE entering the exposure measure related to derivative transactions according to paragraphs 19 to 28 of the Basel III leverage ratio framework.
39	E, K	Derivatives	Potential future exposure of derivatives when applying the current exposure method and Basel II netting standards.
39	D, F, J, L	Derivatives	Non entry cells: Items in rows 40 to 42 provide a breakdown of derivatives which should sum up to total derivatives.
40	D, F, J, L	Credit derivatives (protection sold)	Potential future exposure with no netting or CRM (columns D and J) or notional amount (columns F and L) for credit derivatives sold subject to close out, including the full treatment set out in paragraph 3 of the Annex of the Basel III leverage ratio framework (capping add-on at unpaid premiums). Where the effective notional amount of written credit derivatives is included in the exposure measure and not offset pursuant to paragraph 30 of Basel III leverage ratio framework, banks may choose to set the individual potential future exposure amounts relating to those written credit derivatives to zero.
41	D, F, J, L	Credit derivatives (protection bought)	Potential future exposure with no netting or CRM (columns D and J) or notional amount (columns F and L) of purchased credit derivatives (ie where the bank is buying credit protection from a counterparty)
42	D, F, J, L	Financial derivatives	Potential future exposure with no netting or CRM (columns D and J) or notional amount (columns F and L) of financial derivatives.

<sup>32</sup> In these cases, where effective bilateral netting contracts are in place, and when calculating  $A_{Net}=0.4*A_{Gross}+0.6*NGR*A_{Gross}$ ,  $A_{Gross}$  may be reduced by the individual add-on amounts (ie notional amounts multiplied by the appropriate add-on factors) which relate to written credit derivatives whose notional values are included as exposures of the Basel III leverage ratio. No adjustments should be made to NGR. Where effective bilateral netting contracts are not in place, the add-on can be set to zero in order to avoid double counting. See paragraph 31 of the Basel III leverage ratio framework.

Row	Column	Heading	Description
43	D, J	Exempted CCP leg of client-cleared trade exposures (potential future exposure)	Potential future exposure using the current exposure method and assuming no netting or CRM associated with exempted CCP leg of client-cleared trade exposures (potential future exposure fulfilling the exemption criteria laid down in paragraph 27 of the Basel III leverage ratio framework).
43	E, F, K, L	Exempted CCP leg of client-cleared trade exposures (potential future exposure)	Potential future exposure of derivatives when applying the current exposure method and Basel II netting standards (columns E and K), or notional amount (columns F and L) for exempted CCP leg of client-cleared trade exposures according to paragraph 27 of the Basel III leverage ratio framework.
<b>B2) Off-balance sheet items</b>			
45	F, L	Off-balance sheet items with a 0% CCF in the RSA; of which:	Off-balance sheet items that would be assigned a 0% credit conversion factor as defined in the standardised approach to credit risk in the Basel II framework. That is commitments that are unconditionally cancellable at any time by the bank without prior notice (UCC), or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness (see paragraph 83 of the Basel II framework and the footnote to this paragraph). Note that rows 46 and 47 do not sum up to row 45 since the latter includes commitments that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness but that are not UCCs.
46	F, L	Unconditionally cancellable credit cards commitments	Credit cards commitments that are unconditionally cancellable at any time by the bank without prior notice (UCC) that would receive a 0% CCF under the standardised approach to credit risk. Credit card commitments that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness but that are not UCC should not be included in this row.
47	F, L	Other unconditionally cancellable commitments	Other commitments that are unconditionally cancellable at any time by the bank without prior notice, that would receive a 0% CCF under the standardised approach to credit risk. Commitments that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness but that are not UCC should not be included in this row.
48	F, L	Off-balance sheet items with a 20% CCF in the RSA	Off-balance sheet items that would be assigned a 20% credit conversion factor as defined in the standardised approach to credit risk (see paragraphs 83 and 85 of the Basel II framework and the footnote to paragraph 83).
49	F, L	Off-balance sheet items with a 50% CCF in the RSA	Off-balance sheet items that would be assigned a 50% credit conversion factor as defined in the standardised approach to credit risk (see paragraphs 83, 84(ii) and 84(iii) of the Basel II framework). This includes liquidity facilities and other commitments to securitisations incorporating the changes according to the Enhancements. That is the CCF for all eligible liquidity facilities in the securitisation framework is 50% regardless of the maturity.

Row	Column	Heading	Description
50	F, L	Off-balance sheet items with a 100% CCF in the RSA	Off-balance sheet items that would be assigned a 100% credit conversion factor as defined in the standardised approach to credit risk (see paragraphs 83(i), 83 (ii), 84 and 84(i) of the Basel II framework.  This includes liquidity facilities and other commitments to securitisations incorporating the changes according to the Enhancements.
51	F, L	Total off-balance sheet items	This is a non-data entry row.
53	F, L	Check row	This is a non-data entry row. It checks that the unconditionally cancellable commitments do not exceed the off-balance sheet items with a 0% CCF.

#### 5.4 On- and off-balance sheet items – additional breakdown of exposures (panel C)

Panel C provides an additional breakdown for on- and off-balance sheet exposures belonging to the banking book, according to the risk weights applied under the Basel II framework.<sup>33</sup>

Banks adopting the standardised approach for credit risk should report each exposure according to the regulatory risk weight as provided by the Basel II framework (under the standardised approach or the securitisation framework).<sup>34,35</sup> For banks adopting the internal ratings-based approach, for exposure (other than those for which specific regulatory risk weights are provided for – eg specialised lending exposures under the supervisory slotting criteria approach, securitisations exposures with an external credit assessment, equity exposures under the simple risk weight method, etc) belonging to each borrower grade, the risk weight should be derived by dividing the risk weighted exposure obtained from the risk-weight formula or the supervisory formula (for credit risk or securitisations exposures, respectively) by the EAD after recognition of eligible credit risk mitigation techniques. Under the internal ratings-based approach, exposures classified as in default should be excluded from the rows 60 to 67 and included in row 68.

Exposures deducted from the regulatory capital should be considered as being applied a 1250% risk weight.<sup>36</sup>

The exposure value of on-balance sheet items (columns D and J) should correspond to the solvency-based value under the Basel II framework,<sup>37</sup> after recognition of eligible credit risk mitigation techniques (eg EAD for the internal ratings-based approach). Off-balance sheet items (columns E and K)

<sup>33</sup> Transactions subject to the treatment for counterparty credit risk (see Annex 4 of the Basel II framework) should be included irrespective of whether they are classified in the banking or in the trading book.

<sup>34</sup> For exposures supported by credit risk mitigation techniques implying the substitution of the risk weighting of the counterparty with the risk weighting of the guarantee (eg financial collateral under the simple approach), banks should refer to the risk weight after the substitution effect.

<sup>35</sup> Banks currently adopting the Basel I framework should refer to the risk weights currently applied for the calculation of the credit risk capital requirement; for reporting purposes, the exposures should be mapped to the risk weights buckets as provided in this panel.

<sup>36</sup> Deductions from the capital base under Annex 1a part C of the Basel II framework as well as regulatory adjustments under paragraphs 66 to 88 of the Basel III standards should not be included in panel C. Exposures for which the Basel II framework allows the option of being deducted or risk weighted (eg certain securitisation exposures) should be included in panel C with a 1250% risk weight even if they are deducted from the capital base.

<sup>37</sup> Or under the Basel I framework, if currently applied by a bank, in which case the bank should correspondingly apply the Basel I standards for netting.

should be reported as for their notional value multiplied by the regulatory CCF<sup>38</sup> under the Basel II framework.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
59	D, E, J, K	Total on- and off-balance sheet exposures belonging to the banking book (breakdown according to the effective risk weight):	This is a non-data entry row.
60	D, E, J, K	= 0%	Exposures with effective risk weight of 0%.
61	D, E, J, K	> 0 and ≤ 12%	Exposures with effective risk weights exceeding 0% but not more than 12%.
62	D, E, J, K	> 12 and ≤ 20%	Exposures with effective risk weights exceeding 12% but not more than 20%.
63	D, E, J, K	> 20 and ≤ 50%	Exposures with effective risk weights exceeding 20% but not more than 50%.
64	D, E, J, K	> 50 and ≤ 75%	Exposures with effective risk weights exceeding 50% but not more than 75%.
65	D, E, J, K	> 75 and ≤ 100%	Exposures with effective risk weights exceeding 75 but not more than 100%.
66	D, E, J, K	> 100 and ≤ 425%	Exposures with effective risk weights exceeding 100% but not more than 425%.
67	D, E, J, K	> 425 and ≤ 1250%	Exposures with effective risk weights exceeding 425% but not more than 1250%.
68	D, E, J, K	Defaulted exposures under the IRB approach	Exposures classified as in default under the internal ratings-based approach.

## 5.5 Reconciliation (panel D)

Panel D on reconciliation is a summary table that seeks to ensure the data is entered correctly and consistently. The reconciliation is between total accounting balance sheet exposures and total exposures after the effects of accounting netting (and other credit risk mitigation effects), or the effects of derivatives treated off-balance sheet under the applicable accounting standards and recognised with their gross values in panel A, have been eliminated. The adjusted non-netted values will provide a consistent comparison of exposures across accounting standards.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
74	D	Accounting total assets, previous quarter	Total assets following the relevant accounting balance sheet (considering the regulatory consolidation). The figure should be the same as the total value in cell D27.
74	J	Accounting total assets, reporting date	This is a non-data entry row. Total assets following the relevant accounting balance sheet (considering the regulatory consolidation) should be entered in cell C58 of the "General Info" worksheet. The figure should be the same as the total value in cell J27.

<sup>38</sup> The applicable CCF should be based on the approach to credit risk used by the bank (eg standardised approach or internal ratings-based approach).

Row	Column	Heading	Description
75	D, J	Check row	This is a non-data entry row. It checks that the total assets figure in panel D is the same as reported in panel A.
76	D, J	Reverse out on-balance sheet netting	Enter the amount of on-balance sheet netting (ie netting of loans against deposits) following the relevant accounting standards. This figure should equal the difference between the gross (column E (and K)) and the netted figures (column D (and J)) in panel A for the other assets (row 19).
77	D, J	Reverse out derivatives netting and other derivatives adjustments	Enter the amount of derivatives netting and the gross value of derivatives that are treated off-balance sheet and therefore included in column E (and K), where applicable, following the relevant accounting standards. This figure should equal the difference between the gross (column E (and K)) and the accounting figures (column D (and J)) in panel A for derivatives (row 8).
78	D, J	Reverse out SFT netting	Enter the amount of netting related to SFT following the relevant accounting standards. This figure should equal the difference between the gross (column E (and K)) and the netted figures (column D (and J)) in panel A for SFT (row 15).
79	D, J	Reverse out other netting and other adjustments	Adjustment to the accounting other assets for the purpose of the Basel III leverage ratio. This should correspond to row 20.
80	D, J	Totals	This is a non-data entry row.
81	D, J	Check row	This is a non-data entry row. It checks that the total assets figure calculated in row 80 is the same as the total of gross values in panel A (row 27).

## 5.6 Adjusted notional exposures for written credit derivatives (panel E)

In panel E for the additional treatment for written credit derivatives exposure<sup>39</sup>, there are three columns.

- (a) Column D (and J) requires the effective notional amounts<sup>40</sup> for written credit derivatives, capped at maximum potential loss as defined in paragraph 30 of the Basel III leverage ratio framework.
- (b) Column E (and K) requires the effective notional amounts capped at maximum potential loss, for credit derivatives bought on the same reference name as the written credit derivatives.
- (c) Column F (and L) requires the effective notional amounts capped at maximum potential loss, for credit derivatives bought on the same reference name, where in the addition the maturity of the protection bought is equal to or greater than the maturity of the protection sold.

Reference names are considered the same if the conditions in footnote 14 of the Basel III leverage ratio framework are met.

Assuming Bank A has sold credit protection on \$100 of Corporate X debt for five years, and purchased credit protection on the same debt through the following transactions: (i) \$40 for five years; (ii) \$40 for two years; (iii) \$20 for six months, and assuming Bank A has not entered in other credit derivatives transactions, the notional amounts of credit protection written and purchased under the criteria described above are the following:

<sup>39</sup> Both credit derivatives belonging to the banking book and to the trading book should be reported.

<sup>40</sup> That is reflecting the true exposure of contracts that are leveraged or otherwise enhanced by the structure of the transaction as provided in footnote 13 of the Basel III leverage framework.

	Capped notional amount	Capped notional amount (same reference name)	Capped notional amount (same reference name with no maturity mismatch)
Credit derivatives (protection sold)	100		
Credit derivatives (protection bought)	100	100	40

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
87	D, J	Credit derivatives:	This is a non-data entry row.
88	D, J	Credit derivatives (protection sold)	Capped notional value of written credit derivatives (ie where the bank is providing credit protection to a counterparty) as set out in paragraph 30 of the Basel III leverage ratio framework.
89	D, J	Credit derivatives (protection bought)	Capped notional value of purchased credit derivatives (ie where the bank is buying credit protection from a counterparty) as set out in paragraph 30 of the Basel III leverage ratio framework.
89	E, K	Credit derivatives (protection bought)	Capped notional value of purchased credit derivatives (ie where the bank is buying credit protection from a counterparty) as set out in paragraph 30 of the Basel III leverage ratio framework, on the same underlying reference names as those credit derivatives written by the bank as defined in footnote 14 of the Basel III leverage ratio framework. Hence, the value should not be greater than the value entered in cell D89 (and J89) for each reference name.
89	F, L	Credit derivatives (protection bought)	Capped notional value of purchased credit derivatives (ie where the bank is buying credit protection from a counterparty) on the same underlying reference names as those credit derivatives written by the bank, where the maturity of the purchased protection is equal to or greater than the maturity of the sold protection. Hence, the value should not be greater than the value entered in cell E89 (and K89) for each reference name.
90	E, F, K, L	Credit derivatives (protection sold less protection bought)	This is a non-data entry row. It calculates the difference between written and purchased credit derivatives on the same underlying reference names, for each of the two hypotheses for the offsetting as described above.
92	D, J	Check row	This is a non-data entry row. It checks that the notional amount of written credit derivatives is the same as or less than that in panel B.
93	D, J	Check row	This is a non-data entry row. It checks that the notional amount of purchased credit derivatives is the same as or less than that in panel B.
94	D, E, F, J, K, L	Check row	This is a non-data entry row. It checks that the notional amount of purchased credit derivatives for each of the two hypotheses for the offsetting as described above is consistently filled-in.

## 5.7 Calculation of the Basel III leverage ratio (panel F)

Panel F provides with the calculation of the Basel III leverage ratio, on the basis of the exposures data reported in the "Leverage Ratio" worksheet as well as of other relevant data as reported in the "General Info" and the "DefCap" worksheets (ie Tier 1 capital, regulatory adjustments).

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
100	D, J	Tier 1 capital	This is a non-data entry row. It includes the amount of Basel III Tier 1 capital as reported in cell E71 of the "General Info" worksheet (numerator of the Basel III leverage ratio).
101	D, J	Total exposures	This is a non-data entry row. It calculates the total exposures to be included in the denominator of the Basel III leverage ratio (before the deduction of regulatory adjustments).
101	E, K	Data complete	This is a non-data entry row. It checks that all required exposure amounts entering the Basel III leverage ratio calculation are reported in previous panels.
102	D, J	Regulatory adjustments	This is a non-data entry row. It includes the amount of regulatory adjustments from Tier 1 as reported in the "DefCap" worksheet.
103	D, J	Total exposures for the calculation of the leverage ratio	This is a non-data entry row. It calculates the total exposures to be used for calculating the Basel III leverage ratio.
104	D, J	Basel III leverage ratio	This is a non-data entry row. It calculates the Basel III leverage ratio on the basis of the previous values.

## 5.8 Alternative methods for derivative exposures (panel G)

Panel G requests for additional data on alternative methods for calculating the Basel III leverage ratio exposure value for derivative transactions. These methods are represented by the *Standardised approach for measuring counterparty credit risk exposures* as published by the Committee in March 2014 (hereafter referred to as "SA-CCR without modification" and the "SA-CCR document"),<sup>41</sup> and a modified version of the SA-CCR according to the criteria laid down in the current instructions (hereafter referred to as "modified SA-CCR").

The scope of derivatives transactions for the calculations in panel G is the same as the one used for the calculation of the Basel III leverage ratio exposure measure (ie *excluding* the CCP-leg of clearing members' client-cleared trade exposures to a QCCP as set out in paragraph 27 of the Basel III leverage ratio framework).

### 5.8.1 Counterparty credit risk exposure according to the SA-CCR without modification

Column D (and J) requires the counterparty credit risk exposure of derivative transactions already included in panels A and B to be calculated according to the SA-CCR without modification.

#### *Replacement cost*

In row 110 banks are required to report the replacement cost of their derivative transactions calculated according to paragraphs 130 to 145 of the SA-CCR document.

<sup>41</sup> Basel Committee on Banking Supervision, *The standardised approach for measuring counterparty credit risk exposures*, March 2014, [www.bis.org/publ/bcbs279.htm](http://www.bis.org/publ/bcbs279.htm).

Further rows 111 to 114 request data on respectively:

- (a) the impact on the replacement cost of the bank's derivative transactions of respectively the:
  - (i) collateral *provided* by the bank and included in rows 18 or 21 (cells D111 and J111); and
  - (ii) non-cash collateral *provided* by the bank and included in rows 18 or 21 (cells D112 and J112);
- (b) *receivables* for cash collateral provided and taken into account in C or NICA according to the SA-CCR document (cells D113 and J113);
- (c) collateral *provided* that is both included in rows 18 or 21 and taken into account in C or NICA according to the SA-CCR document (cells D114 and J114).

### *Potential future exposure*

In row 117 banks are required to report the potential future exposure of their derivative transactions calculated according to paragraphs 146 to 187 of the SA-CCR document.

### 5.8.2 Counterparty credit risk exposure according to a modified SA-CCR

Columns E and K require the counterparty credit risk exposure of derivative transactions already included in panels A and B to be calculated according to a modified version of the SA-CCR according to the criteria laid down below.

### *Replacement cost*

Cells E110 and K 110 are non-entry cells (relevant data are gathered from panel A).

### *Potential future exposure*

Data on PFE add-on have to be reported according to two alternative criteria:

- in row 117 banks are requested to calculate and report the PFE of all their derivative transactions, including those for which variation margin is exchanged, by applying the maturity factors for unmargined transactions provided in the SA-CCR document (see paragraphs 154, 155 and 164 of the SA-CCR document). Furthermore, the PFE multiplier must be set to one for all derivative transactions. All other criteria provided by the SA-CCR document, including the methodology for offsetting long and short positions within each hedging set and for aggregating the trade-level add-ons within each asset class have to be applied. This row is the the sum of
  - PFE of all *margined* netting sets as requested in row 115, where banks are required to calculate the PFE of all their derivative transactions, including those for which variation margin is exchanged, by applying the maturity factors for unmargined transactions provided in the SA-CCR document (see paragraphs 154, 155 and 164); furthermore, the PFE multiplier must be set to one for all derivative transactions and all other criteria provided by the SA-CCR document, including the methodology for offsetting long and short positions within each hedging set and for aggregating the trade-level add-ons within each asset class have to be applied;
  - PFE of all *unmargined* netting sets as requested in row 116, where banks are required to calculate the PFE of all their derivative transactions, including those for which variation margin is exchanged, by applying the maturity factors for unmargined transactions provided in the SA-CCR document (see paragraphs 154, 155 and 164); furthermore, the PFE multiplier must be set to one for all derivative transactions and all other criteria provided by the SA-CCR document, including the methodology for

offsetting long and short positions within each hedging set and for aggregating the trade-level add-ons within each asset class have to be applied.

- in row 118 banks are requested to calculate and report the sum of gross add-ons without any recognition of netting and by applying the maturity factors for unmargined transactions throughout. To calculate the gross add-ons, banks are requested, for each derivative transaction, to multiply (i) the absolute value of the supervisory delta (paragraph 159 of the SA-CCR document); (ii) the adjusted notional amount (paragraphs 157 and 158 of the SA-CCR document); (iii) the supervisory factor (paragraph 183 of the SA-CCR document); and (iv) the unmargined maturity factor (first bullet of paragraph 164 of the SA-CCR document). The resulting trade-level gross add-ons are then summed up. This calculation is equivalent to replacing all the aggregation formulas specified in paragraphs 168 to 179 of the SA-CCR document by simple gross sums.

### 5.8.3 Description of the data

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
110	D, J	Replacement cost (RC)	Replacement cost (RC) of derivative transactions calculated according to paragraphs 130 to 145 of the SA-CCR document.
110	E, K	Replacement cost (RC)	Non-entry cells (relevant data are gathered from panel A).
111	D, J	Impact on the RC of collateral provided by the bank and included in rows 18 or 21	The difference between un-modified RC under SA-CCR, which includes collateral provided by the bank, and the RC without taking into account any collateral provided by the bank that is already included in rows 18 or 21. This row is introduced to correct for double counting of collateral provided.
112	D, J	Impact on the RC of non-cash collateral provided by the bank and included in rows 18 or 21	Similar to row 111 but restricting the impact to non-cash collateral. That is, the difference between RC under SA-CCR, which includes collateral provided by the bank, and the RC without taking into account any non-cash collateral provided by the bank that is already included in rows 18 or 21.
113	D, J	Receivables for cash collateral provided and taken into account in C or NICA	Receivables for cash collateral provided by the bank that is both included in row 18 and taken into account in the calculation of C or NICA in SA-CCR. The eligibility criteria of the Basel III leverage ratio framework are not applied, ie it includes any cash collateral or cash variation margin whether it meets the criteria in paragraph .25 or not.
114	D, J	Collateral provided that is both included in rows 18 or 21 and taken into account in C or NICA	The gross value of all collateral provided by the bank that is both included in row 18 or 21 and taken into account in the calculation of C or NICA in SA-CCR.
115	E, K	Potential future exposure of all margined netting sets w/o collateral	Potential future exposure of derivative transactions for margined netting sets, calculated by applying the SA-CCR with the modification that the PFE multiplier has to be set to one. Therefore, formulas for margined transactions may be applied to derivative transactions as appropriate.
116	E, K	Potential future exposure of all unmargined netting sets w/o collateral	Potential future exposure of derivative transactions for unmargined netting sets, calculated by applying the SA-CCR with the modification that the PFE multiplier has to be set to one.

Row	Column	Heading	Description
117	D, J	Potential future exposure:	Potential future exposure of derivative transactions calculated according to paragraphs 146 to 187 of the SA-CCR document.
117	E, K	Potential future exposure:	<p>Non-entry cell. It is the sum of the potential future exposure of all margined and unmargined netting sets without collateral as requested in rows 115 and 116.</p> <p>Potential future exposure of derivative transactions calculated by applying the SA-CCR with the following modifications:</p> <ul style="list-style-type: none"> <li>formulas for unmargined transactions must be applied to all derivative transactions, including those for which variation margin is exchanged;</li> <li>the PFE multiplier has to be set to one.</li> </ul>
118	E, K	Sum of trade-level gross add-ons	<p>Potential future exposure of derivative transactions calculated:</p> <ul style="list-style-type: none"> <li>by multiplying, for each individual derivative transaction, (i) the absolute value of the supervisory delta (paragraph 159 of the SA-CCR document); (ii) the adjusted notional amount (paragraphs 157 and 158 of the SA-CCR document); (iii) the supervisory factor (paragraph 183 of the SA-CCR document); and (iv) the unmargined maturity factor (first bullet of paragraph 164 of the SA-CCR document); and then</li> <li>by summing up the resulting trade-level add-ons.</li> </ul>
119	D, E, J, K	Check row	This is a non-data entry row. It checks that the potential future exposure amounts with netting are not greater than the sum of trade-level gross add-ons.

## 5.9 Alternative currency criteria for eligible cash variation margin in derivative transactions (panel H)

Panel H requests for additional data on alternative interpretations of the currency criterion as set out in paragraph 25(iii) of the Basel III leverage ratio framework for eligible cash variation margin *received* or *posted* in relation to derivative transactions (see paragraphs 25 and 26 of the Basel III leverage ratio framework).

The data included in rows 13 and 22 of panel A (where applicable under the operative accounting framework) of the template should reflect the interpretation given in Q1 of the FAQs on the Basel III leverage ratio framework. According to the said FAQ Q1 the variation margin in every currency specified in the derivative contract, governing qualifying master netting agreement, or the credit support annex to the qualifying master netting agreement meets the currency criterion.

Panel H requests data on two alternative currency criteria:

- Currency criterion 1:** for cash variation margin to be eligible, it must offset derivative market values whose associated cash flows will be settled in the same currency (currency of settlement). Hence, for each cash variation margin received (posted) in any currency X, banks have to determine whether the netting set contains a positive (negative) derivative market value in this given currency X. If it is the case, the cash variation margin meets the currency criterion.
- Currency criterion 2:** for cash variation margin to be eligible, the cash flows of all derivative contracts in the netting set must be settled in the currency of the variation margin. This implies

that for netting sets involving derivatives to be settled in more than one currency, no variation margin is eligible.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
126	D, J	Eligible cash variation margin received and offset against market values of derivative transactions (criterion 1)	Same as row 13 but applying stricter currency <b>criterion 1</b> specified above (as opposed to the interpretation specified in Q1 of the FAQs on the Basel III leverage ratio framework).
127	D, J	Eligible cash variation margin received and offset against market values of derivative transactions (criterion 2)	Same as row 13 but applying stricter currency <b>criterion 2</b> specified above (as opposed to the interpretation specified in Q1 of the FAQs on the Basel III leverage ratio framework).
128	D, J	Check row	This is a non-data entry row. It checks that eligible cash variation margin received and offset against the market values of the derivative transactions under the eligibility criterion 1 cannot be greater than under the criterion specified in Q1 of the FAQs on the Basel III leverage ratio framework and as reported in row 13.
129	D, J	Check row	This is a non-data entry row. It checks that eligible cash variation margin received and offset against the market values of the derivative transactions under the eligibility criterion 2 cannot be greater than under the criterion specified in Q1 of the document FAQs on the Basel III leverage ratio framework and as reported in row 13.
130	D, J	Check row	This is a non-data entry row. It checks that eligible cash variation margin received and offset against the market values of the derivative transactions under the eligibility criterion 2 cannot be greater than under the criterion 1.
132	D, J	Receivables for eligible cash variation margin provided in derivatives transactions (criterion 1)	Same as row 22, where applicable under the operative accounting framework, but applying stricter currency <b>criterion 1</b> specified above (as opposed to the interpretation specified in Q1 of the FAQs on the Basel III leverage ratio framework).
133	D, J	Receivables for eligible cash variation margin provided in derivatives transactions (criterion 2)	Same as row 22, where applicable under the operative accounting framework, but applying stricter currency <b>criterion 2</b> specified above (as opposed to the interpretation specified in Q1 of the FAQs on the Basel III leverage ratio framework).
134	D, J	Check row	This is a non-data entry row. It checks that the amount of receivables for eligible cash variation margin provided for derivative transactions under criterion 1 cannot be greater than under the criterion specified in Q1 of the FAQs on the Basel III leverage ratio framework and as reported in row 22.
135	D, J	Check row	This is a non-data entry row. It checks that the amount of receivables for eligible cash variation margin provided for derivative transactions under criterion 2 cannot be greater than under the criterion specified in Q1 of the FAQs on the Basel III leverage ratio framework and as reported in row 22.
136	D, J	Check row	This is a non-data entry row. It checks that that the amount of receivables for eligible cash variation margin provided for derivative transactions under criterion 2 cannot be greater than under criterion 1.

## 5.10 Memo items related to initial margin for centrally cleared derivative transactions (panel I)

Panel I requests additional data *on initial margin* that a **clearing member** (CM) bank collects from its clients for cleared derivative transactions. **By construction, a bank that is not a CM or a bank that is a CM but does not engage in clearing of client derivative transactions should report zero amounts in all the cells of panel I.**

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
142	D, J	Initial margin in the form of securities that a bank receives from clients for cleared derivative transactions	These cells include initial margin in the form of securities that a bank receives from clients for cleared transactions.
143	D, J	a. Amount of the cash initial margin that the bank passes on to an account in the name of the CCP	Report the amount of the cash initial margin that the bank passes on to a QCCP (eg deposits into a QCCP account). Provide additional details of this amount in rows 144 and 145.
144	D, J	i. Amount of the cash initial margin that remains on the bank's balance sheet	Report the amount of the cash initial margin that the bank passes on to a QCCP, but which continues to remain on the bank's balance sheet.
145	D, J	ii. Amount of the cash initial margin that is off the bank's balance sheet but continues to create an off-balance sheet exposure of the bank	Report the amount of the cash initial margin that the bank passes on to a QCCP and which is off the bank's balance sheet, but continues to create an off-balance sheet exposure of the bank. For example, this may be the case if a bank provides a guarantee to the client with regard to the value of the initial margin that is passed on to the QCCP.
146	D, J	b. Amount of the cash initial margin that is segregated from the bank's other assets	Report the amount of the initial margin (that the bank does not pass on to a QCCP) that is segregated from the bank's other assets. That is, the contractual provisions relating to this segregated initial margin mean that it may not be used, pledged or re-hypothecated by the bank for its own business purposes. However, such segregated margin may be used in accordance with the applicable customer protection rules, subject to the prior agreement with the clearing client.
147	D, J	c. Amount of the cash initial margin that is not segregated from the bank's other assets	Report the portion of the initial margin (that the bank does not pass on to a QCCP) that is not segregated from the bank's other assets, as described in row 146.
148	D, J	Initial margin in the form of cash that a bank receives from clients for centrally cleared derivative transactions	This is a non-data entry row. It calculates the full amount of initial margin in the form of cash that a bank receives from clients for cleared transactions, regardless whether such initial margin is included on the bank's balance sheet. The breakout of this amount is included in rows 143, 146 and 147.
149	D, J	a. Initial margin in the form of securities that a bank includes in its total Basel III leverage ratio exposure measure	Report the amount of initial margin in the form of securities that a bank includes in its total Basel III leverage ratio exposure measure.
150	D, J	b. Initial margin in the form of cash that a bank includes in its total Basel III leverage ratio exposure measure	Report the amount of initial margin in the form of cash that a bank includes in its total Basel III leverage ratio exposure measure.

Row	Column	Heading	Description
151	D, J	Initial margin that a bank includes in its total Basel III leverage ratio exposure measure	This is a non-data entry row. It calculates the amount of the initial margin received from the bank's clients for cleared transactions (in the form of cash or securities) that the bank includes in its total Basel III leverage ratio exposure measure. The breakout of this amount is included rows 149 and 150.

### 5.11 Business model categorisation (panel J)

Panel J provides additional data for the purposes of the categorisation of business models. The definitions for the line items correspond as far as possible with those provided in the Basel II framework (cross references as provided below).

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
157	J	Total exposures; of which:	This is a non-data entry row. Rows 158, 161 and 187 provide a breakdown of total exposures.
158	J	Total trading book exposures; of which:	This is a non-data entry row. Items in rows 159 and 160 provide a breakdown of the Basel III leverage ratio exposure amount for exposures that meet the definition in paragraphs 685 to 689(iii) of the Basel II framework.
159	J	Derivatives, SFTs	Basel III leverage ratio exposure amount for derivatives and SFT that belong to the trading book according to paragraphs 685 to 689(iii) of the Basel II framework.
160	J	Other trading book exposures	Basel III leverage ratio exposure amount for instruments that belong to the trading book according to paragraphs 685 to 689(iii) of the Basel II framework other than derivatives and SFT.
161	J	Total banking book exposures; of which:	This is a non-data entry row. Items in rows 162 to 164 provide a breakdown of the Basel III leverage ratio exposure amount for all exposures that do not meet the definition in paragraphs 685 to 689(iii) of the Basel II framework.
162	J	Derivatives, SFTs	Basel III leverage ratio exposure amount for derivatives and SFT.
163	J	Investments in covered bonds	Basel III leverage ratio exposure amount for covered bonds.
164	J	Other banking book exposures; of which:	This is a non-data entry row. Items in rows 165, 172, 173, 178 and 184 provide a breakdown of the Basel III leverage ratio exposure amount of banking book exposures other than derivatives, SFT and covered bonds.
165	J	Sovereigns; of which:	This is a non-data entry row. Basel III leverage ratio exposure amount for exposures which meet the definition in paragraph 229 of the Basel II framework, as well as Basel III leverage ratio exposures that meet the definition of claims on domestic PSEs and of exposures to MDBs in paragraph 230 of the Basel II framework. Items in rows 166, 170 and 171 provide a breakdown of the sovereign exposures.
166	J	Public sector entities (PSEs); of which:	Basel III leverage ratio exposure amount for exposures to PSEs referred to in paragraphs 229 and 230 of the Basel II framework.
167	J	PSE guaranteed by central government	Basel III leverage ratio exposure amount for PSE exposures guaranteed by central government (of which item, also to be included in row 166).

Row	Column	Heading	Description
168	J	PSEs not guaranteed by central government but treated as a sovereign under paragraph 229 of the Basel II framework	Basel III leverage ratio exposure amount for PSEs not guaranteed by central government but treated as a sovereign under paragraph 229 of the Basel II framework (of which item, also to be included in row 166).
169	J	Check row	This is a non-data entry row. It checks that the sum of the exposure amounts in rows 167 and 168 is smaller than or equal the amount of total PSE exposures.
170	J	MDBs	Basel III leverage ratio exposure amount for exposures to MDBs referred to in paragraphs 229 and 230 of the Basel II framework.
171	J	Other sovereign exposures	Basel III leverage ratio exposure amount for sovereigns exposures, excluding exposures to PSEs and MDBs.
172	J	Banks	Basel III leverage ratio exposure amount for exposures which meet the definition in paragraph 230 of the Basel II framework, excluding exposures to PSEs and MDBs.
173	J	Retail exposures; of which:	This is a non-data entry row. Items in rows 174 to 177 provide a breakdown of Basel III leverage ratio exposure amount for exposures which meet the definition in paragraphs 231 to 234 of the Basel II framework.
174	J	Residential real estate exposures	Basel III leverage ratio exposure amount for exposures which meet the definition in the second bullet of paragraph 231 of the Basel II framework.
175	J	SME exposures	Basel III leverage ratio exposure amount for exposures which meet the definition in the third bullet of paragraph 231 and in paragraph 232 of the Basel II framework.
176	J	Qualifying revolving retail exposures	Basel III leverage ratio exposure amount for exposures which meet the definition in paragraph 234 of the Basel II framework.
177	J	Other retail exposures	Basel III leverage ratio exposure amount for retail exposures other than residential real estate, SME and qualifying revolving retail exposures.
178	J	Corporate ; of which:	This is a non-data entry row. Items in rows 179 and 180 provide a breakdown of Basel III leverage ratio exposure amount for exposures which meet the definition in paragraphs 218 to 228 of the Basel II framework.
179	J	Financial	Basel III leverage ratio exposure amount for corporate exposures which meet the definition in paragraph 102 of the Basel III framework, excluding exposures to banks.
180	J	Non-financial; of which:	This is a non-data entry row. Items in rows 181 to 183 provide a breakdown of non-financial exposures.
181	J	SME exposures	Basel III leverage ratio exposure amount for exposures which meet the definition in paragraph 273 of the Basel II framework excluding exposures that meet the definition in paragraphs 231, third bullet, and 232.
182	J	Commercial real estate	Basel III leverage ratio exposure amount for commercial real estate exposures which meet the definition in paragraphs 219 to 228 of the Basel II framework.
183	J	Other corporate non-financial	Basel III leverage ratio exposure amount for non-financial corporate exposures which meet the definition in paragraphs 219 to 228 of the Basel II framework, other than SME and commercial real estate exposures.

Row	Column	Heading	Description
184	J	Other exposures (eg equity and other non-credit obligation assets); of which:	Basel III leverage ratio exposure amount for banking book exposures other than sovereigns, banks, retail and corporate exposures.
185	J	Securitisation exposures	Basel III leverage ratio exposure amount for securitisation exposures (of which item, also to be included in row 184).
186	J	Check row	This is a non-data entry row. It checks that the exposure amount for securitisation exposures is smaller than or equal the amount of total other exposures.
187	J	Exposure amounts resulting from the additional treatment for credit derivatives	Basel III leverage ratio exposure amount for capped notional amounts for credit derivatives (panel E).
188	J	Check row	This is a non-data entry row. It checks that total in row 157 equals total exposures in panels A, B and E.
190	J	Memo item: Trade finance exposures	Basel III leverage ratio exposure amount for issued and confirmed import and export letters of credit which are short-term and self-liquidating, and similar transactions. Trade finance exposures should also be included in one of the rows 158 to 185.

Banks should report all exposure values consistent with the calculations for the purposes of the Basel III leverage ratio in the rest of this worksheet. As a result, row 157 should equal total exposures in panels A, B and E. Unless mentioned otherwise, the input rows in this panel are mutually exclusive. Rows 157, 158, 161, 164, 165, 173, 178 and 180 are non-data entry rows, and rows 169, 186 and 188 include checks.

## 5.12 EU-specific (panel K)

**This panel should only be completed by banks in the European Union.**

The data item described below refers to the same derivative exposures reported in the main Basel III leverage ratio reporting template of the Basel III monitoring exercise. However, instead of applying the Current Exposure Method (CEM) of the Basel II framework, institutions shall apply the *Original Exposure Method* (OEM) as set forth in Article 275 of the *Capital Requirements Regulation* (CRR), as published in the *Official Journal of the European Union* in June 2013, to determine the values reported in cell J196. Institutions that do not use the OEM shall leave cell J196 blank.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
196	J	Exposure value when applying the Original Exposure Method	This cell provides the leverage ratio exposure value of derivatives calculated according to the Original Exposure Method set forth in Article 275 of the CRR as published in the Official Journal of the European Union in June 2013.
197	J	Check row	This is a non-data entry row. It checks that J196 does not exceed L39.

## 6. Liquidity

This chapter of the Instructions regards the LCR and NSFR. The data collection is predominantly aimed at monitoring the LCR as specified in *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring*

tools, published by the Committee in January 2013 and the NSFR as specified in *Basel III: The Net Stable Funding Ratio*, published by the Committee in October 2014. These documents are referred to in the remainder of this chapter as the “Basel III LCR standards” and “Basel III NSFR standards”, respectively.

Purpose of this exercise is to collect information that enables the Committee to monitor banks migration towards compliance with the LCR and NSFR as specified in the Basel III LCR standards and Basel III NSFR standards, respectively.

The liquidity data are collected in two templates: one for the LCR and one for the NSFR. The template for the LCR is built up the same way as the LCR section in the Basel III LCR standards.

All specifications and criteria specified in the Basel III LCR standards and the Basel III NSFR standards apply. The instructions indicate which paragraph of these documents the data requested refer to. If the instruction contradicts these documents, the standards overrule the instructions. Where the instructions provide further specification on the requested data beyond the standards, however, these instructions should be followed.

The template should be filled in on a consolidated basis following the existing scope of application set out in Part I (Scope of Application) of the Basel II framework (Basel III LCR standards paragraph 164). Consistent with all other worksheets, data for the “LCR” and “NSFR” worksheets should be reported in the most convenient currency. The currency which has been used should be recorded in the “General Info” worksheet (see Section 2.2).

## 6.1 Liquidity coverage ratio (LCR)

The LCR has two components:

- (a) The value of the stock of high-quality liquid assets (HQLA) in stressed conditions (see sub-section 6.1.1 below); and
- (b) Total net cash outflows, calculated according to the scenario parameters set by the supervisors. The term “total net cash outflows” is defined as “total expected cash outflows” (see sub-section 6.1.2 below) minus “total expected cash inflows” (see sub-section 6.1.3 below) in the specified stress scenario for the subsequent 30 calendar days (the stressed period).

### 6.1.1 Liquid assets (panel A)

**Operational requirements** (paragraphs 28 to 40 in the Basel III LCR standards): All assets in the stock are subject to the following operational requirements. These operational requirements are designed to ensure that the stock of HQLA is managed in such a way that the bank can, and is able to demonstrate that it can, immediately use the stock of assets as a source of contingent funds that is available for the bank to convert into cash through outright sale or repo, to fill funding gaps between cash inflows and outflows at any time during the 30 day stress period, with no restriction on the use of the liquidity generated.

All assets in the stock should be unencumbered, per the definition below. Banks should exclude from the stock those assets that, although meeting the definition of “unencumbered” specified below, the bank would not have the operational capability to monetise to meet outflows during the stressed period. Operational capability to monetise assets requires having procedures and appropriate systems in place, including providing the function noted below with access to all necessary information to execute monetisation of any asset at any time. Monetisation of the asset must be executable, from an operational perspective, in the standard settlement period for the asset class in the relevant jurisdiction.

All assets accounted for in this section should be under the control of the function charged with managing the liquidity of the bank (eg the treasurer), meaning the function has the continuous authority, and legal and operational capability, to monetise any asset in the stock. Control must be evidenced either by maintaining assets in a separate pool managed by the function with the sole intent

for use as a source of contingent funds, or by demonstrating that the function can monetise the asset at any point in the 30 day stress period and that the proceeds of doing so are available to the function throughout the 30 day stress period without directly conflicting with a stated business or risk management strategy. For example, an asset should not be included in the stock if the sale of that asset, without replacement throughout the 30 day period, would remove a hedge that would create an open risk position in excess of internal limits.

A bank is permitted to hedge the market risk associated with ownership of the stock of liquid assets and still include the assets in the stock. If it chooses to hedge the market risk, the bank should take into account (in the market value applied to each asset) the cash outflow that would arise if the hedge were to be closed out early (in the event of the asset being sold).

In accordance with Principle 9 of the *Sound Principles* a bank "should monitor the legal entity and physical location where collateral is held and how it may be mobilised in a timely manner". Specifically it should have a policy in place that identifies legal entities, geographical locations, currencies and specific custodial or bank accounts where HQLA are held. In addition the bank should determine whether any such assets should be excluded for operational reasons and, therefore, have the ability to determine the composition of its stock on a daily basis.

Qualifying HQLA that are held to meet statutory liquidity requirements at the legal entity or sub-consolidated level (where applicable) may only be included in the stock at the consolidated level to the extent that the related risks (as measured by the legal entity's or sub-consolidated group's net cash outflows in the LCR) are also reflected in the consolidated LCR. Any surplus of HQLA held at the legal entity can only be included in the consolidated stock if those assets would also be freely available to the consolidated (parent) entity in times of stress.

In assessing whether assets are freely transferable for regulatory purposes, banks should be aware that assets may not be freely available to the consolidated entity due to regulatory, legal, tax, accounting or other impediments. Assets held in legal entities without market access should only be included to the extent that they can be freely transferred to other entities that could monetise the assets.

In certain jurisdictions, large, deep and active repo markets do not exist for eligible asset classes, and therefore such assets are likely to be monetised through outright sale. In these circumstances, a bank should exclude from the stock of HQLA those assets where there are impediments to sale, such as large fire-sale discounts which would cause it to breach minimum solvency requirements, or requirements to hold such assets, including, but not limited to, statutory minimum inventory requirements for market-making.

Banks should not include in the stock of HQLA any assets, or liquidity generated from assets, they have received under right of rehypothecation, if the beneficial owner has the contractual right to withdraw those assets during the 30 day stress period.

Assets received as collateral for derivatives transactions that are not segregated and legally able to be rehypothecated may be included in the stock of HQLA provided that the bank records an appropriate outflow for the associated risks as set out in the Basel III LCR standards paragraph 116.

As part of the stock, the liquid assets cannot be counted as cash inflows even if they mature within 30 days (ie no double-counting is allowed).

**Definition of unencumbered:** free of legal, regulatory, contractual or other restrictions on the ability of the bank to liquidate, sell, transfer, or assign the asset. An asset in the stock should not be pledged by the bank (either explicitly or implicitly) to secure, collateralise or credit-enhance any transaction, nor be designated to cover operational costs (such as rents and salaries). However, assets that the bank received as collateral in reverse repo and securities financing transactions can be considered as part of the stock if they are held at the bank, have not been rehypothecated, and are legally and contractually available for the bank's use. In addition, assets which qualify for the stock of HQLA that have been repositioned or deposited with, or pledged to, the central bank or a public sector

entity (PSE) but have not been used to generate liquidity may be included in the stock. If a bank has deposited, pre-positioned or pledged Level 1, Level 2 and other assets in a collateral pool and no specific securities are assigned as collateral for any transactions, it may assume that assets are encumbered in order of increasing liquidity value in the LCR, ie assets ineligible for the LCR are assigned first, followed by Level 2B, then other Level 2 and finally Level 1. This determination must be made in compliance with any requirements, such as concentration or diversification, of the central bank or PSE.

**Criteria of liquid assets:** To qualify as a “high quality liquid asset”, assets should be liquid in markets during a time of stress and, with the exception of Level 2B assets, ideally be central bank eligible. Such assets should generally possess the fundamental and market-related characteristics specified in paragraphs 24(i) and 24(ii) of the Basel III LCR standards. Securities that can be included in the stock of HQLA should meet the following common criteria (note that additional security-specific criteria are included in the individual line item descriptions):

- they should neither be issued by, nor be an obligation of, a financial institution<sup>42</sup> or any of its affiliated entities (except in the case of covered bonds and RMBS which should not be issued by the bank itself or any of its affiliated entities);
- they should be traded in large, deep and active repo or cash markets characterised by a low level of concentration;
- they should have a proven record as a reliable source of liquidity in the markets (repo or sale) even during stressed market conditions; and
- with the exception of Level 2B assets, they should ideally be central bank eligible.<sup>43</sup>

Row	Heading	Description	Basel III LCR standards reference
<b>A)a) Level 1 assets</b>			
6	Coins and banknotes	Coins and banknotes currently held by the bank that are immediately available to meet obligations. Deposits placed at, or receivables from, other institutions should be reported in the inflows section.	50(a)
7	Total central bank reserves; of which:	Total amount held in central bank reserves (including required reserves) including banks' overnight deposits with the central bank, and term deposits with the central bank that: (i) are explicitly and contractually repayable on notice from the depositing bank; or (ii) that constitute a loan against which the bank can borrow on a term basis or on an overnight but automatically renewable basis (only where the bank has an existing deposit with the relevant central bank). Other term deposits with central banks are not eligible for the stock of HQLA; however, if the term expires within 30 days, the term deposit could be considered as an inflow (reported in line 305).	50(b), footnote 12
8	part of central bank reserves that can be drawn in times of stress	Total amount held in central bank reserves and overnight and term deposits at the same central bank (as reported in line 7) which can be drawn down in times of stress. Amounts required to be installed in the central bank reserves within 30 days should be reported in line 166 of the outflows section. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	50(b), footnote 13

<sup>42</sup> Financial institutions, in this context, include banks, securities firms and insurance companies.

<sup>43</sup> Central bank eligibility alone is not a sufficient basis for determining which assets qualify as HQLA.

Row	Heading	Description	Basel III LCR standards reference
Securities with a 0% risk weight:			
11	issued by sovereigns	Marketable debt securities issued by sovereigns, receiving a 0% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53).	50(c)
12	guaranteed by sovereigns	Marketable debt securities guaranteed by sovereigns, receiving a 0% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53).	50(c)
13	issued or guaranteed by central banks	Marketable debt securities issued or guaranteed by central banks, receiving a 0% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53).	50(c)
14	issued or guaranteed by PSEs	Marketable debt securities issued or guaranteed by public sector entities, receiving a 0% risk weight under the standardised approach to credit risk of the Basel II framework (paragraphs 57 and 58).	50(c)
15	issued or guaranteed by BIS, IMF, ECB and European Community or MDBs	Marketable debt securities issued or guaranteed by the Bank for International Settlements, the International Monetary Fund, the European Central Bank (ECB) and European Community. or multilateral development banks (MDBs), receiving a 0% risk weight under the standardised approach to credit risk of the Basel II framework (paragraphs 56 and 59).	50(c)
For non-0% risk-weighted sovereigns:			
17	sovereign or central bank debt securities issued in domestic currency by the sovereign or central bank in the country in which the liquidity risk is taken or in the bank's home country	Debt securities issued by the sovereign or central bank in the domestic currency of that country, that are not eligible for inclusion in line items 11 or 13 because of the non-0% risk weight of that country.  Banks are only permitted to include debt issued by sovereigns or central banks of their home jurisdictions or, to the extent of the liquidity risk taken in other jurisdictions, of those jurisdictions.	50(d)
18	domestic sovereign or central bank debt securities issued in foreign currencies, up to the amount of the bank's stressed net cash outflows in that specific foreign currency stemming from the bank's operations in the jurisdiction where the bank's liquidity risk is being taken	Debt securities issued by the domestic sovereign or central bank in foreign currencies (that are not eligible for inclusion in line items 11 or 13 because of the non-0% risk weight), up to the amount of the bank's stressed net cash outflows in that specific foreign currency stemming from the bank's operations in the jurisdiction where the bank's liquidity risk is being taken.	50(e)
Total Level 1 assets:			
19	Total stock of Level 1 assets	Total outright holdings of Level 1 assets plus all borrowed securities of Level 1 assets	49
20	Adjustment to stock of Level 1 assets	Adjustment to the stock of Level 1 assets for purpose of calculating the caps on Level 2 and Level 2B assets.	Annex 1
21	Adjusted amount of Level 1 assets	Adjusted amount of Level 1 assets used for the purpose of calculating the adjustment to the stock of HQLA due to the cap on Level 2 assets in line item 50 and the cap on Level 2B assets in line item 49.	Annex 1

Row	Heading	Description	Basel III LCR standards reference
<b>A)b) Level 2A assets</b>			
Securities with a 20% risk weight:			
25	issued by sovereigns	Marketable debt securities issued by sovereigns, receiving a 20% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53), satisfying all the conditions listed in paragraph 52(a) of the Basel III LCR standards, and not included in lines 17 or 18.	52(a)
26	guaranteed by sovereigns	Marketable debt securities guaranteed by sovereigns, receiving a 20% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53), satisfying all the conditions listed in paragraph 52(a) of the Basel III LCR standards.	52(a)
27	issued or guaranteed by central banks	Marketable debt securities issued or guaranteed by central banks, receiving a 20% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 53), satisfying all the conditions listed in paragraph 52(a) of the Basel III LCR standards, and not included in lines 17 or 18.	52(a)
28	issued or guaranteed by PSEs	Marketable debt securities issued or guaranteed by PSEs, receiving a 20% risk weight under the standardised approach to credit risk of the Basel II framework (paragraphs 57 and 58), satisfying all the conditions listed in paragraph 52(a) of the Basel III LCR standards.	52(a)
29	issued or guaranteed by MDBs	Marketable debt securities issued or guaranteed by multilateral development banks, receiving a 20% risk weight under the standardised approach to credit risk of the Basel II framework (paragraph 59), satisfying all the conditions listed in paragraph 52(a) of the Basel III LCR standards.	52(a)
Non-financial corporate bonds:			
30	rated AA- or better	Non-financial corporate bonds (including commercial paper) (i) having a long-term credit assessment by a recognised ECAI of at least AA- or in the absence of a long term rating, a short-term rating equivalent in quality to the long-term rating or (ii) not having a credit assessment by a recognised ECAI but are internally rated as having a probability of default (PD) corresponding to a credit rating of at least AA-, satisfying the conditions listed in paragraph 52(b) of the Basel III LCR standards.	52(b)
Covered bonds (not self-issued):			
31	rated AA- or better	Covered bonds, not self-issued, (i) having a long-term credit assessment by a recognised ECAI of at least AA- or in the absence of a long term rating, a short-term rating equivalent in quality to the long-term rating or (ii) not having a credit assessment by a recognised ECAI but are internally rated as having a probability of default (PD) corresponding to a credit rating of at least AA-, satisfying the conditions listed in paragraph 52(b) of the Basel III LCR standards.	52(b)
Total Level 2A assets:			
32	Total stock of Level 2A assets	Total outright holdings of Level 2A assets plus all borrowed securities of Level 2A assets, after applying haircuts	52(a),(b)
33	Adjustment to stock of Level 2A assets	Adjustment to the stock of Level 2A assets for purpose of calculating the caps on Level 2 and Level 2B assets.	Annex 1

Row	Heading	Description	Basel III LCR standards reference
34	Adjusted amount of Level 2A assets	Adjusted amount of Level 2A assets used for the purpose of calculating the adjustment to the stock of HQLA due to the cap on Level 2 assets in line item 50 and the cap on Level 2B assets in line item 49.	Annex 1
<b>A)c) Level 2B assets</b>			
<b>Please refer to the instructions from your supervisor for the specification of items in the Level 2B assets subsection.</b>			
In choosing to include any Level 2B assets in Level 2, national supervisors are expected to ensure that (i) such assets fully comply with the qualifying criteria set out Basel III LCR standards, paragraph 54; and (ii) banks have appropriate systems and measures to monitor and control the potential risks (eg credit and market risks) that banks could be exposed to in holding these assets.			
37	Residential mortgage backed securities (RMBS), rated AA or better	RMBS that satisfy all of the conditions listed in paragraph 54(a) of the Basel III LCR standards.	54(a)
38	Non-financial corporate bonds, rated BBB- to A+	Non-financial corporate debt securities (including commercial paper) rated BBB- to A+ that satisfy all of the conditions listed in paragraph 54(b) of the Basel III LCR standards.	54(b)
39	Non-financial common equity shares	Non-financial common equity shares that satisfy all of the conditions listed in paragraph 54(c) of the Basel III LCR standards.	54(c)
40	Sovereign or central bank debt securities, rated BBB- to BBB+	Sovereign or central bank debt securities, rated BBB- to BBB+, that are not already included in lines 17 or 18, per FAQ 3(a) in Basel Committee on Banking Supervision, <i>Frequently Asked Questions on Basel III's January 2013 Liquidity Coverage Ratio</i> , April 2014, <a href="http://www.bis.org/publ/bcbs284.htm">www.bis.org/publ/bcbs284.htm</a> .	BCBS FAQ 3(a)
Total Level 2B assets:			
41	Total stock of Level 2B RMBS assets	Total outright holdings of Level 2B RMBS assets plus all borrowed securities of Level 2B RMBS assets, after applying haircuts.	54(a)
42	Adjustment to stock of Level 2B RMBS assets	Adjustment to the stock of Level 2B RMBS assets for purpose of calculating the caps on Level 2 and Level 2B assets.	Annex 1
43	Adjusted amount of Level 2B RMBS assets	Adjusted amount of Level 2B RMBS assets used for the purpose of calculating the adjustment to the stock of HQLA due to the cap on Level 2 assets in line item 50 and the cap on Level 2B assets in line item 49.	Annex 1
44	Total stock of Level 2B non-RMBS assets	Total outright holdings of Level 2B non-RMBS assets plus all borrowed securities of Level 2B non-RMBS assets, after applying haircuts.	54(b),(c)
45	Adjustment to stock of Level 2B non-RMBS assets	Adjustment to the stock of Level 2B non-RMBS assets for purpose of calculating the caps on Level 2 and Level 2B assets.	Annex 1
46	Adjusted amount of Level 2B non-RMBS assets	Adjusted amount of Level 2B non-RMBS assets used for the purpose of calculating the adjustment to the stock of HQLA due to the cap on Level 2 assets in line item 50 and the cap on Level 2B assets in line item 49.	Annex 1
47	Adjusted amount of Level 2B (RMBS and non-RMBS) assets	Sum of adjusted amount of Level 2B RMBS assets and adjusted amount of Level 2B non-RMBS assets	Annex 1
49	Adjustment to stock of HQLA due to cap on Level 2B assets	Adjustment to stock of HQLA due to 15% cap on Level 2B assets.	47, Annex 1

Row	Heading	Description	Basel III LCR standards reference
50	Adjustment to stock of HQLA due to cap on Level 2 assets	Adjustment to stock of HQLA due to 40% cap on Level 2 assets.	51, Annex 1
<b>A)d) Total stock of HQLA</b>			
53	Total stock of HQLA	Total stock of HQLA after taking haircuts and the adjustment for the caps on Level 2 and Level 2B assets into account.	
57	Assets held at the entity level, but excluded from the consolidated stock of HQLA	<p>Any surplus of liquid assets held at the legal entity that is excluded (ie not reported in lines above) from the consolidated stock because of reasonable doubts that they would be freely available to the consolidated (parent) entity in times of stress. Eligible liquid assets that are held by a legal entity being consolidated to meet its local LCR requirements (where applicable) can be included in the consolidated LCR to the extent that such liquid assets are used to cover the total net cash outflows of that entity, notwithstanding that the assets are subject to liquidity transfer restrictions. If the liquid assets held in excess of the total net cash outflows of the legal entity are not transferable, such surplus liquidity should be excluded from the standard and reported in this line. For practical reasons, the liquidity transfer restrictions to be accounted for in the consolidated ratio are confined to existing restrictions imposed under applicable laws, regulations and supervisory requirements.</p> <p>Banks should report the market value of Level 1 assets excluded in column D, the market value of Level 2A assets excluded in column E, the market value of Level 2B RMBS assets excluded in column F and the market value of Level 2B non-RMBS assets excluded in column G.</p>	36–37, 171–172
58	of which, can be included in the consolidated stock by the time the standard is implemented	Any assets reported in row 57 but which the bank believes will, through management actions executed prior to the implementation date of the standard, meet the eligibility requirements for the stock of liquid assets.	
60	Assets excluded from the stock of HQLA due to operational restrictions	<p>Level 1 and Level 2 assets held by the bank that are not included in the stock of HQLA (ie not reported in lines above), because of the operational restrictions noted in paragraphs 31-34 and 38-40 of the Basel III LCR standards.</p> <p>Banks should report the market value of Level 1 assets excluded in column D, the market value of Level 2A assets excluded in column E, the market value of Level 2B RMBS assets excluded in column F and the market value of Level 2B non-RMBS assets excluded in column G.</p>	31–34, 38–40
61	of which, can be bought back into the qualifying stock by the time the standard is implemented	Any assets reported in row 60 but which the bank believes will, through management actions executed prior to the implementation date of the standard, meet the eligibility requirements for the stock of liquid assets.	

Row	Heading	Description	Basel III LCR standards reference
<p><b>A)e) Treatment for jurisdictions with insufficient HQLA</b>  <b>Please refer to the instructions from your supervisor for the specification of this subsection.</b></p> <p>Some jurisdictions may not have sufficient supply of Level 1 assets (or both Level 1 and Level 2 assets) in their domestic currency to meet the aggregate demand of banks with significant exposures in this currency (note that an insufficiency in Level 2 assets alone does not qualify for the alternative treatment). To address this situation, the Committee has developed alternative treatments for the holdings in the stock of HQLA, which are expected to apply to a limited number of currencies and jurisdictions.</p> <p>Eligibility for such alternative treatment will be judged on the basis of qualifying criteria set out in Annex 2 of the Basel III LCR standards and will be determined through an independent peer review process overseen by the Committee. The purpose of this process is to ensure that the alternative treatments are only used when there is a true shortfall in HQLA in the domestic currency relative to the needs in that currency.</p> <p>There are three potential options for this treatment (line items 68 to 72). <b>If your supervisor intends to adopt this treatment, it is expected that they provide specific instructions to the banks under its supervision for reporting the relevant information under the option it intends to use.</b> To avoid double-counting, if an asset has already been included in the eligible stock of HQLA, it should not be reported under these options.</p>			
<p><b>Option 1 – Contractual committed liquidity facilities from the relevant central bank, with a fee</b></p> <p>These facilities should not be confused with regular central bank standing arrangements. In particular, these facilities are contractual arrangements between the central bank and the commercial bank with a maturity date which, at a minimum, falls outside the 30-day LCR window. Further, the contract must be irrevocable prior to maturity and involve no ex-post credit decision by the central bank.</p> <p>Such facilities are only permissible if there is also a fee for the facility which is charged regardless of the amount, if any, drawn down against that facility and the fee is set so that banks which claim the facility line to meet the LCR, and banks which do not, have similar financial incentives to reduce their exposure to liquidity risk. That is, the fee should be set so that the net yield on the assets used to secure the facility should not be higher than the net yield on a representative portfolio of Level 1 and Level 2 assets, after adjusting for any material differences in credit risk.</p>			
68	Option 1 – Contractual committed liquidity facilities from the relevant central bank	Only include the portion of facility that is secured by available collateral accepted by the central bank, after haircut specified by the central bank. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	58
<p><b>Option 2 – Foreign currency HQLA to cover domestic currency liquidity needs</b></p> <p>For currencies that do not have sufficient HQLA, supervisors may permit banks that evidence a shortfall of HQLA in the domestic currency (which would match the currency of the underlying risks) to hold HQLA in a currency that does not match the currency of the associated liquidity risk, provided that the resulting currency mismatch positions are justifiable and controlled within limits agreed by their supervisors.</p> <p>To account for foreign exchange risk associated with foreign currency HQLA used to cover liquidity needs in the domestic currency, such liquid assets should be subject to a minimum haircut of 8% for major currencies that are active in global foreign exchange markets. For other currencies, supervisors should increase the haircut to an appropriate level on the basis of historical (monthly) exchange rate volatilities between the currency pair over an extended period of time. If the domestic currency is formally pegged to another currency under an effective mechanism, the haircut for the pegged currency can be lowered to a level that reflects the limited exchange rate risk under the peg arrangement. Haircuts for foreign currency HQLA used under Option 2 would apply only to HQLA in excess of a threshold specified by supervisors which is not greater than 25% that are used to cover liquidity needs in the domestic currency.</p>			
70	Level 1 assets	Subject to the limit mentioned above, the aggregate amount of the excess of Level 1 assets in a given foreign currency or currencies that can be used to cover the associated liquidity need of the domestic currency. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	59
71	Level 2 assets	Subject to the limit mentioned above, the aggregate amount of the excess of Level 2 assets in a given foreign currency or currencies that can be used to cover the associated liquidity need of the domestic currency. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	59

Row	Heading	Description	Basel III LCR standards reference
<b>Option 3 – Additional use of Level 2 assets with a higher haircut</b>			
This option addresses currencies for which there are insufficient Level 1 assets, as determined by the qualifying principles and criteria, but where there are sufficient Level 2A assets. In this case, supervisors may choose to allow banks that evidence a shortfall of liquid assets in the domestic currency (to match the currency of the liquidity risk incurred) to hold additional Level 2A assets in the stock. These additional Level 2A assets should be subject to a minimum 20% – ie 5% higher than the 15% haircut applicable to Level 2A assets that are included in the 40% cap. Any Level 2B assets held by the bank would remain subject to the cap of 15%, regardless of the amount of other Level 2 assets held.			
72	Option 3 – Additional use of Level 2 assets with a higher haircut	Assets reported in lines 25 to 31 that are <b>not</b> counted towards the regular stock of HQLA because of the cap on Level 2 assets. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	62
<b>Total usage of alternative treatment</b>			
73	Total usage of alternative treatment (post-haircut) before applying the cap	Sum of the usage of alternative treatment should be equal to total outright holdings and all borrowed securities under different options. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	
74	Cap on usage of alternative treatment	<b>Please refer to the instructions from your supervisor for the specification of this item.</b>	
75	Total usage of alternative treatment (post-haircut) after applying the cap	The lower of the cap and eligible alternative treatment (post-haircut) before applying the cap. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	
<b>A)f) Total stock of HQLA plus usage of alternative treatment</b>			
78	Total stock of HQLA plus usage of alternative treatment	Sum of stock of HQLA and usage of alternative treatment after cap.	

### 6.1.2 Outflows, Liquidity Coverage Ratio (LCR) (panel B1)

This section calculates the total expected cash outflows in the LCR stress scenario for the subsequent 30 calendar days. They are calculated by multiplying the outstanding balances of various categories or types of liabilities and off-balance sheet commitments by the rates at which they are expected to run off or to be drawn down (Basel III LCR standards paragraph 69).

Where there is potential that an item could be reported in multiple outflow categories, (eg committed liquidity facilities granted to cover debt maturing within the 30 calendar day period), a bank only has to assume up to the maximum contractual outflow for that product (Basel III LCR standards paragraph 72).

Row	Heading	Description	Basel III LCR standards reference
<b>a)</b>	<b>Retail deposit run-off</b>		
	<p>Retail deposits are defined as deposits placed with a bank by a natural person. Deposits from legal entities, sole proprietorships and partnerships are captured in wholesale deposit categories. Retail deposits reported in lines 88 to 108 include demand deposits and term deposits maturing in or with a notice period up to 30 days.</p> <p>Term deposits with a residual contractual maturity greater than 30 days which may be withdrawn within 30 days without entailing a significant withdrawal penalty materially greater than the loss of interest, should be considered to mature within the 30-day horizon and should also be included in lines 88 to 108 as appropriate. If a portion of the term deposit can be withdrawn without incurring such a penalty, only that portion should be treated as a demand deposit. The remaining balance of the deposit should be treated as a term deposit.</p> <p>Notes, bonds and other debt securities sold exclusively to the retail market and held in retail accounts can be reported in the appropriate retail deposit category (Basel III LCR standards paragraph 110). To be treated in this manner, it is not sufficient that the debt instruments are specifically designed and marketed to retail customers. Rather there should be limitations placed such that those instruments cannot be bought and held by parties other than retail customers.</p> <p>Per paragraph 76 of the Basel III LCR standards, an “effective deposit insurance scheme” refers to a scheme (i) that guarantees that it has the ability to make prompt payouts, (ii) for which the coverage is clearly defined and (iii) of which public awareness is high. The deposit insurer in an effective deposit insurance scheme has formal legal powers to fulfil its mandate and is operationally independent, transparent and accountable. A jurisdiction with an explicit and legally binding sovereign deposit guarantee that effectively functions as deposit insurance can be regarded as having an effective deposit insurance scheme.</p>		
84	Total retail deposits; of which	Total retail deposits as defined above.	73–84
85	Insured deposits; of which:	The portion of retail deposits that are fully insured by an effective deposit insurance scheme.	75–78
86	in transactional accounts; of which:	Total insured retail deposits in transactional accounts (eg accounts where salaries are automatically credited).	75, 78
87	eligible for a 3% run-off rate; of which:	The amount of insured transactional retail deposits that are in jurisdictions where the supervisor chooses to apply a 3% run-off rate given the deposits are fully insured by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	78
88	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 87, the amount that <b>are</b> in the reporting bank's home jurisdiction.	78
89	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 87, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	78
90	eligible for a 5% run-off rate; of which:	The amount of insured transactional retail deposits that are in jurisdictions where the supervisor does <b>not</b> choose to apply a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	75
91	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 90, the amount that <b>are</b> in the reporting bank's home jurisdiction.	75
92	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 90, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	75
93	in non-transactional accounts with established relationships that make deposit withdrawal highly unlikely; of which:	Total insured retail deposits in non-transactional accounts where the customer has another relationship with the bank that would make deposit withdrawal highly unlikely.	75, 78

Row	Heading	Description	Basel III LCR standards reference
94	eligible for a 3% run-off rate; of which:	The amount of insured non-transactional established relationship retail deposits that are in jurisdictions where the supervisor chooses to apply a 3% run-off rate given the deposits are fully insured by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	78
95	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 94, the amount that <b>are</b> in the reporting bank's home jurisdiction.	78
96	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 94, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	78
97	eligible for a 5% run-off rate; of which:	The amount of insured non-transactional established relationship retail deposits that are in jurisdictions where the supervisor does not choose to apply a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	75
98	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 97, the amount that <b>are</b> in the reporting bank's home jurisdiction.	75
99	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 97, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	75
100	in non-transactional and non-relationship accounts	Insured retail deposits in non-transactional accounts where the customer does <b>not</b> have another relationship with the bank that would make deposit withdrawal highly unlikely.	79
101	Uninsured deposits	The portion of retail deposits that are non-maturing or mature within 30 days that are not fully insured by an effective deposit insurance scheme (ie all retail deposits not reported in lines 88 to 100, excluding any deposits included in lines 103 to 105).	79
102	Additional deposit categories with higher run-off rates as specified by supervisor	Other retail deposit categories, as defined by the supervisor. These amounts should <b>not</b> be included in the lines above.	79
103	Category 1	As defined by supervisor	79
104	Category 2	As defined by supervisor	79
105	Category 3	As defined by supervisor	79
106	Term deposits (treated as having >30 day remaining maturity); of which	Retail deposits with a residual maturity or withdrawal notice period greater than 30 days where the depositor has no legal right to withdraw deposits within 30 days, or where early withdrawal results in a significant penalty that is materially greater than the loss of interest.	82–84
107	With a supervisory run-off rate	As defined by supervisor.	84
108	Without supervisory run-off rate	All other term retail deposits treated as having > 30 day remaining maturity as defined in line 106.	82

**b) Unsecured wholesale funding run-off**

Unsecured wholesale funding is defined as liabilities and general obligations that are raised from non-natural persons (ie legal entities, including sole proprietorships and partnerships) and are **not** collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution, excluding derivatives.

Wholesale funding included in the LCR is defined as all funding that is callable within the LCR's 30-day horizon or that has its earliest possible contractual maturity date within this horizon (such as maturing term deposits and unsecured debt securities) as well as funding with an undetermined maturity. This includes all funding with options that are exercisable at the investor's discretion within the 30-day horizon. It also includes funding with options exercisable at the

Row	Heading	Description	Basel III LCR standards reference
		<p>bank's discretion where the bank's ability not to exercise the option is limited for reputational reasons. In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date and within the 30-day horizon, such liabilities should be included in the appropriate outflows category.</p> <p>Small business customers</p> <p>Unsecured wholesale funding provided by small business customers consists of deposits and other extensions of funds made by non-financial small business customers. "Small business customers" are defined in line with the definition of loans extended to small businesses in paragraph 231 of the Basel II framework that are managed as retail exposures and are generally considered as having similar liquidity risk characteristics to retail accounts, provided the total aggregated funding raised from the small business customer is less than €1 million (on a consolidated basis where applicable) (Basel III LCR standards paragraph 90).</p> <p>"Aggregated funding" means the gross amount (ie not netting any form of credit extended to the legal entity) of all forms of funding (eg deposits or debt securities or similar derivative exposure for which the counterparty is known to be a small business customer) (Basel III LCR standards footnote 41).</p> <p>Applying the limit on a consolidated basis means that where one or more small business customers are affiliated with each other, they may be considered as a single creditor such that the limit is applied to the total funding received by the bank from this group of customers (Basel III LCR standards footnote 41).</p> <p>Where a bank does not have any exposure to a small business customer that would enable it to use the definition under paragraph 231 of the Basel II framework, the bank may include such a deposit in this category provided that the total aggregate funding raised from the customer is less than €1 million (on a consolidated basis where applicable) and the deposit is managed as a retail deposit. This means that the bank treats such deposits in its internal risk management systems consistently over time and in the same manner as other retail deposits, and that the deposits are not individually managed in a way comparable to larger corporate deposits.</p> <p>Term deposits from small business customers with a residual contractual maturity of greater than 30 days which can be withdrawn within 30 days without a significant withdrawal penalty materially greater than the loss of interest should be considered to fall within the 30-day horizon and should also be included in lines 117 to 137 as appropriate. If a portion of the term deposit can be withdrawn without incurring such a penalty, only that portion should be treated as a demand deposit. The remaining balance of the deposit should be treated as a term deposit.</p>	
112	Total unsecured wholesale funding		85–111
113	Total funding provided by small business customers; of which:	Total small business customer deposits as defined above.	89–92
114	Insured deposits; of which:	The portion of deposits or other forms of unsecured wholesale funding which are provided by non-financial small business customers and are non-maturing or mature within 30 days that are fully insured by an effective deposit insurance scheme.	89, 75–78
115	in transactional accounts; of which:	Total insured small business customer deposits in transactional accounts (eg accounts where salaries are paid out from).	89, 75, 78
116	eligible for a 3% run-off rate; of which:	The amount of insured transactional small business customer deposits that are in jurisdictions where the supervisor chooses to apply a 3% run-off rate given the deposits are fully insured by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	89, 78
117	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 116, the amount that <b>are</b> in the reporting bank's home jurisdiction.	89, 78
118	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 116, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	89, 78
119	eligible for a 5% run-off rate; of which:	The amount of insured transactional small business customer deposits that are in jurisdictions where the supervisor does not choose to apply a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	89, 75

Row	Heading	Description	Basel III LCR standards reference
120	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 119, the amount that <b>are</b> in the reporting bank's home jurisdiction.	89, 75
121	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 119, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	89, 75
122	in non-transactional accounts with established relationships that make deposit withdrawal highly unlikely; of which:	Total insured small business customer deposits in non-transactional accounts where the customer has another relationship with the bank that would make deposit withdrawal highly unlikely.	89, 75, 78
123	eligible for a 3% run-off rate; of which:	The amount of insured non-transactional established relationship small business customer deposits that are in jurisdictions where the supervisor chooses to apply a 3% run-off rate given the deposits are fully insured by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	89, 78
124	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 123, the amount that <b>are</b> in the reporting bank's home jurisdiction.	89, 78
125	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 123, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	89, 78
126	eligible for a 5% run-off rate; of which:	The amount of insured non-transactional established relationship small business customer deposits that are in jurisdictions where the supervisor does not choose to apply a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	89, 75
127	are in the reporting bank's home jurisdiction	Of the deposits referenced in line 126, the amount that <b>are</b> in the reporting bank's home jurisdiction.	89, 75
128	are not in the reporting bank's home jurisdiction	Of the deposits referenced in line 126, the amount that <b>are not</b> in the reporting bank's home jurisdiction.	89, 75
129	in non-transactional and non-relationship accounts	Insured small business customer deposits in non-transactional accounts, where the customer does not have another relationship with the bank that would make deposit withdrawal highly unlikely.	89, 79
130	Uninsured deposits	The portion of small business customer deposits that are non-maturing or mature within 30 days, that are not fully insured by an effective deposit insurance scheme (ie all small business customer deposits not reported in lines 117 to 129, excluding any reported in lines 132 to 134).	89, 79
131	Additional deposit categories with higher run-off rates as specified by supervisor	Other small business customer deposits, as defined by supervisor. Amounts in these categories should not be included in the lines above.	89, 79
132	Category 1	As defined by supervisor.	89, 79
133	Category 2	As defined by supervisor.	89, 79
134	Category 3	As defined by supervisor.	89, 79
135	Term deposits (treated as having >30 day maturity); of which:	Small business customer deposits with a residual maturity or withdrawal notice period of greater than 30 days where the depositor has no legal right to withdraw deposits within 30 days, or if early withdrawal is allowed, would result in a significant penalty that is materially greater than the loss of interest.	92, 82-84

Row	Heading	Description	Basel III LCR standards reference
136	With a supervisory run-off rate	As defined by supervisor.	92, 84
137	Without supervisory run-off rate	All other term small business customer deposits treated as having > 30 day remaining maturity as defined in line 135.	92, 82

**Unsecured wholesale funding generated by clearing, custody and cash management activities (“operational deposits”):**

Reported in lines 140 to 154 are portions of deposits and other extensions of funds from financial and non-financial wholesale customers (excluding deposits less than €1 million from small business customers which are reported in lines 117 to 137) generated out of clearing, custody and cash management activities (“operational deposits”). These funds may receive a 25% run-off factor only if the customer has a substantive dependency with the bank and the deposit is required for such activities.

Qualifying activities in this context refer to clearing, custody or cash management activities that meet the following criteria:

- The customer is reliant on the bank to perform these services as an independent third party intermediary in order to fulfil its normal banking activities over the next 30 days. For example, this condition would not be met if the bank is aware that the customer has adequate back-up arrangements.
- These services must be provided under a legally binding agreement to institutional customers.
- The termination of such agreements shall be subject either to a notice period of at least 30 days or significant switching costs (such as those related to transaction, information technology, early termination or legal costs) to be borne by the customer if the operational deposits are moved before 30 days.

Qualifying operational deposits generated by such an activity are ones where:

- The deposits are by-products of the underlying services provided by the banking organisation and not sought out in the wholesale market in the sole interest of offering interest income.
- The deposits are held in specifically designated accounts and priced without giving an economic incentive to the customer (not limited to paying market interest rates) to leave any excess funds on these accounts. In the case that interest rates in a jurisdiction are close to zero, it would be expected that such accounts are non-interest bearing.

Any excess balances that could be withdrawn and would still leave enough funds to fulfil these clearing, custody and cash management activities do not qualify for the 25% factor. In other words, only that part of the deposit balance with the service provider that is proven to serve a customer’s operational needs can qualify as stable. Excess balances should be treated in the appropriate category for non-operational deposits. If banks are unable to determine the amount of the excess balance, then the entire deposit should be assumed to be excess to requirements and, therefore, considered non-operational.

Deposits arising out of correspondent banking or from the provision of prime brokerage services (as defined in Basel III LCR standards footnote 42) should not be reported in these lines rather as non-operational deposits in lines 157 to 164 as appropriate (Basel III LCR standards paragraph 99) and lines 170 and 172, respectively.

A clearing relationship, in this context, refers to a service arrangement that enables customers to transfer funds (or securities) indirectly through direct participants in domestic settlement systems to final recipients. Such services are limited to the following activities: transmission, reconciliation and confirmation of payment orders; daylight overdraft, overnight financing and maintenance of post-settlement balances; and determination of intra-day and final settlement positions. (Basel III LCR standards, paragraph 101)

A custody relationship, in this context, refers to the provision of safekeeping, reporting, processing of assets or the facilitation of the operational and administrative elements of related activities on behalf of customers in the process of their transacting and retaining financial assets. Such services are limited to the settlement of securities transactions, the transfer of contractual payments, the processing of collateral, and the provision of custody related cash management services. Also included are the receipt of dividends and other income, client subscriptions and redemptions. Custodial services can furthermore extend to asset and corporate trust servicing, treasury, escrow, funds transfer, stock transfer and agency services, including payment and settlement services (excluding correspondent banking), and depository receipts. (Basel III LCR standards, paragraph 102)

A cash management relationship, in this context, refers to the provision of cash management and related services to customers. Cash management services, in this context, refers to those products and services provided to a customer to manage its cash flows, assets and liabilities, and conduct financial transactions necessary to the customer’s ongoing operations. Such services are limited to payment remittance, collection and aggregation of funds, payroll administration, and control over the disbursement of funds. (Basel III LCR standards, paragraph 103)

Row	Heading	Description	Basel III LCR standards reference
138	Total operational deposits; of which:	The portion of unsecured operational wholesale funding generated by clearing, custody and cash management activities as defined above.	93–104
139	provided by non-financial corporates	Such funds provided by non-financial corporates. Funds from small business customers that meet the requirements outlined in paragraphs 90 and 91 of the Basel III LCR standards should not be reported here but are subject to lower run-off rates in rows 117 to 130.	93–104
140	insured, with a 3% run-off rate	The portion of such funds provided by non-financial corporates that <b>are</b> fully covered by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards and are in jurisdictions where the supervisor chooses to prescribe a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
141	insured, with a 5% run-off rate	The portion of such funds provided by non-financial corporates that <b>are</b> fully covered by an effective deposit insurance scheme but that are not prescribed a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
142	uninsured	The portion of such funds provided by non-financial corporates that <b>are not</b> fully covered by an effective deposit insurance scheme.	93–103
143	provided by sovereigns, central banks, PSEs and MDBs	Such funds provided by sovereigns, central banks, PSEs and multilateral development banks.	93–104
144	insured, with a 3% run-off rate	The portion of such funds provided by sovereigns, central banks, PSEs and multilateral development banks that <b>are</b> fully covered by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards and are in jurisdictions where the supervisor chooses to prescribe a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
145	insured, with a 5% run-off rate	The portion of such funds provided by sovereigns, central banks, PSEs and multilateral development banks that <b>are</b> fully covered by an effective deposit insurance scheme but that are not prescribed a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
146	uninsured	The portion of such funds provided by sovereigns, central banks, PSEs and multilateral development banks that <b>are not</b> fully covered by an effective deposit insurance scheme.	93–103
147	provided by banks	Such funds provided by banks.	93–104
148	insured, with a 3% run-off rate	The portion of such funds provided by banks that <b>are</b> fully covered by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards and are in jurisdictions where the supervisor chooses to prescribe a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104

Row	Heading	Description	Basel III LCR standards reference
149	insured, with a 5% run-off rate	The portion of such funds provided by banks that <b>are</b> fully covered by an effective deposit insurance scheme but that are not prescribed a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
150	uninsured	The portion of such funds provided by banks that <b>are not</b> fully covered by an effective deposit insurance scheme.	93–103
151	provided by other financial institutions and other legal entities	Such funds provided by financial institutions (other than banks) and other legal entities.	93–104
152	insured, with a 3% run-off rate	The portion of such funds provided by financial institutions (other than banks) and other legal entities that <b>are</b> fully covered by an effective deposit insurance scheme that meets the conditions outlined in paragraph 78 of the Basel III LCR standards and are in jurisdictions where the supervisor chooses to prescribe a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
153	insured, with a 5% run-off rate	The portion of such funds provided by financial institutions (other than banks) and other legal entities that <b>are</b> fully covered by an effective deposit insurance scheme but that are not prescribed a 3% run-off rate. <b>Please refer to the instructions from your supervisor for the specification of these items.</b>	104
154	uninsured	The portion of such funds provided by financial institutions (other than banks) and other legal entities that <b>are not</b> fully covered by an effective deposit insurance scheme.	93–103

Non-operational deposits in lines 157 to 164 include all deposits and other extensions of unsecured funding not included under operational deposits in lines 140 to 154, excluding notes, bonds and other debt securities, covered bond issuance or repo and secured funding transactions (reported below). Deposits arising out of correspondent banking or from the provision of prime brokerage services (as defined in the Basel III LCR standards, footnote 42) should **not** be included in these lines (Basel III LCR standards, paragraph 99).

Customer cash balances arising from the provision of prime brokerage services, including but not limited to the cash arising from prime brokerage services as identified in Basel III LCR standards, paragraph 99, should be considered separate from any required segregated balances related to client protection regimes imposed by national regulations, and should not be netted against other customer exposures included in this standard. These offsetting balances held in segregated accounts are treated as inflows in Basel III LCR standards, paragraph 154 and should be excluded from the stock of HQLA (Basel III LCR standards, paragraph 111).

155	Total non-operational deposits; of which	The portion of unsecured wholesale funding not considered as "operational deposits" as defined above.	105–109
156	provided by non-financial corporates; of which:	Total amount of such funds provided by non-financial corporates.	107–108
157	where entire amount is fully covered by an effective deposit insurance scheme	Amount of such funds provided by non-financial corporates where the entire amount of the deposit <b>is</b> fully covered by an effective deposit insurance scheme.	108
158	where entire amount is not fully covered by an effective deposit insurance scheme	Amount of such funds provided by non-financial corporates where the entire amount of the deposit <b>is not</b> fully covered by an effective deposit insurance scheme.	107
159	provided by sovereigns, central banks, PSEs and MDBs; of which:	Such funds provided by sovereigns, central banks (other than funds to be reported in line item 166), PSEs, and multilateral development banks.	107-108
160	where entire amount is fully covered by an effective deposit insurance scheme	Amount of such funds provided by sovereigns, central banks, PSEs and MDBs where the entire amount of the deposit <b>is</b> fully covered by an effective deposit insurance scheme.	108

Row	Heading	Description	Basel III LCR standards reference
161	where entire amount is not fully covered by an effective deposit insurance scheme	Amount of such funds provided by sovereigns, central banks, PSEs and MDBs where the entire amount of the deposit <b>is not</b> fully covered by an effective deposit insurance scheme.	107
162	provided by members of institutional networks of cooperative (or otherwise named) banks	<p>An institutional network of cooperative (or otherwise named) banks is a group of legally autonomous banks with a statutory framework of cooperation with common strategic focus and brand where specific functions are performed by central institutions or specialised service providers. Central institutions or specialised central service providers of such networks should report in this line the amount of deposits placed by network member institutions (that are not reported in line items 149 or 150 and that are) (a) due to statutory minimum deposit requirements which are registered at regulators or (b) in the context of common task sharing and legal, statutory or contractual arrangements so long as both the bank that has received the monies and the bank that has deposited participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members.</p> <p>Deposits from network member institutions that are neither included in line items 149 or 150, nor placed for purposes as referred to in letters (a) and (b) above, are to be reported in line items 163 or 164.</p> <p>Banks that are not the central institutions or specialised central service provider of such network should report zero in this line.</p>	105
163	provided by other banks	Such funds provided by other banks, not reported in line 162.	109
164	provided by other financial institutions and other legal entities	Such funds provided by financial institutions other than banks and by other legal entities not included in the categories above. Funding from fiduciaries, beneficiaries, conduits and special purpose vehicles and affiliated entities should also be reported here.	109
<p>Notes, bonds and other debt securities issued by the bank are included in line 165 regardless of the holder, unless the bond is sold exclusively in the retail market and held in retail accounts (including small business customers treated as retail), in which case the instruments can be reported in the appropriate retail or small business customer deposit category in lines 88 to 108 or lines 117 to 137, respectively. Outflows on covered bonds should be reported in line 228.</p>			
165	Unsecured debt issuance	Outflows on notes, bonds and other debt securities, excluding on bonds sold exclusively to the retail or small business customer markets, and excluding outflows on covered bonds.	110
166	Additional balances required to be installed in central bank reserves	Amounts to be installed in the central bank reserves within 30 days. Funds reported in this line should not be included in line 160 or 161. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	Extension of 50(b)
169	Of the non-operational deposits reported above, amounts that could be considered operational in nature but per the standards have been excluded from receiving the operational deposit treatment due to:		

Row	Heading	Description	Basel III LCR standards reference
170	correspondent banking activity	Amounts in accounts with a clearing, custody or cash management relationship but which have been excluded from the operational deposit category because the account is a correspondent banking account. Correspondent banking refers to arrangements under which one bank (correspondent) holds deposits owned by other banks (respondents) and provides payment and other services in order to settle foreign currency transactions (eg so-called nostro and vostro accounts used to settle transactions in a currency other than the domestic currency of the respondent bank for the provision of clearing and settlement of payments).	99, footnote 42
172	prime brokerage services	Amounts in accounts with a clearing, custody or cash management relationship but which have been excluded from the operational deposit category because the account holder is a prime brokerage client of the reporting institution. Prime brokerage is a package of services offered to large active investors, particularly hedge funds.	99, footnote 42
174	excess balances in operational accounts that could be withdrawn and would leave enough funds to fulfil the clearing, custody and cash management activities	Amounts in accounts with a clearing, custody or cash management relationship but which have been excluded from the operational deposit category because these funds are excess balances and could be withdrawn and would leave enough funds to fulfil the clearing, custody and cash management activities.	96

**c) Secured funding run-off**

Secured funding is defined as those liabilities and general obligations that are collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution. In this section any transaction in which the bank has received a collateralised loan in cash, such as repo transactions, expiring within 30 days should be reported. Collateral swaps where the bank receives a collateralised loan in the form of other assets than cash, should not be reported here, but in panel C below.

Additionally, collateral lent to the bank's customers to effect short positions should be treated as a form of secured funding. A customer short position in this context describes a transaction where a bank's customer sells a security it does not own, and the bank subsequently obtains the same security from internal or external sources to make delivery into the sale. Internal sources include the bank's own inventory of collateral as well as rehypothecatable Level 1 or Level 2 collateral held in other customer margin accounts. The contingent risk associated with non-contractual obligations where customer short positions are covered by other customers' collateral that does not qualify as Level 1 or Level 2 should be reported in line 264. External sources include collateral obtained through a securities borrowing, reverse repo, or like transaction.

If the bank has deposited both liquid and non-liquid assets in a collateral pool and no assets are specifically assigned as collateral for the secured transaction, the bank may assume for this monitoring exercise that the assets with the lowest liquidity get assigned first: assets that are not eligible for the stock of liquid assets are assumed to be assigned first. Only once all those assets are fully assigned should Level 2B assets be assumed to be assigned, followed by Level 2A assets. Only once all Level 2 assets are assigned should Level 1 assets be assumed to be assigned.

A bank should report all outstanding secured funding transactions with remaining maturities within the 30 calendar day stress horizon, including customer short positions that do not have a specified contractual maturity. The amount of funds raised through the transaction should be reported in column D ("amount received"). The value of the underlying collateral extended in the transaction should be reported in column E ("market value of extended collateral"). Both values are needed to calculate the caps on Level 2 and Level 2B assets and both should be calculated at the date of reporting, not the trade or settlement date of the transaction.

**Please refer to the instructions from your supervisor for the specification of items related to Level 2B assets in this subsection.**

Row	Heading	Description	Basel III LCR standards reference
178	Transactions conducted with the bank's domestic central bank; of which:	In column D: Amount raised in secured funding or repo transactions with the bank's domestic central bank that mature within 30 days. In column E: The market value of the collateral extended on these transactions.	114–115
179	Backed by Level 1 assets; of which:	In column D: Amount raised in secured funding or repo transactions with the bank's domestic central bank that mature within 30 days and are backed by Level 1 assets. In column E: The market value of the Level 1 asset collateral extended on these transactions.	114–115
180	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 179, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 1 assets where these assets would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (if they were not already securing the particular transaction in question), because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 1 asset collateral extended on these transactions.	114–115
182	Backed by Level 2A assets; of which:	In column D: Amount raised in secured funding or repo transactions with the bank's domestic central bank that mature within 30 days and are backed by Level 2A assets. In column E: The market value of the Level 2A asset collateral extended on these transactions.	114–115
183	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 182, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2A assets where these assets would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2A asset collateral extended on these transactions.	114–115
185	Backed by Level 2B RMBS assets; of which:	In column D: Amount raised in secured funding or repo transactions with the bank's domestic central bank that mature within 30 days and are backed by Level 2B RMBS assets. In column E: The market value of the Level 2B RMBS asset collateral extended on these transactions.	114–115

Row	Heading	Description	Basel III LCR standards reference
186	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 185, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2B RMBS assets where these assets would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2B RMBS asset collateral extended on these transactions.	114–115
188	Backed by Level 2B non-RMBS assets; of which:	In column D: Amount raised in secured funding or repo transactions with the bank's domestic central bank that mature within 30 days and are backed by Level 2B non-RMBS assets. In column E: The market value of the Level 2B non-RMBS asset collateral extended on these transactions.	114–115
189	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 188, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2B non-RMBS assets where these assets would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2B non-RMBS asset collateral extended on these transactions.	114–115
191	Backed by other assets	In column D: Amount raised on secured funding or repo transactions with the bank's domestic central bank that mature within 30 days and are backed by all other assets (ie other than Level 1 or Level 2 assets). In column E: The market value of the other asset collateral extended on these transactions.	114–115
192	Transactions not conducted with the bank's domestic central bank and backed by Level 1 assets; of which:	In column D: Amount raised in secured funding or repo transactions that are not conducted with the bank's domestic central bank and that mature within 30 days and are backed by Level 1 assets. In column E: The market value of the Level 1 asset collateral extended on these transactions.	114–115
193	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 192, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 1 assets where these assets would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (if they were not already securing the particular transaction in question), because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 1 asset collateral extended on these transactions.	114–115

Row	Heading	Description	Basel III LCR standards reference
195	Transactions not conducted with the bank's domestic central bank and backed by Level 2A assets; of which:	In column D: Amount raised in secured funding or repo transactions that are not conducted with the bank's domestic central bank and that mature within 30 days and are backed by Level 2A assets. In column E: The market value of the Level 2A asset collateral extended on these transactions.	114–115
196	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 195, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2A assets where these assets would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2A asset collateral extended on these transactions.	114–115
198	Transactions not conducted with the bank's domestic central bank and backed by Level 2B RMBS assets; of which:	In column D: Amount raised in secured funding or repo transactions that are not conducted with the bank's domestic central bank and that mature within 30 days and are backed by Level 2B RMBS assets. In column E: The market value of the Level 2B RMBS asset collateral extended on these transactions.	114–115
199	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 198, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2B RMBS assets where these assets would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2B RMBS asset collateral extended on these transactions.	114–115
201	Transactions not conducted with the bank's domestic central bank and backed by Level 2B non-RMBS assets; of which:	In column D: Amount raised in secured funding or repo transactions that are not conducted with the bank's domestic central bank and that mature within 30 days and are backed by Level 2B non-RMBS assets. In column E: The market value of the Level 2B non-RMBS asset collateral extended on these transactions.	114–115
202	Counterparties are domestic sovereigns, MDBs or domestic PSEs with a 20% risk weight; of which:	In column D: Secured funding transactions with domestic sovereign, multilateral development banks or domestic PSEs that are backed by Level 2B non-RMBS assets. PSEs that receive this treatment should be limited to those that are 20% or lower risk weighted. In column E: The market value of collateral extended on these transactions.	114–115

Row	Heading	Description	Basel III LCR standards reference
203	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 202, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2B non-RMBS assets where these assets would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2B non-RMBS asset collateral extended on these transactions.	114–115
205	Counterparties are not domestic sovereigns, MDBs or domestic PSEs with a 20% risk weight; of which:	In column D: Secured funding transactions with counterparties other than domestic sovereign, multilateral development banks or domestic PSEs with a 20% risk weight that are backed by Level 2B non-RMBS assets. In column E: The market value of collateral extended on these transactions.	114–115
206	Transactions involving eligible liquid assets	In column D: Of the amount reported in line 205, that which is raised in secured funding or repo transactions that mature within 30 days and are backed by Level 2B non-RMBS assets where these assets would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (if they were not already securing the particular transaction in question) because: (i) they would be held unencumbered; and (ii) they would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column E: The market value of the Level 2B non-RMBS asset collateral extended on these transactions.	114–115
208	Transactions not conducted with the bank's domestic central bank and backed by other assets (non-HQLA); of which:	In column D: Amount raised in secured funding or repo transactions that are not conducted with the bank's domestic central bank and that mature within 30 days and are backed by other assets (non-HQLA). In column E: The market value of the other (non-HQLA) asset collateral extended on these transactions.	114–115
209	Counterparties are domestic sovereigns, MDBs or domestic PSEs with a 20% risk weight; of which:	In column D: Secured funding transactions with domestic sovereign, multilateral development banks or domestic PSEs that are backed by other assets (non-HQLA). PSEs that receive this treatment should be limited to those that are 20% or lower risk weighted. In column E: The market value of collateral extended on these transactions.	114–115
210	Counterparties are not domestic sovereigns, MDBs or domestic PSEs with a 20% risk weight; of which:	In column D: Secured funding transactions with counterparties other than domestic sovereign, multilateral development banks or PSEs that are backed by other assets (non-HQLA). In column E: The market value of collateral extended on these transactions.	114–115

Row	Heading	Description	Basel III LCR standards reference
<b>d) Additional requirements</b>			
214	Derivatives cash outflow	<p>Banks should calculate, in accordance with their existing valuation methodologies, expected contractual derivative cash inflows and outflows. Cash flows may be calculated on a net basis (ie inflows can offset outflows) by counterparty, only where a valid master netting agreement exists. The sum of all net cash outflows should be reported here. The sum of all net cash inflows should be reported in line 316.</p> <p>Banks should exclude from such calculations those liquidity requirements that would result from increased collateral needs due to market value movements (to be reported in line 222) or falls in value of collateral posted (reported in line 217 and line 218). Options should be assumed to be exercised when they are 'in the money' to the option buyer.</p> <p>Where derivative payments are collateralised by HQLA, cash outflows should be calculated net of any corresponding cash or collateral inflows that would result, all other things being equal, from contractual obligations for cash or collateral to be provided to the bank, if the bank is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the collateral is received. This is in line with the principle that banks should not double count liquidity inflows and outflows.</p> <p><b>Note that cash flows do not equal the marked-to-market value, since the marked-to-market value also includes estimates for contingent inflows and outflows and may include cash flows that occur beyond the 30-day horizon.</b></p> <p>It is generally expected that a positive amount would be provided for both this line item and line 316 for institutions engaged in derivatives transactions.</p>	116, 117
215	Increased liquidity needs related to downgrade triggers in derivatives and other financing transactions	The amount of collateral that would need to be posted for or contractual cash outflows generated by any downgrade up to and including a 3-notch downgrade of the bank's long-term credit rating. Triggers linked to a bank's short-term rating should be assumed to be triggered at the corresponding long-term rating in accordance with published ratings criteria. The impact of the downgrade should consider impacts on all types of margin collateral and contractual triggers which change rehypothecation rights for non-segregated collateral.	118
216	Increased liquidity needs related to the potential for valuation changes on posted collateral securing derivative and other transactions:		119
217	Cash and Level 1 assets	Current market value of relevant collateral posted as margin for derivatives and other transactions that, if they had been unencumbered, would have been eligible for inclusion in line items 6 to 18.	

Row	Heading	Description	Basel III LCR standards reference
218	For other collateral (ie all non-Level 1 collateral)	Current market value of relevant collateral posted as margin for derivatives and other transactions other than those included in line item 217 (all non-Level 1 collateral). This amount should be calculated net of collateral received on a counterparty basis (provided that the collateral received is not subject to restrictions on reuse or rehypothecation). Any collateral that is in a segregated margin account can only be used to offset outflows that are associated with payments that are eligible to be offset from that same account.	
219	Increased liquidity needs related to excess non-segregated collateral held by the bank that could contractually be called at any time by the counterparty	The amount of non-segregated collateral that the reporting institution currently has received from counterparties but could under legal documentation be recalled because the collateral is in excess of that counterparty's current collateral requirements.	120
220	Increased liquidity needs related to contractually required collateral on transactions for which the counterparty has not yet demanded the collateral be posted	The amount of collateral that is contractually due from the reporting institution, but for which the counterparty has not yet demanded the posting of such collateral.	121
221	Increased liquidity needs related to contracts that allow collateral substitution to non-HQLA assets	The amount of HQLA collateral that can be substituted for non-HQLA without the bank's consent that has been received to secure transactions and that has not been segregated (eg otherwise included in HQLAs, as secured funding collateral or in other bank operations).	122
222	Increased liquidity needs related to market valuation changes on derivative or other transactions	Any potential liquidity needs deriving from full collateralisation of mark-to-market exposures on derivative and other transactions. Unless its national supervisor has provided other instructions, banks should calculate any outflow generated by increased needs related to market valuation changes by identifying the largest absolute net 30-day collateral flow realised during the preceding 24 months, where the absolute net collateral flow is based on both realised outflows and inflows. Inflows and outflows of transactions executed under the same master netting agreement can be treated on a net basis.	123
223	Loss of funding on ABS and other structured financing instruments issued by the bank, excluding covered bonds	Balances of term asset-backed securities and other structured financing instruments, excluding covered bonds (which should be reported in line 228), issued by the bank that mature in 30 days or less. To the extent that sponsored conduits/SPVs are required to be consolidated under liquidity requirements, their assets and liabilities should be taken into account.	124

Row	Heading	Description	Basel III LCR standards reference
224	Loss of funding on ABCP, conduits, SIVs and other such financing activities; of which:	All funding on asset-backed commercial paper, conduits, securities investment vehicles and other such financing facilities maturing or returnable within 30 days. Banks having structured financing facilities that include the issuance of short-term debt instruments, such as asset backed commercial paper, should report the potential liquidity outflows from these structures. These include, but are not limited to, (i) the inability to refinance maturing debt, and (ii) the existence of derivatives or derivative-like components contractually written into the documentation associated with the structure that would allow the "return" of assets in a financing arrangement, or that require the original asset transferor to provide liquidity, effectively ending the financing arrangement ("liquidity puts") within the 30-day period. Where the structured financing activities are conducted through a special purpose entity (such as a special purpose vehicle, conduit or SIV), the bank should, in determining the HQLA requirements, look through to the maturity of the debt instruments issued by the entity and any embedded options in financing arrangements that may potentially trigger the "return" of assets or the need for liquidity, irrespective of whether or not the SPV is consolidated.	125
225	debt maturing ≤ 30 days	Portion of the funding specified in line 224 maturing within 30 days.	125
226	with embedded options in financing arrangements	Portion of the funding specified in line 224 <b>not</b> maturing within 30 days but with embedded options that could reduce the effective maturity of the debt to 30 days or less.	125
227	other potential loss of such funding	Portion of the funding specified in line 224 that is not included in line 225 or 226.	125
228	Loss of funding on covered bonds issued by the bank	Balances of covered bonds, issued by the bank that mature in 30 days or less.	124

Credit and liquidity facilities are defined as explicit contractual agreements or obligations to extend funds at a future date to retail or wholesale counterparties. For the purpose of the standard, these facilities only include contractually irrevocable ("committed") or conditionally revocable agreements to extend funds in the future (Basel III LCR standards, paragraph 126).

Unconditionally revocable facilities that are unconditionally cancellable by the bank (in particular, those without a precondition of a material change in the credit condition of the borrower) are excluded from this section and should be reported in lines 254 to 266, as appropriate (Basel III LCR standards, paragraph 126).

The currently undrawn portion of these facilities should be reported. The reported amount may be net of any HQLAs eligible for the stock of HQLAs, if the HQLAs have already been posted as collateral by the counterparty to secure the facilities or that are contractually obliged to be posted when the counterparty will draw down the facility (eg a liquidity facility structured as a repo facility), if the bank is legally entitled and operationally capable to re-use the collateral in new cash raising transactions once the facility is drawn, and there is no undue correlation between the probability of drawing the facility and the market value of the collateral. The collateral can be netted against the outstanding amount of the facility to the extent that this collateral is not already counted in the stock of HQLAs (Basel III LCR standards, paragraph 127).

A liquidity facility is defined as any committed, undrawn back-up facility that would be utilised to refinance the debt obligations of a customer in situations where such a customer is unable to rollover that debt in financial markets (eg pursuant to a commercial paper programme, secured financing transactions, obligations to redeem units, etc).

The amount of a commitment to be treated as a liquidity facility is the amount of the currently outstanding debt issued by the customer (or proportionate share, if a syndicated facility) maturing within a 30 day period that is backstopped by the facility. The portion of a liquidity facility that is backing debt that does not mature within the 30-day window is excluded from the scope of the definition of a facility. Any additional capacity of the facility (ie the remaining commitment) would be treated as a committed credit facility and should be reported as such.

General working capital facilities for corporate entities (eg revolving credit facilities in place for general corporate and/or working capital purposes) will not be classified as liquidity facilities, but as credit facilities.

Row	Heading	Description	Basel III LCR standards reference
<p>Notwithstanding the above, any facilities provided to hedge funds, money market funds and special purpose funding vehicles, for example SPEs (as defined in the Basel III LCR standards, paragraph 125) or conduits, or other vehicles used to finance the banks own assets, should be captured in their entirety as a liquidity facility and reported in line 239.</p> <p>For that portion of financing programs that are captured in the Basel III LCR standards, paragraphs 124 and 125 (ie are maturing or have liquidity puts that may be exercised in the 30-day horizon), banks that are providers of associated liquidity facilities do not need to double count the maturing financing instrument and the liquidity facility for consolidated programs.</p>			
229	Undrawn committed credit and liquidity facilities to retail and small business customers	Balances of undrawn committed credit and liquidity facilities extended by the bank to natural persons and small business customers, as defined above.	131(a)
230	Undrawn committed credit facilities to		
231	non-financial corporates	Balances of undrawn committed credit facilities extended by the bank to non-financial institution corporations (excluding small business customers). The amount reported in this line should also include any 'additional capacity' of liquidity facilities (as defined above) provided to non-financial corporates.	131(b)
232	sovereigns, central banks, PSEs and MDBs	Balances of undrawn committed credit facilities extended by the bank to sovereigns, central banks, PSEs, multilateral development banks and any other entity not included in other drawdown categories. The amount reported in this line should also include any 'additional capacity' of liquidity facilities (as defined above) provided to sovereigns, central banks, PSEs, multilateral development banks.	131(b)
233	Undrawn committed liquidity facilities to		
234	non-financial corporates	The amount of undrawn committed liquidity facilities should be the amount of currently outstanding debt (or proportionate share if a syndicated facility) issued by non-financial institution corporations (excluding small business customers) maturing within a 30 day period that is backstopped by the facility. Any 'additional capacity' of liquidity facilities (as defined above) provided to non-financial corporates should not be reported here, rather should be reported in line 231.	131(c)
235	sovereigns, central banks, PSEs and MDBs	The amount of undrawn committed liquidity facilities should be the amount of currently outstanding debt (or proportionate share if a syndicated facility) issued by sovereigns, central banks, PSEs, or multilateral development banks maturing within a 30 day period that is backstopped by the facility. Any 'additional capacity' of liquidity facilities (as defined above) provided to sovereigns, central banks, PSEs, or multilateral development banks should not be reported here, rather should be reported in line 232.	131(c)
236	Undrawn committed credit and liquidity facilities provided to banks subject to prudential supervision	Balances of undrawn committed credit and liquidity facilities extended to banks that are subject to prudential supervision.	131(d)

Row	Heading	Description	Basel III LCR standards reference
237	Undrawn committed credit facilities provided to other FIs	Balances of undrawn committed credit facilities extended by the bank to other financial institutions (including securities firms, insurance companies, fiduciaries and beneficiaries). The amount reported in this line should also include any 'additional capacity' of liquidity facilities (as defined above) provided to other financial institutions (including securities firms, insurance companies, fiduciaries and beneficiaries).	131(e)
238	Undrawn committed liquidity facilities provided to other FIs	The amount of undrawn committed liquidity facilities should be the amount of currently outstanding debt (or proportionate share if a syndicated facility) issued by to other financial institutions (including securities firms, insurance companies, fiduciaries and beneficiaries) maturing within a 30 day period that is backstopped by the facility. Any 'additional capacity' of liquidity facilities (as defined above) provided to other financial institutions (including securities firms, insurance companies, fiduciaries and beneficiaries) should not be reported here, rather should be reported in line 237.	131(f)
239	Undrawn committed credit and liquidity facilities to other legal entities	Balances of undrawn committed credit and liquidity facilities extended to other legal entities, including hedge funds, money market funds and special purpose funding vehicles, for example SPEs (as defined in the Basel III LCR standards, paragraph 125) or conduits, or other vehicles used to finance the banks own assets (not included in lines 229 to 238).	131(g)
<b>Other contractual obligations to extend funds</b>			
241	Other contractual obligations to extend funds to:	Any contractual lending obligations not captured elsewhere in the standard.	132-133
242	financial institutions	Any contractual lending obligations to financial institutions not captured elsewhere.	132
243	retail clients	The full amount of contractual obligations to extend funds to retail clients within the next 30 calendar days (not netted for the assumed roll-over on the inflows in line 302).	133
244	small business customers	The full amount of contractual obligations to extend funds to small business customers within the next 30 calendar days (not netted for the assumed roll-over on the inflows in line 303).	133
245	non-financial corporates	The full amount of contractual obligations to extend funds to non-financial corporate clients within the next 30 calendar days (not netted for the assumed roll-over on the inflows in line 304).	133
246	other clients	The full amount of contractual obligations to extend funds to other clients within the next 30 calendar days (not netted for the assumed roll-over on the inflows in line 310).	133
247	retail, small business customers, non-financials and other clients	The amounts of contractual obligations to extend funds to retail, small business customers, non-financial corporate and other clients within the next 30 calendar days (lines 243 to 246) are added up in this line. The roll-over of funds that is implicitly assumed in the inflow section (lines 302, 303, 304 and 310) are then subtracted. If the result is positive, it is included here as an outflow in column H. Otherwise, the outflow included here is zero.	133

Row	Heading	Description	Basel III LCR standards reference
<p>Other contingent funding obligations (treatment determined by national supervisor)</p> <p>These contingent funding obligations may be either contractual or non-contractual and are not lending commitments. Non-contractual contingent funding obligations include associations with, or sponsorship of, products sold or services provided that may require the support or extension of funds in the future under stressed conditions. Non-contractual obligations may be embedded in financial products and instruments sold, sponsored, or originated by the institution that can give rise to unplanned balance sheet growth arising from support given for reputational risk considerations (Basel III LCR standards, paragraph 135). Stressed conditions in this context refer to the scenario as described in paragraph 19 of the Basel III LCR standards. Banks should report the full amount of any exposure and national supervisors should set appropriate outflow rates for their jurisdictions.</p>			
254	Non-contractual obligations related to potential liquidity draws from joint ventures or minority investments in entities	Non contractual contingent funding obligations related to potential liquidity draws from joint ventures or minority investments in entities, which are not consolidated per paragraph 164 of the Basel III LCR standards, where there is the expectation that the bank will be the main liquidity provider when the entity is in need of liquidity. The amount included should be calculated in accordance with the methodology agreed by the bank's supervisor. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	137
255	Unconditionally revocable "uncommitted" credit and liquidity facilities	Balances of undrawn credit and liquidity facilities where the bank has the right to unconditionally revoke the undrawn portion of these facilities.	140
256	Trade-finance related obligations (including guarantees and letters of credit)	Trade finance instruments consist of trade-related obligations directly underpinned by the movement of goods or the provision of services. Amounts to be reported here include items such as: <ul style="list-style-type: none"> <li>outstanding documentary trade letters of credit, documentary and clean collection, import bills, and export bills; and</li> <li>outstanding guarantees directly related to trade finance obligations, such as shipping guarantees.</li> </ul> Lending commitments, such as direct import or export financing for non-financial corporate firms, are excluded from this treatment and reported in lines 229 to 239.	138, 139
257	Guarantees and letters of credit unrelated to trade finance obligations	The outstanding amount of letters of credit issued by the bank and guarantees unrelated to trade finance obligations described in line 256.	140
258	Non-contractual obligations:		
259	Debt-buy back requests (incl related conduits)	Potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities. In case debt amounts qualify for both line 259 and line 263, please enter them in just one of these lines.	140
260	Structured products	Structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes (VRDNs).	140
261	Managed funds	Managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment funds etc.	140
262	Other non-contractual obligations	Any other non-contractual obligation not entered above.	140

Row	Heading	Description	Basel III LCR standards reference
263	Outstanding debt securities with remaining maturity > 30 days	For issuers with an affiliated dealer or market maker, there may be a need to include an amount of the outstanding debt securities (unsecured and secured, term as well as short term) having maturities greater than 30 calendar days, to cover the potential repurchase of such outstanding securities. In case debt amounts qualify for both line 259 and line 263, please enter them in just one of these lines.	140
264	Non contractual obligations where customer short positions are covered by other customers' collateral	Amount of contingent obligations related to instances where banks have internally matched client assets against other clients' short positions where the collateral does not qualify as Level 1 or Level 2, and the bank may be obligated to find additional sources of funding for these positions in the event of client withdrawals. Instances where the collateral qualifies as Level 1 or Level 2 should be reported in the appropriate line of the secured funding section (lines 192 to 206).	140
265	Bank outright short positions covered by a collateralised securities financing transaction	Amount of the bank's outright short positions that are being covered by collateralised securities financing transactions. Such short positions are assumed to be maintained throughout the 30-day period and receive a 0% outflow. The corresponding collateralised securities financing transactions that are covering such short positions should be reported in lines 291 to 296 or 406 to 430.	147
266	Other contractual cash outflows (including those related to unsecured collateral borrowings and uncovered short positions)	Any other contractual cash outflows within the next 30 calendar days should be captured in this standard, such as such as outflows to cover unsecured collateral borrowings, uncovered short positions, dividends or contractual interest payments, <b>with explanation given in an accompanying note to your supervisor</b> as to what comprises the amounts included in this line. This amount should exclude outflows related to operating costs.	141, 147

### 6.1.3 Inflows, Liquidity Coverage Ratio (LCR) (panel B2)

Row	Heading	Description	Basel III LCR standards reference
<p>Total expected contractual cash inflows are calculated by multiplying the outstanding balances of various categories of contractual receivables by the rates at which they are expected to flow in under the scenario up to an aggregate cap of 75% of total expected cash outflows (Basel III LCR standards, paragraph 69).</p> <p>Items must not be double counted – if an asset is included as part of the “stock of HQLA” (ie the numerator), the associated cash inflows cannot also be counted as cash inflows (ie part of the denominator) (Basel III LCR standards, paragraph 72).</p> <p>When considering its available cash inflows, the bank should only include contractual inflows (including interest payments) from outstanding exposures that are fully performing and for which the bank has no reason to expect a default within the 30-day time horizon (Basel III LCR standards, paragraph 142). Pre-payments on loans (not due within 30 days) should not be included in the inflows.</p> <p>Contingent inflows are not included in total net cash outflows (Basel III LCR standards, paragraph 142).</p>			
<p><b>a) Secured lending including reverse repos and securities borrowing</b></p> <p>Secured lending is defined as those loans that the bank has extended and are collateralised by legal rights to specifically designated assets owned by the borrowing institution, which the bank use or rehypothecate for the duration of the loan, and for which the bank can claim ownership to in the case of default by the borrower. In this section any transaction in which the bank has extended a collateralised loan in cash, such as reverse repo transactions, expiring within 30 days should be reported. Collateral swaps where the bank has extended a collateralised loan in the form of other assets than</p>			

Row	Heading	Description	Basel III LCR standards reference
<p>cash, should not be reported here, but in panel C below.</p> <p>A bank should report all outstanding secured lending transactions with remaining maturities within the 30 calendar day stress horizon. The amount of funds extended through the transaction should be reported in column D ("amount extended"). The value of the underlying collateral received in the transactions should be reported in column E ("market value of received collateral"). Both values are needed to calculate the caps on Level 2 and Level 2B assets and both should be calculated at the date of reporting, not the date of the transaction. Note that if the collateral received in the form of Level 1 or Level 2 assets is not rehypothecated and is legally and contractually available for the bank's use it should be reported in the appropriate lines of the stock of HQLA section (lines 11 to 40) as well as in this subsection (see paragraph 31 of the Basel III LCR standards).</p> <p><b>Please refer to the instructions from your supervisor for the specification of items related to Level 2B assets in this subsection.</b></p>			
274	Reverse repo and other secured lending or securities borrowing transactions maturing ≤ 30 days	All reverse repo or securities borrowing transactions maturing within 30 days, in which the bank has extended cash and obtained collateral.	145–146
275	Of which collateral <b>is not</b> re-used (ie is not rehypothecated) to cover the reporting institution's outright short positions	Such transactions in which the collateral obtained is not re-used (ie is not rehypothecated) to cover the reporting institution's outright short positions. If the collateral is re-used, the transactions should be reported in lines 291 to 296.	145–146
276	Transactions backed by Level 1 assets	All such transactions in which the bank has obtained collateral in the form of Level 1 assets. These transactions are assumed to roll-over in full, not giving rise to any cash inflows.  In column D: The amounts extended in these transactions. In column E: The market value of the Level 1 collateral received in these transactions.	145–146
277	Transactions involving eligible liquid assets	Of the transactions backed by Level 1 assets, those where the collateral obtained is reported in panel Aa of the "LCR" worksheet as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards.  In column D: The amounts extended in these transactions. In column E: The market value of the Level 1 collateral received in these transactions.	145–146
279	Transactions backed by Level 2A assets; of which:	All such transactions in which the bank has obtained collateral in the form of Level 2A assets. These are assumed to lead to a 15% cash inflow due to the reduction of funds extended against the collateral.  In column D: The amounts extended in these transactions. In column E: The market value of the Level 2A collateral received in these transactions.	145–146
280	Transactions involving eligible liquid assets	Of the transactions backed by Level 2A assets, those where the collateral obtained is reported in panel Ab of the "LCR" worksheet as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards.  In column D: The amounts extended in these transactions. In column E: The market value of the Level 2A collateral received in these transactions.	145–146

Row	Heading	Description	Basel III LCR standards reference
282	Transactions backed by Level 2B RMBS assets; of which:	All such transactions in which the bank has obtained collateral in the form of Level 2B RMBS assets. These are assumed to lead to a 25% cash inflow due to the reduction of funds extended against the collateral. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B RMBS collateral received in these transactions.	145–146
283	Transactions involving eligible liquid assets	Of the transactions backed by Level 2B RMBS assets, those where the collateral obtained is reported in panel Ac of the “LCR” worksheet as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B RMBS collateral received in these transactions.	145–146
285	Transactions backed by Level 2B non-RMBS assets; of which:	All such transactions in which the bank has obtained collateral in the form of Level 2B non-RMBS assets. These are assumed to lead to a 50% cash inflow due to the reduction of funds extended against the collateral. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B non-RMBS collateral received in these transactions.	145–146
286	Transactions involving eligible liquid assets	Of the transactions backed by Level 2B non-RMBS assets, those where the collateral obtained is reported in panel Ac of the “LCR” worksheet as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B non-RMBS collateral received in these transactions.	145–146
288	Margin lending backed by non-Level 1 or non-Level 2 collateral	Collateralised loans extended to customers for the purpose of taking leveraged trading positions (“margin loans”) made against non-HQLA collateral. These are assumed to lead to a 50% cash inflow. In column D: The amounts extended in these transactions. In column E: The market value of the collateral received in these transactions.	145–146
289	Transactions backed by other collateral	All such transactions (other than those reported in line 288) in which the bank has obtained collateral in another form than Level 1 or Level 2 assets. These are assumed not to roll over and therefore lead to a 100% cash inflow. In column D: The amounts extended in these transactions. In column E: The market value of the collateral received in these transactions.	145–146

Row	Heading	Description	Basel III LCR standards reference
290	Of which collateral is re-used (ie is rehypothecated) to cover the reporting institution's outright short positions	If the collateral obtained in these transactions <b>is</b> re-used (ie rehypothecated) to cover the reporting institution's outright short positions that could be extended beyond 30 days, it should be assumed that the transactions will be rolled-over and will not give rise to any cash inflows. This reflects the need to continue to cover the short position or to repurchase the relevant securities. Institutions should only report reverse repo amounts in these cells where it itself is short the collateral. If the collateral is not re-used, the transaction should be reported in lines 275 to 289.	145–146
291	Transactions backed by Level 1 assets	All such transactions in which the bank has obtained collateral in the form of Level 1 assets. In column D: The amounts extended in these transactions. In column E: The market value of the Level 1 collateral received in these transactions.	145–146
292	Transactions backed by Level 2A assets	All such transactions in which the bank has obtained collateral in the form of Level 2A assets. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2A collateral received in these transactions.	145–146
293	Transactions backed by Level 2B RMBS assets	All such transactions in which the bank has obtained collateral in the form of Level 2B RMBS assets. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B RMBS collateral received in these transactions.	145–146
294	Transactions backed by Level 2B non-RMBS assets	All such transactions in which the bank has obtained collateral in the form of Level 2B non-RMBS assets. In column D: The amounts extended in these transactions. In column E: The market value of the Level 2B non-RMBS collateral received in these transactions.	145–146
295	Margin lending backed by non-Level 1 or non-Level 2 collateral	Collateralised loans extended to customers for the purpose of taking leveraged trading positions ("margin loans") made against non-HQLA collateral. In column D: The amounts extended in these transactions. In column E: The market value of the collateral received in these transactions.	145–146
296	Transactions backed by other collateral	All such transactions (other than those reported in line 295) in which the bank has obtained collateral in another form than Level 1 or Level 2 assets. In column D: The amounts extended in these transactions. In column E: The market value of collateral received in these transactions.	145–146

Row	Heading	Description	Basel III LCR standards reference
<b>b) Other inflows by counterparty</b>			
<p>Contractual inflows (including interest payments and instalments) due in <math>\leq 30</math> days from fully performing loans, not reported in lines 276 to 296. These include maturing loans that have already been agreed to roll over. The agreed roll-over should also be reported in lines 242 to 246 as appropriate.</p> <p>Inflows should only be taken at the latest possible date, based on the contractual rights available to counterparties. For revolving credit facilities, this assumes that the existing loan is rolled over and that any remaining balances are treated in the same way as a committed facility according to Basel III LCR standards, paragraph 131.</p> <p>Inflows from loans that have no specific maturity (ie have non-defined or open maturity) should not be included; therefore, no assumptions should be applied as to when maturity of such loans would occur. An exception to this, as noted below, would be minimum payments of principal, fee or interest associated with an open maturity loan, provided that such payments are contractually due within 30 days.</p>			
302	Retail customers	All payments (including interest payments and instalments) from retail customers on fully performing loans not reported in lines 276 to 296 that are contractually due within the 30-day horizon. Only contractual payments due should be reported, eg required minimum payments of principal, fee or interest, and not total loan balances of undefined or open maturity.	153
303	Small business customers	All payments (including interest payments and instalments) from small business customers on fully performing loans not reported in lines 276 to 296 that are contractually due within the 30-day horizon. Only contractual payments due should be reported, eg required minimum payments of principal, fee or interest, and not total loan balances of undefined or open maturity.	153
304	Non-financial corporates	All payments (including interest payments and instalments) from non-financial corporates on fully performing loans not reported in lines 276 to 296 that are contractually due within the 30-day horizon. Only contractual payments due should be reported, eg required minimum payments of principal, fee or interest, and not total loan balances of undefined or open maturity.	154
305	Central banks	All payments (including interest payments and instalments) from central banks on fully performing loans. Central bank reserves (including required reserves) including banks' overnight deposits with the central bank, and term deposits with the central bank that: (i) are explicitly and contractually repayable on notice from the depositing bank; or (ii) that constitute a loan against which the bank can borrow on a term basis or on an overnight but automatically renewable basis (only where the bank has an existing deposit with the relevant central bank), should be reported in lines 7 or 8 and not here. If the term of other deposits (not included in lines 7 or 8) expires within 30 days, it should be included in this line.	154
306	Financial institutions, of which	All payments (including interest payments and instalments) from financial institutions on fully performing loans not reported in lines 276 to 296 that are contractually due within the 30-day horizon. Only contractual payments due should be reported, eg required minimum payments of principal, fee or interest, and not total loan balances of undefined or open maturity.	154
307	operational deposits	All deposits held at other financial institutions for operational activities, as outlined in the Basel III LCR standards, paragraphs 93 to 104, such as for clearing, custody, and cash management activities.	156

Row	Heading	Description	Basel III LCR standards reference
308	deposits at the centralised institution of an institutional network that receive 25% run-off	For banks that belong to a cooperative network as described in paragraphs 105 and 106 of the Basel III LCR standards, this item includes all (portions of) deposits (not included in line item 307) held at the centralised institution in the cooperative banking network that are placed (a) due to statutory minimum deposit requirements which are registered at regulators, or (b) in the context of common task sharing and legal, statutory or contractual arrangements. These deposits receive a 25% run-off at the centralised institution.	157
309	all payments on other loans and deposits due in $\leq$ 30 days	All payments (including interest payments and instalments) from financial institutions on fully performing unsecured and secured loans, that are contractually due within the 30-day horizon, and the amount of deposits held at financial institutions that is or becomes available within 30 days, and that are not included in lines 307 or 308.  Banks may also recognise in this category inflows from the release of balances held in segregated accounts in accordance with regulatory requirements for the protection of customer trading assets, provided that these segregated balances are maintained in Level 1 or Level 2 assets. This inflow should be calculated in line with the treatment of other related outflows and inflows covered in this standard.	154
310	Other entities	All payments (including interest payments and instalments) from other entities (including sovereigns, multilateral development banks, and PSEs) on fully performing loans that are contractually due within 30 days, not included in lines 302 to 309.	154

Row	Heading	Description	Basel III LCR standards reference
<b>c) Other cash inflows</b>			
316	Derivatives cash inflow	<p>Banks should calculate, in accordance with their existing valuation methodologies, expected contractual derivative cash inflows and outflows. Cash flows may be calculated on a net basis (ie inflows can offset outflows) by counterparty, only where a valid master netting agreement exists. The sum of all net cash inflows should be reported here. The sum of all net cash outflows should be reported in line 214.</p> <p>Banks should exclude from such calculations those liquidity requirements that would result from increased collateral needs due to market value movements (to be reported in line 222) or falls in value of collateral posted (reported in line 217 and line 218). Options should be assumed to be exercised when they are 'in the money' to the option buyer.</p> <p>Where derivatives are collateralised by HQLA, cash inflows should be calculated net of any corresponding cash or contractual collateral outflows that would result, all other things being equal, from contractual obligations for cash or collateral to be posted by the bank, given these contractual obligations would reduce the stock of HQLA. This is in line with the principle that banks should not double count liquidity inflows and outflows.</p> <p><b>Note that cash flows do not equal the marked-to-market value, since the marked-to-market value also includes estimates for contingent inflows and outflows and may include cash flows that occur beyond the 30-day horizon.</b></p> <p>It is generally expected that a positive amount would be provided for both this line item and line 214 for institutions engaged in derivatives transactions.</p>	158, 159
317	Contractual inflows from securities maturing ≤ 30 days and not included anywhere above	Contractual inflows from securities, including certificates of deposit, maturing ≤ 30 days that are not already included in any other item of the LCR framework, provided that they are fully performing (ie no default expected). Level 1 and Level 2 securities maturing within 30 days should be included in the stock of liquid assets in panel A, provided that they meet all operational and definitional requirements outlined in the Basel III LCR standards.	155
318	Other contractual cash inflows	Any other contractual cash inflows to be received ≤ 30 days that are not already included in any other item of the LCR framework. Inflow percentages should be determined as appropriate for each type of inflow by supervisors in each jurisdiction. Cash inflows related to non-financial revenues are <b>not</b> to be included, since they are not taken into account in the calculation of LCR. Any non-contractual contingent inflows should not be reported, as they are not included in the LCR. <b>Please provide your supervisor with an explanatory note on any amounts included in this line.</b>	160
<p>Cap on cash inflows</p> <p>In order to prevent banks from relying solely on anticipated inflows to meet their liquidity requirement, and also to ensure a minimum level of HQLA holdings, the amount of inflows that can offset outflows is capped at 75% of total expected cash outflows as calculated in the standard. This requires that a bank must maintain a minimum amount of stock of HQLA equal to 25% of the total net cash outflows (Basel III LCR standards, paragraph 144).</p>			
324	Cap on cash inflows	The cap on cash inflows is equal to 75% of total cash outflows.	69, 144

Row	Heading	Description	Basel III LCR standards reference
325	Total cash inflows after applying the cap	The amount of total cash inflows after applying the cap is the lower of the total cash inflows before applying the cap and the level of the cap.	69, 144

#### 6.1.4 Collateral swaps (panel C)

Any transaction maturing within 30 days in which non-cash assets are swapped for other non-cash assets, should be reported in this panel. "Level 1 assets" in this section refers to Level 1 assets other than cash. **Please refer to the instructions from your supervisor for the specification of items related to Level 2B assets in this subsection.**

Row	Heading	Description	Basel III LCR standards reference
330	Collateral swaps maturing ≤ 30 days	Any transaction maturing within 30 days in which non-cash assets are swapped for other non-cash assets.	48, 113, 146, Annex 1
331	Of which the borrowed assets are not re-used (ie are not rehypothecated) to cover short positions	Such transactions in which the collateral obtained is not re-used (ie is not rehypothecated) in transactions to cover short positions. If the collateral is re-used, the transaction should be reported in lines 406 to 430.	48, 113, 146, Annex 1
332	Level 1 assets are lent and Level 1 assets are borrowed; of which:	Such transactions in which the bank has swapped Level 1 assets (lent) for other Level 1 assets (borrowed).	48, 113, 146, Annex 1
333	Involving eligible liquid assets	Of the transactions where Level 1 assets are lent and Level 1 assets are borrowed, those where: (i) the Level 1 collateral borrowed is reported in panel Aa of the "LCR" worksheet (which should also be reported in E333), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the Level 1 collateral lent would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (which is the value that should be reported in D333), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).	48, 113, 146, Annex 1
335	Level 1 assets are lent and Level 2A assets are borrowed; of which:	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
336	Involving eligible liquid assets	Of the transactions where Level 1 assets are lent and Level 2A assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2A collateral borrowed is reported in panel Ab of the "LCR" worksheet (which should also be reported in E336), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 1 collateral lent would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (which is the value that should be reported in D336), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
338	Level 1 assets are lent and Level 2B RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
339	Involving eligible liquid assets	Of the transactions where Level 1 assets are lent and Level 2B RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E339), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 1 collateral lent would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (which is the value that should be reported in D339), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
341	Level 1 assets are lent and Level 2B non-RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
342	Involving eligible liquid assets	Of the transactions where Level 1 assets are lent and Level 2B non-RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B non-RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E342), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 1 collateral lent would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (which is the value that should be reported in D342), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
344	Level 1 assets are lent and other assets are borrowed; of which:	Such transactions in which the bank has swapped Level 1 assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
345	Involving eligible liquid assets	Of the transactions where Level 1 assets are lent and other assets are borrowed, those where: (a) the Level 1 collateral lent would otherwise qualify to be reported in panel Aa of the "LCR" worksheet (value to be reported in D345), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards); <b>and</b> (b) the collateral borrowed is non-Level 1 and non-Level 2 assets (which is the value that should be reported in E345).	48, 113, 146, Annex 1
347	Level 2A assets are lent and Level 1 assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2A assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
348	Involving eligible liquid assets	Of the transactions where Level 2A assets are lent and Level 1 assets are borrowed, those where: (i) the Level 1 collateral borrowed is reported in panel Aa of the "LCR" worksheet (which should also be reported in E348), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the Level 2A collateral lent would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (which is the value that should be reported in D348), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).	48, 113, 146, Annex 1
350	Level 2A assets are lent and Level 2A assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2A assets (lent) for other Level 2A assets (borrowed).	48, 113, 146, Annex 1
351	Involving eligible liquid assets	Of the transactions where Level 2A assets are lent and Level 2A assets are borrowed, those where: (i) the Level 2A collateral borrowed is reported in panel Ab of the "LCR" worksheet (which should also be reported in E351), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the Level 2A collateral lent would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (which is the value that should be reported in D351), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).	48, 113, 146, Annex 1
353	Level 2A assets are lent and Level 2B RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2A assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
354	Involving eligible liquid assets	Of the transactions where Level 2A assets are lent and Level 2B RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E354), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2A collateral lent would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (which is the value that should be reported in D354), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
356	Level 2A assets are lent and Level 2B non-RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2A assets (lent) for other Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
357	Involving eligible liquid assets	Of the transactions where Level 2A assets are lent and Level 2B non-RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B non-RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E357), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2A collateral lent would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (which is the value that should be reported in D357), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
359	Level 2A assets are lent and other assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2A assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
360	Involving eligible liquid assets	Of the transactions where Level 2A assets are lent and other assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2A collateral lent would otherwise qualify to be reported in panel Ab of the "LCR" worksheet (which is the value that should be reported in D360), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards); <b>and</b></li> <li>(ii) the collateral borrowed is non-Level 1 and non-Level 2 assets (which is the value that should be reported in E360).</li> </ul>	48, 113, 146, Annex 1
362	Level 2B RMBS assets are lent and Level 1 assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
363	Involving eligible liquid assets	Of the transactions where Level 2B RMBS assets are lent and Level 1 assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 1 collateral borrowed is reported in panel Aa of the "LCR" worksheet (which should also be reported in E363), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D363), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
365	Level 2B RMBS assets are lent and Level 2A assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
366	Involving eligible liquid assets	Of the transactions where Level 2B RMBS assets are lent and Level 2A assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2A collateral borrowed is reported in panel Ab of the "LCR" worksheet (which should also be reported in E366), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D366), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
368	Level 2B RMBS assets are lent and Level 2B RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
369	Involving eligible liquid assets	Of the transactions where Level 2B RMBS assets are lent and Level 2B RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E369), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D369), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
371	Level 2B RMBS assets are lent and Level 2B non-RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for other Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
372	Involving eligible liquid assets	Of the transactions where Level 2B RMBS assets are lent and Level 2B non-RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B non-RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E372), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D372), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
374	Level 2B RMBS assets are lent and other assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
375	Involving eligible liquid assets	Of the transactions where Level 2B RMBS assets are lent and other assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D375), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards); <b>and</b></li> <li>(ii) the collateral borrowed is non-Level 1 and non-Level 2 assets (which is the value that should be reported in E375).</li> </ul>	48, 113, 146, Annex 1
377	Level 2B non-RMBS assets are lent and Level 1 assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
378	Involving eligible liquid assets	Of the transactions where Level 2B non-RMBS assets are lent and Level 1 assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 1 collateral borrowed is reported in panel Aa of the "LCR" worksheet (which should also be reported in E378), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B non-RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D378), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
380	Level 2B non-RMBS assets are lent and Level 2A assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
381	Involving eligible liquid assets	Of the transactions where Level 2B non-RMBS assets are lent and Level 2A assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2A collateral borrowed is reported in panel Ab of the "LCR" worksheet (which should also be reported in E381), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B non-RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D381), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
383	Level 2B non-RMBS assets are lent and Level 2B RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
384	Involving eligible liquid assets	Of the transactions where Level 2B non-RMBS assets are lent and RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E384), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B non-RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D384), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
386	Level 2B non-RMBS assets are lent and Level 2B non-RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for other Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
387	Involving eligible liquid assets	Of the transactions where Level 2B non-RMBS assets are lent and Level 2B non-RMBS assets are borrowed, those where: <ul style="list-style-type: none"> <li>(i) the Level 2B non-RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E387), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b></li> <li>(ii) the Level 2B non-RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D387), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards).</li> </ul>	48, 113, 146, Annex 1
389	Level 2B non-RMBS assets are lent and other assets are borrowed; of which:	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
390	Involving eligible liquid assets	Of the transactions where Level 2B non-RMBS assets are lent and other assets are borrowed, those where: (i) the Level 2B non-RMBS collateral lent would otherwise qualify to be reported in panel Ac of the "LCR" worksheet (which is the value that should be reported in D390), if they were not already securing the particular transaction in question (ie would be unencumbered and would meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards); <b>and</b> (ii) the collateral borrowed is non-Level 1 and non-Level 2 assets (which is the value that should be reported in E390).	48, 113, 146, Annex 1
392	Other assets are lent and Level 1 assets are borrowed; of which:	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
393	Involving eligible liquid assets	Of the transactions where other assets are lent and Level 1 assets are borrowed, those where: (i) the Level 1 collateral borrowed is reported in panel Aa of the "LCR" worksheet (which should also be reported in E393), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the collateral lent is non-Level 1 and non-Level 2 assets (which is the value that should be reported in D393).	48, 113, 146, Annex 1
395	Other assets are lent and Level 2A assets are borrowed; of which:	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
396	Involving eligible liquid assets	Of the transactions where other assets are lent and Level 2A assets are borrowed, those where: (i) the Level 2A collateral borrowed is reported in panel Ab of the "LCR" worksheet (which should also be reported in E396), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the collateral lent is non-Level 1 and non-Level 2 assets (which is the value that should be reported in D396).	48, 113, 146, Annex 1
398	Other assets are lent and Level 2B RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
399	Involving eligible liquid assets	Of the transactions where other assets are lent and Level 2B RMBS assets are borrowed, those where: (i) the Level 2B RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E399), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the collateral lent is non-Level 1 and non-Level 2 assets (which is the value that should be reported in D399).	48, 113, 146, Annex 1
401	Other assets are lent and Level 2B non-RMBS assets are borrowed; of which:	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
402	Involving eligible liquid assets	Of the transactions where other assets are lent and Level 2B non-RMBS assets are borrowed, those where: (i) the Level 2B non-RMBS collateral borrowed is reported in panel Ac of the "LCR" worksheet (which should also be reported in E402), as the assets meet the operational requirements for HQLA as specified in paragraphs 28 to 40 of the Basel III LCR standards; <b>and</b> (ii) the collateral lent is non-Level 1 and non-Level 2 assets (which is the value that should be reported in D402).	48, 113, 146, Annex 1
404	Other assets are lent and other assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
405	Of which the borrowed assets are re-used (ie are rehypothecated) in transactions to cover short positions	If the collateral obtained in these transactions is re-used (ie rehypothecated) to cover short positions that could be extended beyond 30 days, it should be assumed that the transactions will be rolled-over and will not give rise to any cash inflows. This reflects the need to continue to cover the short position or to repurchase the relevant securities. If the collateral is not re-used, the transaction should be reported in lines 332 to 404.	48, 113, 146, Annex 1
406	Level 1 assets are lent and Level 1 assets are borrowed	Such transactions in which the bank has swapped Level 1 assets (lent) for other Level 1 assets (borrowed).	48, 113, 146, Annex 1
407	Level 1 assets are lent and Level 2A assets are borrowed	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
408	Level 1 assets are lent and Level 2B RMBS assets are borrowed	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
409	Level 1 assets are lent and Level 2B non-RMBS assets are borrowed	Such transactions in which the bank has swapped Level 1 assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
410	Level 1 assets are lent and other assets are borrowed	Such transactions in which the bank has swapped Level 1 assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
411	Level 2A assets are lent and Level 1 assets are borrowed	Such transactions in which the bank has swapped Level 2A assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
412	Level 2A assets are lent and Level 2A assets are borrowed	Such transactions in which the bank has swapped Level 2A assets (lent) for other Level 2A assets (borrowed).	48, 113, 146, Annex 1
413	Level 2A assets are lent and Level 2B RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2A assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
414	Level 2A assets are lent and Level 2B non-RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2A assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
415	Level 2A assets are lent and other assets are borrowed	Such transactions in which the bank has swapped Level 2A assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1

Row	Heading	Description	Basel III LCR standards reference
416	Level 2B RMBS assets are lent and Level 1 assets are borrowed	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
417	Level 2B RMBS assets are lent and Level 2A assets are borrowed	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
418	Level 2B RMBS assets are lent and Level 2B RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for other Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
419	Level 2B RMBS assets are lent and Level 2B non-RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
420	Level 2B RMBS assets are lent and other assets are borrowed	Such transactions in which the bank has swapped Level 2B RMBS assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
421	Level 2B non-RMBS assets are lent and Level 1 assets are borrowed	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
422	Level 2B non-RMBS assets are lent and Level 2A assets are borrowed	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
423	Level 2B non-RMBS assets are lent and Level 2B RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
424	Level 2B non-RMBS assets are lent and Level 2B non-RMBS assets are borrowed	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for other Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
425	Level 2B non-RMBS assets are lent and other assets are borrowed	Such transactions in which the bank has swapped Level 2B non-RMBS assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1
426	Other assets are lent and Level 1 assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 1 assets (borrowed).	48, 113, 146, Annex 1
427	Other assets are lent and Level 2A assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2A assets (borrowed).	48, 113, 146, Annex 1
428	Other assets are lent and Level 2B RMBS assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2B RMBS assets (borrowed).	48, 113, 146, Annex 1
429	Other assets are lent and Level 2B non-RMBS assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for Level 2B non-RMBS assets (borrowed).	48, 113, 146, Annex 1
430	Other assets are lent and other assets are borrowed	Such transactions in which the bank has swapped other assets than Level 1 or Level 2 assets (lent) for other assets than Level 1 or Level 2 assets (borrowed).	48, 113, 146, Annex 1

## 6.2 Net Stable Funding Ratio (NSFR)

The Net Stable Funding Ratio has been developed to ensure a stable funding profile in relation to the characteristics of the composition of an institution's assets and off-balance sheet activities. A sustainable funding structure is intended to reduce the likelihood that disruptions to a bank's regular sources of funding will erode its liquidity position in a way that would increase the risk of its failure and potentially lead to broader systemic stress. This metric establishes a minimum level of stable funding based on the liquidity characteristics of an institution's on- and off-balance sheet items over a one year horizon.

The NSFR is defined as the ratio of the amount of available stable funding to the amount of required stable funding. *Available* stable funding is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The amount of such funding *required* of a specific institution is a function of the liquidity characteristics and residual maturities of the various assets held by that institution as well as those of its off-balance sheet exposures.

Banks should report their NSFR using the same scope of application as for the Liquidity Coverage Ratio. All references to LCR definitions in the NSFR refer to the definitions in the LCR standard published by the Basel Committee. Supervisors who have chosen to implement a more stringent definition in their domestic LCR rules than those set out in the Basel Committee LCR standard have discretion over whether to apply this stricter definition for the purposes of implementing the NSFR requirements in their jurisdiction.

The template asks banks to allocate their liabilities and capital as reported on their balance sheet to the specific Available Stable Funding (ASF) categories outlined below. Banks should allocate the assets reported on their balance sheet to specific Required Stable Funding (RSF) categories according to:

- (i) their remaining maturity;
- (ii) whether they are unencumbered or encumbered; and,
- (iii) if they are encumbered, the duration of the encumbrance.

### *Treatment of securities financing transactions*

Use of balance sheet and accounting treatments should generally result in banks **excluding**, from their assets, securities which they have borrowed in securities financing transactions (such as reverse repos and collateral swaps) where they do not have beneficial ownership. In contrast, banks should **include** securities they have lent in securities financing transactions (such as repos or collateral swaps) where they retain beneficial ownership.

Banks should also exclude any securities they have received through collateral swaps if these securities do not appear on their balance sheets.

Where banks have encumbered securities in repos or other securities financing transactions, but have retained beneficial ownership and those assets remain on the bank's balance sheet, the bank should allocate such securities to the appropriate RSF category.

Securities financing transactions with a single counterparty may be measured net when calculating the NSFR, provided that the netting conditions set out in Paragraph 33(i) of the Basel III Leverage ratio framework are met.

### *Treatment of encumbrance*

In accordance with the principle that a bank cannot derive liquidity benefit from assets that they have encumbered, banks are required to identify whether specific assets have been encumbered and for what duration. For each category of assets, banks should report in separate lines the balances of encumbered and unencumbered assets in the appropriate column, depending on the residual maturity of the asset.

Assets encumbered for exceptional central bank liquidity operations<sup>44</sup> where national supervisors and central banks have agreed to a reduced RSF factor (not lower than the RSF factor applied to the equivalent asset that is unencumbered) should report such values separately as described below.

### **Further details of how encumbrance is to be reported are included at the start of section 6.2.2.**

#### *Treatment of derivatives payables and derivatives receivables*

A bank will usually have both derivatives liabilities (ie payables) and derivative assets (ie receivables) on its balance sheet. Derivative liabilities are calculated first based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a negative value. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of the Basel III leverage ratio framework, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost. In calculating NSFR derivative liabilities, collateral posted in the form of variation margin in connection with derivatives contracts, regardless of the asset type, must be deducted from the negative replacement cost amount.<sup>45,46</sup>

Derivative assets are calculated first based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a positive value. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of the Basel III leverage ratio framework, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost.

In calculating NSFR derivatives assets, collateral received in connection with derivatives contracts may not offset the positive replacement cost amount, regardless of whether or not netting is permitted under the bank's operative accounting or risk-based framework, unless it is received in the form of cash variation margin and meets the conditions as specified in paragraph 25 of the Basel III Leverage ratio framework or further specified in any related FAQ.<sup>47</sup> Any remaining balance sheet liability associated with (a) variation margin received that does not meet the criteria above or (b) initial margin received may not offset derivative assets and should be assigned a 0% ASF factor.

#### 6.2.1 Available stable funding (panel A)

The available amount of stable funding is calculated by first assigning the **carrying value** of an institution's capital and liabilities to the categories below, which are also listed in Table 1, page 6 of the Basel III NSFR standards.<sup>48</sup> Carrying value represents the amount at which a liability or equity instrument is recorded before the application of any regulatory deductions, filters or other adjustments and is the amount prior to the application of any ASF factors.

Some amendments have been made to the definitions in the Basel III NSFR standards to take into account the collection of data in maturity buckets.

- Institutions should report all capital and liabilities to the appropriate columns based on maturity.

<sup>44</sup> In general, exceptional central bank liquidity operations are considered to be non-standard, temporary operations conducted by the central bank in order to achieve its mandate in a period of market-wide financial stress and/or exceptional macroeconomic challenges.

<sup>45</sup> NSFR derivative liabilities = (derivative liabilities) – (total collateral posted as variation margin on derivative liabilities)

<sup>46</sup> To the extent the bank's accounting framework reflects on balance sheet, in connection with a derivatives contract, an asset associated with collateral posted as variation margin that is deducted from the replacement cost amount for purposes of the NSFR, that asset should not be included in the calculation of a bank's RSF to avoid any double counting.

<sup>47</sup> NSFR derivative assets = (derivative assets) – (cash collateral received as variation margin on derivative assets)

<sup>48</sup> [www.bis.org/bcbs/publ/d295.htm](http://www.bis.org/bcbs/publ/d295.htm).

- When determining the maturity of an instrument, investors are assumed to redeem a call option at the earliest possible date. For funding with options exercisable at the bank’s discretion supervisors should take into account reputational factors that may limit a bank’s ability not to exercise the option.<sup>49</sup> In particular, where the market expects certain liabilities to be redeemed before their legal final maturity date, banks and supervisors should assume such behaviour for the purpose of the NSFR and include these liabilities in the corresponding ASF category. For long-dated liabilities, only the portion of cash flows falling at or beyond the six-month and one-year time horizons should be treated as having an effective residual maturity of six months or more and one year or more, respectively.
- For retail and small business customers the same methodology for determining maturity should be followed in the NSFR as in the LCR.
- Deposits with a fixed term should be allocated to the appropriate maturity bucket; non-maturity (demand) deposits should be reported in the column for less than six months.

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
6	Tier 1 and 2 capital (Basel III 2022), before the application of capital deductions and excluding the proportion of Tier 2 instruments with residual maturity of less than one year	The total amount of regulatory capital, before the application of capital deductions, as defined in paragraph 49 of the Basel III capital standards, excluding the proportion of Tier 2 instruments with residual maturity of less than one year. Amounts reported here should only include amounts after transitional arrangements have expired under fully implemented Basel III standards (ie as in 2022). Standards governing Tier 1 and Tier 2 capital are described in the Basel III capital standards.	21(a)
8	Capital instruments not included above with an effective residual maturity of one year or more	The total amount of any capital instrument not included in line 6 that has an effective residual maturity of one year or more but excluding any instruments with explicit or embedded options that, if exercised, would reduce the expected maturity to less than one year.	21(b)
9	“Stable” (as defined in the LCR) demand and/or term deposits from retail and small business customers	“Stable” non-maturity (demand) deposits and/or term deposits (as defined in the LCR in paragraphs 75 to 78) provided by retail customers and small business customers. Term deposits, regardless of the residual contractual maturity, which may be withdrawn early without entailing a withdrawal penalty significantly greater than the loss of interest should be reported in the <6 months column.	21(c), 22
11	“Less stable” (as defined in the LCR) demand and/or term deposits from retail and small business customers	“Less stable” (as defined in the LCR in paragraphs 79 to 81) non-maturity (demand) deposits and/or term deposits provided by retail and small business customers. Term deposits, regardless of the residual contractual maturity, which may be withdrawn early without entailing a withdrawal penalty significantly greater than the loss of interest should be reported in the <6 months column.	21(c), 23

<sup>49</sup> This could reflect a case where a bank may imply that it would be subject to funding risk if it did not exercise an option on its own funding.

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
13	Unsecured funding from non-financial corporates	Unsecured funding, non-maturity deposits and/or term deposits provided by non-financial corporates (excluding small business customers).	21(c), 24(a)
14	Of which is an operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by non-financial corporates with operational relationships, as defined in the LCR.	93–104 (Basel III LCR standards)
15	Of which is a non-operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by non-financial corporates without operational relationships, as defined in the LCR.	107–108 (Basel III LCR standards)
16	Of which is non-deposit unsecured funding	Banks should report any non-deposit unsecured funding provided by non-financial corporates.	
20	Unsecured funding from central banks	Unsecured funding, non-maturity deposits and/or term deposits provided by central banks.	21(c), 24(b), 24(d), 25(a)
21	Of which is an operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by central banks with operational relationships, as defined in the LCR.	93–104 (Basel III LCR standards)
22	Of which is a non-operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by central banks without operational relationships, as defined in the LCR.	107–108 (Basel III LCR standards)
23	Of which is non-deposit unsecured funding	Banks should report any non-deposit unsecured funding provided by central banks.	
25	Unsecured funding from sovereigns, PSEs, MDBs and NDBs	Unsecured funding, non-maturity deposits and/or term deposits provided by sovereigns, public sector entities (PSEs), multilateral development banks (MDBs) and national development banks (NDBs). Banks should include in this line unsecured funding received from the Bank for International Settlements, the International Monetary Fund and the European Commission.	21(c), 24(c)
26	Of which is an operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by sovereigns, PSEs, MDBs and NDBs with operational relationships, as defined in the LCR.	93–104 (Basel III LCR standards)
27	Of which is a non-operational deposit (as defined in the LCR)	Banks should report the portion of unsecured deposits provided by sovereigns, PSEs, MDBs and NDBs without operational relationships, as defined in the LCR.	107–108 (Basel III LCR standards)
28	Of which is non-deposit unsecured funding	Banks should report any non-deposit unsecured funding provided by sovereigns, PSEs, MDBs and NDBs.	
32	Unsecured funding from other legal entities (including financial corporates and financial institutions)	The total amount of unsecured borrowings and liabilities (including term deposits) not reported in rows 13 to 28, comprising funding from other legal entities (including financial corporates and financial institutions (other than banks that are members of the same cooperative network of banks)).	21(c), 24(b), 24(d), 25(a)
33	Of which is an operational deposit (as defined in the LCR)	Banks should report the total amount of unsecured deposits provided by other legal entities with operational relationships, as defined in the LCR.	93–104 (Basel III LCR standards)
34	Of which is a non-operational deposit (as defined in the LCR)	Banks should report the total amount of unsecured deposits provided by other legal entities without operational relationships, as defined in the LCR.	109 (Basel III LCR standards)

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
35	Of which is non-deposit unsecured funding	Banks should report any non-deposit unsecured funding provided by other legal entities (including financial corporates and financial institutions). Banks should report here any non-deposit unsecured funding for which a counterparty cannot be determined (and is thus not reported in lines 16, 23, and/or 28).	
39	Deposits from members of the same cooperative network of banks subject to national discretion as defined in FN 10	In accordance with footnote 10 of the Basel III NSFR standards, this section should only be used to report deposits that exist between banks within the same cooperative network, provided they are either (a) required by law in some jurisdictions to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements, or (b) in the context of common task sharing and legal, statutory or contractual arrangements, so long as the bank that has received the monies and the bank that has deposited participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members. If deposits are placed in the context of (a) above, then banks should allocate the total amount of deposits received from members of their institutional network of cooperative banks according to underlying funding source in Panel D (lines 277 to 294 below), and the total balance reported in those lines should equal the balance reported here. If deposits are placed in the context of (b) above, then banks should report balances in this row but <b>do not</b> need to report balances in Panel D (lines 277 to 294 below). Any deposits that are operational deposits according to paragraphs 93 to 104 of the Basel III LCR standards or other deposits from members of their institutional networks of cooperative networks would be reported in line 41.	105(a) (Basel III LCR standards), footnote 10, 21(c)
41	Other deposits from members of a cooperative network of banks	Banks should report any deposits from banks that are members of the same cooperative network of banks that are operational deposits according to paragraphs 93 to 104 of the Basel III LCR standards or other deposits from members of their cooperative networks that are not included in line 39.	
42	Secured borrowings and liabilities (including secured term deposits): of which are from:	The total amount of secured borrowings and liabilities (including term deposits). Secured funding is defined as those liabilities and general obligations that are collateralised by legal rights to specifically designated assets owned by the borrowing institution in the case of bankruptcy, insolvency, liquidation or resolution.	21(c), 24, 25(a)
43	Retail and small business customers	The amount of secured borrowings and liabilities (including term deposits) from retail and small business customers.	
44	Non-financial corporates	The amount of secured borrowings and liabilities (including term deposits) from non-financial corporates.	

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
45	Central banks	The amount of secured borrowings and liabilities (including term deposits) from central banks.	
46	Sovereigns/PSEs/MDBs/NDBs	The amount of secured borrowings and liabilities (including term deposits) from sovereigns/PSEs and multilateral and national development banks.	
47	Other legal entities (including financial corporates and financial institutions)	The amount of secured borrowings and liabilities (including term deposits) from other legal entities (including financial corporates and financial institutions).	
49	Derivative Liabilities, gross of variation margin posted	Report derivative liabilities based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a negative value. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of the Basel III leverage ratio framework, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost. The value reported here should be gross of variation margin posted. That is, it should represent derivative liabilities prior to the deduction of variation margin posted.	19
50	Of which are derivative liabilities where the counterparty is exempt from BCBS-IOSCO margin requirements; of which:	Report derivative liabilities (as described above), gross of variation margin posted, where the counterparty is exempt from BCBS-IOSCO margin requirements, as laid out in paragraph 2(c) of the <i>BCBS-IOSCO margin requirements for non-centrally cleared derivatives</i> . <sup>50</sup>	
51	Non-financial entities that are not systemically important	Derivative liabilities with non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
52	Sovereigns/Central Banks/MDBs/BIS	Derivative liabilities with sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
54	Total variation margin posted	All collateral posted in the form of variation margin in connection with derivative contracts, regardless of asset type.	
55	Of which is posted to counterparties exempted from BCBS-IOSCO margin requirements; of which:	All collateral posted in the form of variation margin in row 54 above that is posted to counterparties exempt from BCBS-IOSCO margin rules, as laid out in paragraph 2(c) of the BCBS-IOSCO Margin requirements for non-centrally cleared derivatives.	
56	Non-financial entities that are not systemically important	Variation margin posted to non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
57	Sovereigns/Central Banks/MDBs/BIS	Variation margin posted to sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	

<sup>50</sup> Basel Committee on Banking Supervision and Board of the International Organization of Securities Commissions, *Margin requirements for non-centrally cleared derivatives*, September 2013, [www.bis.org/publ/bcbs261.htm](http://www.bis.org/publ/bcbs261.htm).

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
59	NSFR derivative liabilities (derivative liabilities less total collateral posted as variation margin on derivative liabilities)	Non-entry field. In calculating NSFR derivative liabilities, collateral posted in the form of variation margin in connection with derivatives contracts, regardless of the asset type, is deducted from the negative replacement cost amount or the negative net replacement cost where applicable. <sup>51 52</sup>	19, 20, FN 6
60	Total initial margin received	All cash, securities or other assets received as initial margin for all derivative contracts (eg, including any independent amount received in relation to OTC contracts).	
61	Of which, initial margin received in the form of cash	Cash received as initial margin for derivative contracts	
62	Of which, initial margin received in the form of Level 1 securities	Initial margin received, in the form of Level 1 securities for derivative contracts	
63	Of which, initial margin received in the form of all other collateral	Initial margin received, in the form of collateral other than cash or Level 1 securities included above in rows 61 to 62.	
65	Total initial margin received, in the form of any collateral type, according to residual maturity of associated derivative contract(s)	All cash, securities or other assets received as initial margin for derivative contracts. Report initial margin balances in this category according to the residual maturity of the derivative contract(s) directly associated with the initial margin. In the case of pooled collateral, report the maturity of initial margin balances according to the maturity of the derivative contract with the longest term in the applicable netting set that contributes to an initial margin requirement. Contracts that are fully offsetting (ie long and short positions in identical contracts) and do not contribute to an initial margin requirement may be excluded from the determination of maturity.  The sum of this category should equal total initial margin received in row 60 above.	
67	Initial margin received, in the form of any collateral type, from counterparties exempt from BCBS-IOSCO margin requirements; of which:	Cash, securities or other assets received as initial margin for derivative contracts from counterparties exempt from BCBS-IOSCO margin requirements for non-centrally cleared derivatives.	
68	Non-financial entities that are not systemically important	Cash, securities or other assets received as initial margin for derivative contracts from non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	

<sup>51</sup> NSFR derivative liabilities = (derivative liabilities) – (total collateral posted as variation margin on derivative liabilities)

<sup>52</sup> To the extent the bank's accounting framework reflects on balance sheet, in connection with a derivatives contract, an asset associated with collateral posted as variation margin that is deducted from the replacement cost amount for purposes of the NSFR, that asset should not be included in the calculation of a bank's RSF to avoid any double counting.

Row	Heading	Description	Basel III NSFR standards reference (unless otherwise noted)
69	Sovereigns/Central Banks/MDBs/BIS	Cash, securities or other assets received as initial margin for derivative contracts from sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
72	Deferred tax liabilities (DTLs)	The amount of deferred tax liabilities, reported according to the nearest possible date in which such liabilities could be realised.	25(b)
73	Minority interest	The amount of minority interest, reported according to the term of the instrument, usually in perpetuity.	25(b)
74	Trade date payables	The amount of payables arising from purchases of financial instruments, foreign currencies and commodities that (i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction, or (ii) have failed to, but are still expected to, settle.	25(d)
75	Interdependent liabilities	<p>National supervisors have discretion in limited circumstances to determine interdependent assets and liabilities in accordance with paragraph 45 of Basel III NSFR standards.</p> <p>Report here liability items which, on the basis of contractual arrangements, are interdependent on corresponding assets report in line 249 below such that: the liability cannot fall due while the asset remains on the balance sheet, the principal payment flows from the asset cannot be used for something other than repaying the liability, and the liability cannot be used to fund other assets. For interdependent items, supervisors may adjust RSF and ASF factors so that they are both 0%, subject to the following criteria:</p> <ul style="list-style-type: none"> <li>• The individual interdependent asset and liability items must be clearly identifiable.</li> <li>• The maturity and principal amount of both the liability and its interdependent asset should be the same.</li> <li>• The bank is acting solely as a pass-through unit to channel the funding received (the interdependent liability) into the corresponding interdependent asset.</li> <li>• The counterparties for each pair of interdependent liabilities and assets should not be the same.</li> </ul>	45
76	All other liability and equity categories not included above	<p>All other liabilities of the institution (not otherwise reported in above categories) should be accounted for in this row at their carrying value. The value of short positions and open maturity positions should be reported in the &lt; 6 month column.</p> <p>Note: deductions from capital should not be included in the amount reported in this line item, and should instead be reported according to the instructions in line 247 below.</p>	21(c), 24(d), 25(a), 25(b)

## 6.2.2 Required stable funding (panel B)

The amount of required stable funding (RSF) is measured using assumptions on the broad characteristics of the liquidity risk profile of an institution's assets and off-balance sheet exposures. The amount of required stable funding is calculated by first assigning the **carrying value** of an institution's assets to the categories below, which are also listed in Table 2, page 11 of the Basel III NSFR standards. The amount assigned to each category is then multiplied by an RSF factor and the total RSF is the sum of the weighted amounts added to the amount of off-balance sheet activity (or potential liquidity exposure) multiplied by its associated RSF factor.

The RSF factor applied to the reported values of each asset or off-balance sheet exposure is intended to approximate the amount of a particular asset that would have to be funded, either because it will be rolled over or because it could not be monetised through sale or used as collateral in a secured borrowing transaction over the course of one year without significant expense. Under the standard, such amounts are expected to be supported by stable funding.

In completing this section of the template banks should allocate the assets recorded on their balance sheet to the appropriate RSF category. For purposes of determining its required stable funding, an institution should (i) include financial instruments, foreign currencies and commodities for which a purchase order has been executed, and (ii) exclude financial instruments, foreign currencies and commodities for which a sales order has been executed, even if such transactions have not been reflected in the balance sheet under a settlement-date accounting model, provided that (i) such transactions are not reflected as derivatives or secured financing transactions in the institution's balance sheet, and (ii) the effects of such transactions will be reflected in the institution's balance sheet when settled.

### *Treatment of encumbrance*

Where indicated, banks should report assets according to:

- (i) whether they are encumbered or unencumbered; and,
- (ii) if they are encumbered, according to the period of encumbrance.
- (iii) In determining encumbrance where it is not tied to specific assets, eg the encumbrance is allocated against a pool of assets that includes different RSF categories, the bank should assume that the highest RSF factor assets are encumbered first.

Where a bank has rehypothecated assets in which it has both positions it owns outright and borrowed positions, a bank should assume it has encumbered the borrowed securities first, unless it has an internal process for making this allocation, or it has applied a different methodology for determining the encumbrance of positions in the LCR. For example, if for the LCR the bank assumes positions held outright are encumbered before borrowed positions in order to recognise inflows from maturing borrowed positions, then the bank must use an equivalent approach for these transactions in the NSFR. For their encumbered assets, banks should first report their value in the appropriate column **according to residual maturity** at the carrying value on the balance sheet, and not the value assigned to it for the purposes of the encumbrance transaction. If the bank is required to over-collateralise transactions, for example due to the application of haircuts, or to achieve a desired credit-rating on a funding instrument, then these excess assets should be reported as encumbered.

The bank should then report that same value **according to the remaining period of encumbrance** in the same column of the appropriate row beneath. Banks should consider whether specific assets have a remaining term of encumbrance period (or residual encumbrance period) that is longer than the maturity of the asset, eg where in practice there is a requirement to encumber additional assets at the contracted maturity date of the currently encumbered asset. For example, if debt is secured on loans of a shorter maturity and the bank will be required to pledge additional collateral to maintain appropriate collateralisation levels, as may be the case with mortgage-backed securities.

For example, if a bank had a non-financial corporate loan that had a value of 50 with a residual maturity of 10 months, 25 of which were encumbered for a remaining period of two months, and 25 of which were encumbered for a remaining period of for seven months, it would complete the template as follows:

	Amount		
	< 6 months	≥ 6 months to < 1 year	≥ 1 year
Loans to non-financial corporate clients with residual maturities less than one year			
Unencumbered			
Encumbered, of which:			
Remaining period of encumbrance < 6 months		25	
Remaining period of encumbrance ≥ 6 months to < 1 year		25	
Remaining period of encumbrance ≥ 1 year			

Assets encumbered for exceptional central bank liquidity operations<sup>53</sup> where national supervisors and central banks have agreed to a reduced RSF factor (not lower than the RSF factor applied to the equivalent asset that is unencumbered) should report such values separately in panel E of the NSFR template. Values reported in panel E should not be included in Required Stable Funding section in panel B to avoid double counting.

Row	Heading	Description	Basel III NSFR standards reference
<b>B)</b>	<b>Required stable funding</b>		
		The required amount of stable funding is calculated by first assigning the <b>carrying value</b> of an institution's assets to the categories below, which are also listed in Table 2, page 11 of the Basel III NSFR standards. The amount assigned to each category is to be multiplied by an RSF factor and the total RSF is the sum of the weighted amounts.	
		Of note, definitions in the NSFR mirror those in the LCR, unless otherwise specified. In addition, for purposes of calculating the NSFR, HQLA is defined as all HQLA (defined in LCR paragraphs 24 to 68) without regard to LCR operational requirements (defined in LCR paragraphs 28 to 43) and LCR caps on Level 2 and Level 2B assets that may limit the ability of some HQLA to be included as eligible HQLA in the calculation of the LCR.	
		Assets that are deducted from capital should be reported in the relevant asset categories below.	
		<i>Treatment of maturity</i>	
		<ul style="list-style-type: none"> <li>• Institutions should allocate all assets to the appropriate columns based on their residual maturity or liquidity value.</li> <li>• When determining the maturity of an instrument, investors are assumed to exercise any option to extend maturity.</li> <li>• For assets with options exercisable at the bank's discretion, supervisors should take into account reputational factors that may limit a bank's ability not to exercise the option.<sup>54</sup> In particular, where the market expects certain assets to be extended in their maturity, banks and supervisors should assume such behaviour for the purpose of the NSFR and include these assets in the corresponding RSF category.</li> <li>• For amortising loans, the portion that comes due within the one-year horizon can be treated in the less than one year residual maturity categories.</li> </ul>	
<b>B1)</b>	<b>On-balance sheet items</b>		

<sup>53</sup> In general, exceptional central bank liquidity operations are considered to be non-standard, temporary operations conducted by the central bank in order to achieve its mandate in a period of market-wide financial stress and/or exceptional macroeconomic challenges.

<sup>54</sup> This could reflect a case where a bank may imply that it would be subject to funding risk if it did not exercise an option to extend the maturity of its own assets.

Row	Heading	Description	Basel III NSFR standards reference
84	Coins and banknotes	Coins and banknotes currently held and immediately available to meet obligations. Banks should not report loans to counterparties in this row.	36(a)
85	Total central bank reserves	Total amount held in central bank reserves (including required and excess reserves) including banks' overnight deposits with the central bank, and term deposits with the central bank.	36(b)
86	Of which are required central bank reserves	Total amount held in central bank reserves related to minimum deposit requirements. Supervisors may agree with the relevant central bank on the RSF factor to be assigned to required reserves, based in particular on consideration of whether or not the reserve requirement must be satisfied at all times and thus the extent to which reserve requirements in that jurisdiction exist on a longer-term horizon and therefore require associated stable funding. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	FN17
88	Securities held where the institution has an offsetting reverse repurchase transaction when the security on each transaction has the same unique identifier (eg ISIN number or CUSIP) and such securities are reported on the balance sheet of the reporting institution	This category is only applicable for jurisdictions whereby accounting standards would require both the reverse repo transaction and the collateral to be reported on-balance sheet. Where this is the case, banks should report in this category, any securities reported on their balance sheet that are borrowed in reverse repurchase transactions. Reverse repo transactions that appear on their balance sheets as secured cash loans and deposits placed should not be reported in this category, rather should be reported with loans to financial institutions in rows 102 to 120. Securities in default should not be reported in this category, rather these should be reported in line 211.	
89	Unencumbered	Banks should report in this row all such <b>unencumbered</b> securities in the appropriate column according to their residual maturity.	
90	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
91	Remaining period of encumbrance < 6 months	For each cell containing securities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance.</b> Attention is drawn to the worked example at the start of this section.	
92	Remaining period of encumbrance ≥ 6 months to < 1 year		
93	Remaining period of encumbrance ≥ 1 year		

Row	Heading	Description	Basel III NSFR standards reference
94	Deposits held at other banks which are members of the same cooperative network of banks and which are subject to national discretion according to FN 10	<p>In accordance with footnote 10 of the Basel III NSFR standards, this section should only be used to report deposits that exist between banks within the same cooperative network, provided they are received in the context of common task sharing and legal, statutory or contractual arrangements, and so long as the bank that has received the monies and the bank that has deposited participate in the same institutional network's mutual protection scheme against illiquidity and insolvency of its members. Such deposits can be assigned an ASF up to the RSF factor assigned by regulation for the same deposits to the depositing bank, not to exceed 85%.</p> <p>Deposits reported in this category should not be reported in any other RSF category.</p> <p>This category <b>does not</b> apply to banks in jurisdictions where deposits are required by law to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements. Accordingly, banks that complete Panel D below, as specified in the instructions for row 39 above, <b>should not</b> report balances here.</p>	FN 10, 43(c)
96	Other deposits at other banks which are members of the same cooperative network of banks; of which:	<p>In accordance with footnote 10 of the Basel III NSFR standards, this section should only be used to report other deposits that exist between banks within the same cooperative network, provided they are received in the context of common task sharing and legal, statutory or contractual arrangements, which do not satisfy the conditions set forth in line 95 above.</p> <p>Deposits reported in this category should not be reported in any other RSF category.</p> <p>This category <b>does not</b> apply to banks in jurisdictions where deposits are required by law to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements. Banks that complete Panel D below, as specified in the instructions for row 39 above, <b>should not</b> report balances here.</p>	
97	Unencumbered	Banks should report in this row all such <b>unencumbered</b> deposits in the appropriate column according to their residual maturity.	
98	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> deposits, regardless of counterparty, in the appropriate column according to their residual maturity.	
99	Remaining period of encumbrance < 6 months	<p>For each cell containing deposits that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b>.</p> <p>Attention is drawn to the worked example at the start of this section.</p>	
100	Remaining period of encumbrance ≥ 6 months to < 1 year		
101	Remaining period of encumbrance ≥ 1 year		

Row	Heading	Description	Basel III NSFR standards reference
102	Loans to financial institutions, of which:	Loans to all financial institutions. Non-performing loans should not be included in this category, rather these should be reported in line 211. Deposits held at financial institutions for operational purposes should not be reported here and should instead be reported in line 139.	31, 38, 39(b), 40(c), 43(a), 43(c)
103	Loans to financial institutions secured by Level 1 collateral and where the bank has the ability to freely rehypothecate the received collateral for the life of the loan, of which:	All loans to financial institutions where the loan is secured against Level 1 assets, as defined in LCR paragraph 50, <b>and</b> where the bank has the ability to freely rehypothecate the received collateral for the life of the loan. Report loans to financial institutions secured by Level 1 assets where the bank <b>does not</b> have the ability to freely rehypothecate the received collateral for the life of the loan in line 109 below.	31, 38, 40(c), 43(a), 43(c)
104	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
105	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
106	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
107	Remaining period of encumbrance ≥ 6 months to < 1 year		
108	Remaining period of encumbrance ≥ 1 year		
109	All other secured loans to financial institutions, of which:	All other secured loans to financial institutions, including both loans secured against collateral other than Level 1 assets <b>and</b> loans secured by Level 1 assets where the bank <b>does not</b> have the ability to freely rehypothecate the received collateral for the life of the loan.	31, 39(b), 40(c), 43(a), 43(c)
110	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.  This includes both unencumbered loans secured against collateral other than Level 1 assets <b>and</b> unencumbered loans secured by Level 1 assets where the bank <b>does not</b> have the ability to freely rehypothecate the received collateral for the life of the loan.	
111	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.  This includes both encumbered loans secured against collateral other than Level 1 assets <b>and</b> encumbered loans secured by Level 1 assets where the bank <b>does not</b> have the ability to freely rehypothecate the received collateral for the life of the loan.	

Row	Heading	Description	Basel III NSFR standards reference
112	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
113	Remaining period of encumbrance ≥ 6 months to < 1 year		
114	Remaining period of encumbrance ≥ 1 year		
115	Unsecured loans to financial institutions, of which:	All loans to financial institutions that are unsecured.	31, 39(b), 40(c), 43(a), 43(c)
116	Unencumbered	Banks should report in these rows all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
117	Encumbered, of which:	Banks should report in all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	
118	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
119	Remaining period of encumbrance ≥ 6 months to < 1 year		
120	Remaining period of encumbrance ≥ 1 year		
121	Securities eligible as Level 1 HQLA for the LCR, of which:	Securities that, if unencumbered, would qualify as Level 1 liquid assets according to paragraph 50 of the Basel III LCR standards.  Securities that would otherwise qualify according to that paragraph, but are excluded for operational or other reasons, are reported in this category. Coins and banknotes, and central bank reserves should be reported in lines 84, 85 and 86 respectively and not in this category.  Securities in default should not be included in this category; rather these should be reported in line 211.	31, 37, 40(b), 43(a)
122	Unencumbered	Banks should report in this row all such <b>unencumbered</b> securities in the appropriate column according to their residual maturity.	
123	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
124	Remaining period of encumbrance < 6 months	For each cell containing securities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
125	Remaining period of encumbrance ≥ 6 months to < 1 year		
126	Remaining period of encumbrance ≥ 1 year		

Row	Heading	Description	Basel III NSFR standards reference
127	Securities eligible for Level 2A HQLA for the LCR, of which:	Securities that, if unencumbered, would qualify as Level 2A liquid assets, according to paragraph 52 of the Basel III LCR standards.  Securities that would otherwise qualify according to that paragraph, but are excluded for exceeding the 40% cap, or for operational or other reasons, are reported in this category.  Securities in default should not be included in this category; rather these should be reported in line 211.	31, 39(a), 40(b), 43(a)
128	Unencumbered	Banks should report in this row all such <b>unencumbered</b> securities in the appropriate column according to their residual maturity.	
129	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
130	Remaining period of encumbrance < 6 months	For each cell containing securities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> .  Attention is drawn to the worked example at the start of this section.	
131	Remaining period of encumbrance ≥ 6 months to < 1 year		
132	Remaining period of encumbrance ≥ 1 year		
133	Securities eligible for Level 2B HQLA for the LCR, of which:	Securities that, if unencumbered, would qualify as Level 2B liquid assets, according to paragraph 54 of the Basel III LCR standards.  Securities that would otherwise qualify according to that paragraph, but are excluded for exceeding the 15% or 40% caps, or for operational or other reasons, are reported in this category.  Securities in default should not be included in this category; rather these should be reported in line 211.	31, 40(a), 40(b), 43(a)
134	Unencumbered	Banks should report in this row all such <b>unencumbered</b> securities in the appropriate column according to their residual maturity.	
135	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
136	Remaining period of encumbrance < 6 months	For each cell containing securities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> .  Attention is drawn to the worked example at the start of this section.	
137	Remaining period of encumbrance ≥ 6 months to < 1 year		
138	Remaining period of encumbrance ≥ 1 year		
139	Deposits held at financial institutions for operational purposes, of which:	Deposits held at financial institutions, including banks subject to prudential supervision, for operational purposes, as defined in LCR paragraphs 93 to 104.	31, 40(d), 43(a)
140	Unencumbered	Banks should report in this row all such <b>unencumbered</b> deposits in the appropriate column according to their residual maturity.	

Row	Heading	Description	Basel III NSFR standards reference
141	Encumbered, of which:	Banks should report these rows all such <b>encumbered</b> deposits, regardless of counterparty, in the appropriate column according to their residual maturity.	
142	Remaining period of encumbrance < 6 months	For each cell containing deposits that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
143	Remaining period of encumbrance ≥ 6 months to < 1 year		
144	Remaining period of encumbrance ≥ 1 year		
145	Loans to non-financial corporate clients with a residual maturity of less than one year; of which:	Loans to non-financial corporate clients having a residual maturity of less than one year. Non-performing loans should not be included in this category, rather these should be reported in line 211. Performing loans to non-financial corporate clients with a residual maturity of less than one year and with a greater than 35% risk weight under the Basel II standardised approach for credit risk should be reported in this category and not in line 181. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	31, 40(e), 43(a)
146	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
147	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	
148	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
149	Remaining period of encumbrance ≥ 6 months to < 1 year		
150	Remaining period of encumbrance ≥ 1 year		

Row	Heading	Description	Basel III NSFR standards reference
151	Loans to central banks with a residual maturity of less than one year; of which:	<p>Loans to central banks having a residual maturity of less than one year that do not qualify to meet local reserve requirements. Balances (including term placements) that qualify toward reserve requirements should be considered as "total central bank reserves" and reported in row 85, even if these balances are in excess of the required level of reserves.</p> <p>Non-performing loans should not be included in this category, rather these should be reported in line 211.</p> <p>Performing loans to central banks with a residual maturity of less than one year and a greater than 35% risk weight under the Basel II standardised approach for credit risk should be reported in this category and not in line 181.</p> <p>Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.</p>	31, 36(c), 40(c), 43(a)
152	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
153	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	
154	Remaining period of encumbrance < 6 months	<p>For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b>.</p> <p>Attention is drawn to the worked example at the start of this section.</p>	
155	Remaining period of encumbrance ≥ 6 months to < 1 year		
156	Remaining period of encumbrance ≥ 1 year		
157	Loans to sovereigns, PSEs, MDBs and NDBs with a residual maturity of less than one year; of which:	<p>Loans to sovereigns, PSEs, MDBs and NDBs having a residual maturity of less than one year.</p> <p>Loans to the Bank for International Settlements, the International Monetary Fund and the European Commission should also be reported in this category.</p> <p>Non-performing loans should not be included in this category; rather these should be reported in line 211.</p> <p>Performing loans to sovereigns, PSEs, MDBs and NDBs with a residual maturity of less than one year and a greater than 35% risk weight under the Basel II standardised approach for credit risk should be reported in this category and not in line 181.</p> <p>Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.</p>	31, 40(e), 41, 43(a)
158	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
159	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	

Row	Heading	Description	Basel III NSFR standards reference
160	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
161	Remaining period of encumbrance ≥ 6 months to < 1 year		
162	Remaining period of encumbrance ≥ 1 year		
163	Residential mortgages of any maturity that would qualify for the 35% or lower risk weight under the Basel II standardised approach for credit risk, of which:	Residential mortgages of any maturity that would qualify for the 35% or lower risk weight under the Basel II standardised approach for credit risk. Non-performing residential mortgages should not be reported in this category; rather these should be reported in line 211. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	31, 40(e), 41(a), 43(a)
164	Unencumbered	Banks should report in this row all such <b>unencumbered</b> mortgages in the appropriate column according to their residual maturity.	
165	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> mortgages, regardless of counterparty, in the appropriate column according to their residual maturity.	
166	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
167	Remaining period of encumbrance ≥ 6 months to < 1 year		
168	Remaining period of encumbrance ≥ 1 year		
169	Other loans, excluding loans to financial institutions, with a residual maturity of one year or greater, that would qualify for the 35% or lower risk weight under the Basel II standardised approach for credit risk, of which:	Include balances of all other loans, excluding loans to financial institutions, with a residual maturity of one year or more, that would qualify for the 35% or lower risk weight under the Basel II standardised approach for credit risk. Non-performing loans should not be reported in this category; rather these should be reported in line 211. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	31, 41(b), 43(a)
170	Unencumbered	Banks should report in t all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
171	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	

Row	Heading	Description	Basel III NSFR standards reference
172	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
173	Remaining period of encumbrance ≥ 6 months to < 1 year		
174	Remaining period of encumbrance ≥ 1 year		
175	Loans to retail and small business customers (excluding residential mortgages reported above) with a residual maturity of less than one year; of which:	Loans to retail (eg natural persons) and small business customers (as defined in the LCR) having a residual maturity of less than one year. Non-performing loans should not be reported in this category, rather these should be reported in line 211. Performing loans to retail and small business customers with a residual maturity of less than one year with a greater than 35% risk weight under the Basel II standardised approach for credit risk should also be reported in this category and not in line 181. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	31, 40(e), 43(a)
176	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
177	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	
178	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
179	Remaining period of encumbrance ≥ 6 months to < 1 year		
180	Remaining period of encumbrance ≥ 1 year		
181	Performing loans (except loans to financial institutions and loans reported in above categories) with risk weights greater than 35% under the Basel II standardised approach for credit risk; of which:	Performing loans, not captured by one of the above categories, with a greater than 35% risk weight under the Basel II standardised approach for credit risk, excluding loans to financial institutions. Non-performing loans should not be reported in this category, rather these should be reported in line 211. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	31, 40(e), 42(b), 43(a), FN19
182	Unencumbered	Banks should report in this row all such <b>unencumbered</b> loans in the appropriate column according to their residual maturity.	
183	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> loans, regardless of counterparty, in the appropriate column according to their residual maturity.	

Row	Heading	Description	Basel III NSFR standards reference
184	Remaining period of encumbrance < 6 months	For each cell containing loans that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
185	Remaining period of encumbrance ≥ 6 months to < 1 year		
186	Remaining period of encumbrance ≥ 1 year		
187	Non-HQLA exchange traded equities, of which:	Exchange traded equities that do not qualify as Level 2B assets. This includes exchange traded FI equities as well as exchange traded non-FI equities that do not meet all of the requirements outlined in paragraph 54(c) of the Basel III LCR standards.  Amounts related to non-HQLA exchange traded equities that are deducted from capital should not be reported here, rather these should be reported in the ≥ 1 year column in row 247.	31, 42(c), 43(a)
188	Unencumbered	Banks should report in this row all such <b>unencumbered</b> equities in the appropriate column according to their residual maturity.	
189	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> equities, regardless of counterparty, in the appropriate column according to their residual maturity.	
190	Remaining period of encumbrance < 6 months	For each cell containing equities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
191	Remaining period of encumbrance ≥ 6 months to < 1 year		
192	Remaining period of encumbrance ≥ 1 year		
193	Non-HQLA securities not in default, of which:	Securities that are not eligible for HQLA treatment as defined by Basel III LCR standards, other than non-HQLA exchange traded equities, which should be reported in line 187, and which are not in default.  Securities in default should not be reported in this category; rather these should be reported in line 211.	31, 40(e), 42(c), 43(a)
194	Unencumbered	Banks should report in this row all such <b>unencumbered</b> securities in the appropriate column according to their residual maturity.	
195	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> securities, regardless of counterparty, in the appropriate column according to their residual maturity.	
196	Remaining period of encumbrance < 6 months	For each cell containing securities that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
197	Remaining period of encumbrance ≥ 6 months to < 1 year		
198	Remaining period of encumbrance ≥ 1 year		
199	Physical traded commodities including gold, of which:	Total balance of physical traded commodities including gold should be reported in the ≥ 1 year maturity column.	31, 42(d), 43(a)

Row	Heading	Description	Basel III NSFR standards reference
200	Unencumbered	Banks should report in this row all such <b>unencumbered</b> physical traded commodities including gold.	
201	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> physical traded commodities including gold, regardless of counterparty.	
202	Remaining period of encumbrance < 6 months	For each cell containing physical traded commodities including gold that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
203	Remaining period of encumbrance ≥ 6 months to < 1 year		
204	Remaining period of encumbrance ≥ 1 year		
205	Other short-term unsecured instruments and transactions with a residual maturity of less than one year, of which are:	<p>Banks should report the balances of other short-term unsecured instruments with outstanding maturities of less than one year.</p> <p>Such instruments include but are not limited to: short-term government and corporate bills, notes, and obligations; commercial paper; negotiable CDs; bankers' acceptances; money market mutual funds.</p> <p><b>Banks should not report in this row any central bank reserves, Level 1, Level 2A and Level 2B assets, unsecured interbank and other money market placements (eg federal funds or euro currencies sold) or instruments in default. These are reported elsewhere on the template.</b></p>	31, 40(e), 43(a)
206	Unencumbered	Banks should report in this row all such <b>unencumbered</b> instruments and transactions in the appropriate column according to their residual maturity.	
207	Encumbered, of which:	Banks should report in these rows all such <b>encumbered</b> instruments and transactions, regardless of counterparty, in the appropriate column according to their residual maturity.	
208	Remaining period of encumbrance < 6 months	For each cell containing instruments that have been encumbered, banks should <b>in addition</b> allocate them to a cell in one of the three rows directly below <b>according to the remaining period of encumbrance</b> . Attention is drawn to the worked example at the start of this section.	
209	Remaining period of encumbrance ≥ 6 months to < 1 year		
210	Remaining period of encumbrance ≥ 1 year		
211	Defaulted securities and non-performing loans	All defaulted securities and non-performing loans should be reported in this line and <b>not</b> in one of the above categories. Performing loans are considered to be those that are not past due for more than 90 days in accordance with paragraph 75 of the Basel II framework. Conversely, non-performing loans are considered to be loans that are more than 90 days past due.	43(c), FN19

Row	Heading	Description	Basel III NSFR standards reference
213	Derivative assets, gross of variation margin received	Report derivative assets based on the replacement cost for derivative contracts (obtained by marking to market) where the contract has a positive value. When an eligible bilateral netting contract is in place that meets the conditions as specified in paragraphs 8 and 9 of the annex of the Basel III Leverage ratio framework, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost. The value reported here should be gross of variation margin received. That is, it should represent derivative assets prior to the deduction of variation margin received.	
214	Of which are derivative assets where the counterparty is exempt from BCBS-IOSCO margin requirements; of which:	Derivative assets (as described above), gross of variation margin received, where the counterparty is exempt from BCBS-IOSCO margin requirements, as laid out in paragraph 2(c) of the <i>BCBS-IOSCO Margin requirements for non-centrally cleared derivatives</i> <sup>55</sup> .	
215	Non-financial entities that are not systemically important	Derivative assets with non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
216	Sovereigns/Central Banks/MDBs/BIS	Derivative assets with sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
218	Variation margin received, of which:	Collateral received in the form of variation margin in connection with derivatives contracts.	
219	Cash variation margin received, meeting conditions as specified in paragraph 25 of the Basel III Leverage Ratio Framework and Disclosure Requirements	Collateral received in the form of cash variation margin in connection with derivatives contracts meeting the conditions as specified in paragraph 25 of the <i>Basel III Leverage Ratio Framework and Disclosure Requirements</i> or further specified in any related FAQ.	
221	Of which is received from counterparties exempted from BCBS-IOSCO margin requirements; of which:	Cash variation margin meeting the conditions as specified in paragraph 25 of the <i>Basel III Leverage Ratio Framework and Disclosure Requirements</i> or further specified in any related FAQ that is received from counterparties exempt from BCBS-IOSCO margin requirements, as laid out in paragraph 2(c) of the <i>BCBS-IOSCO margining requirements for non-centrally cleared derivatives</i> .	
222	Non-financial entities that are not systemically important	Cash variation margin received from non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
223	Sovereigns/Central Banks/MDBs/BIS	Cash variation margin received from sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
225	Other variation margin received	All other collateral received in the form of variation margin in connection with derivatives contracts that is not reported in line 219 above.	

<sup>55</sup> Basel Committee on Banking Supervision and Board of the International Organization of Securities Commissions, *Margin requirements for non-centrally cleared derivatives*, September 2013, [www.bis.org/publ/bcbs261.htm](http://www.bis.org/publ/bcbs261.htm).

Row	Heading	Description	Basel III NSFR standards reference
226	Of which is received from counterparties exempted from BCBS-IOSCO margining requirements	Other collateral not included in line 219 above that is received as variation margin from counterparties exempt from BCBS-IOSCO margining rules, as laid out in paragraph 2(c) of the BCBS-IOSCO margining requirements for non-centrally cleared derivatives.	
227	Non-financial entities that are not systemically important	Other variation margin received from non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
228	Sovereigns/Central Banks/MDBs/BIS	Other variation margin received from sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
230	NSFR derivative assets (derivative assets less cash collateral received as variation margin on derivative assets)	Non-entry field. In calculating NSFR derivative assets, collateral received in connection with derivatives contracts may not offset the positive replacement cost amount, regardless of whether or not netting is permitted under the bank's operative accounting or risk-based framework, unless it is received in the form of cash variation margin and meets the conditions as specified in paragraph 25 of the <i>Basel III Leverage Ratio Framework and Disclosure Requirements</i> or further specified in any related FAQ. <sup>56</sup>	35, FN 16
231	Required stable funding associated with derivative liabilities	Non-entry field. In accordance with paragraph 43(d), the value here equals 20% of derivative liabilities (ie negative replacement cost amounts or negative net replacement cost where applicable) before deducting variation margin posted.	43(d)
232	Total initial margin posted	All cash, securities or other assets posted as initial margin for derivative contracts (eg, including any independent amount received in relation to OTC contracts).	
233	Of which, is initial margin posted on bank's own behalf, of which:	All cash, securities or other assets posted as initial margin for derivative contracts taken on the bank's own behalf. This would not include initial margin posted on behalf of a customer, which should be reported in line 237 below. Where securities or other assets posted as initial margin for derivative contracts would otherwise be included in a category receiving a higher RSF factor, they should be reported within that category and not here. Do not include here cash or other assets provided to contribute to the default fund of a CCP, which should be reported in line 245 below.	42(a)
234	Initial margin posted in the form of cash	Cash posted as initial margin for derivative contracts taken on the bank's own behalf. This would not include initial margin posted on derivative contracts taken on behalf of a customer, which should be reported in line 237 below.	
235	Initial margin posted in the form of Level 1 securities	Initial margin posted in the form of Level 1 securities for derivative contracts taken on the bank's own behalf. This would not include initial margin posted on derivative contracts taken on behalf of a customer, which should be reported in line 237 below.	

<sup>56</sup> NSFR derivative assets = (derivative assets) – (cash collateral received as variation margin on derivative assets)

Row	Heading	Description	Basel III NSFR standards reference
236	Initial margin posted in the form of all other collateral	Initial margin posted in the form of collateral other than cash or Level 1 securities taken on the bank's own behalf and included in above in rows 234 to 235. This would not include initial margin posted on derivative contracts taken on behalf of a customer, which should be reported in line 237 below.	
237	Of which, is initial margin posted on behalf of a customer	Cash, securities or other assets posted as initial margin posted on behalf of a customer, where the bank does not guarantee performance of the third party. Balances reported here should not be included in lines 234 to 236 above.	FN 18
239	Initial margin posted on bank's own behalf, in the form of any collateral type, according to residual maturity of associated derivative contract(s)	All cash, securities or other assets posted as initial margin for derivative contracts taken on the bank's own behalf. Report initial margin balances in this category according to the residual maturity of the derivative contract(s) directly associated with the initial margin. In the case of pooled collateral, report the maturity of initial margin balances according to the maturity of the derivative contract with the longest term in the applicable netting set that contributes to an initial margin requirement. Contracts that are fully offsetting (ie long and short positions in identical contracts) and do not contribute to an initial margin requirement may be excluded from the determination of maturity.  This category would not include initial margin posted on derivative contracts taken on behalf of a customer. The sum of this category should be equal to the sum of rows 234 to 236 above.	
241	Initial margin posted on bank's own behalf, in the form of any collateral type, to counterparties exempt from BCBS-IOSCO margin requirements; of which:	Cash, securities or other assets posted as initial margin for derivative contracts taken on bank's own behalf to counterparties exempt from BCBS-IOSCO margin requirements for non-centrally cleared derivatives. This category would not include initial margin posted on derivative contracts taken on behalf of a customer.	
242	Non-financial entities that are not systemically important	Cash, securities or other assets posted as initial margin for derivative contracts to non-financial entities that are not systemically important and are exempt from BCBS-IOSCO margin requirements.	
243	Sovereigns/Central Banks/MDBs/BIS	Cash, securities or other assets posted as initial margin for derivative contracts to sovereign/Central Bank/MDB/BIS counterparties exempt from BCBS-IOSCO margin requirements.	
245	Cash or other assets provided to contribute to the default fund of a CCP	Cash or other assets provided to contribute to the default fund of a CCP. Do not include here cash, securities or other assets posted as initial margin for derivative contracts, which should be included in categories above.	42(a)
246	Required stable funding associated with initial margin posted and cash or other assets provided to contribute to the default fund of a CCP	Non-entry field. In accordance with paragraph 42(a), required stable funding associated with initial margin posted and cash or other assets provided to contribute to the default fund of a CCP.	42(a)
247	Items deducted from regulatory capital	Includes all items deducted from Basel III regulatory capital.	43(c)

Row	Heading	Description	Basel III NSFR standards reference
248	Trade date receivables	The amount of receivables arising from sales of financial instruments, foreign currencies and commodities that (i) are expected to settle within the standard settlement cycle or period that is customary for the relevant exchange or type of transaction, or (ii) have failed to, but are still expected to, settle.	36(d)
249	Interdependent assets	National supervisors have discretion in limited circumstances to determine interdependent assets and liabilities in accordance with paragraph 45 of Basel III NSFR standards. Report here asset items which, on the basis of contractual arrangements, are interdependent on corresponding liabilities report above in line 75 such that: the liability cannot fall due while the asset remains on the balance sheet, the principal payment flows from the asset cannot be used for something other than repaying the liability, and the liability cannot be used to fund other assets. For interdependent items, supervisors may adjust RSF and ASF factors so that they are both 0%, subject to the following criteria: <ul style="list-style-type: none"> <li>• The individual interdependent asset and liability items must be clearly identifiable.</li> <li>• The maturity and principal amount of both the liability and its interdependent asset should be the same.</li> <li>• The bank is acting solely as a pass-through unit to channel the funding received (the interdependent liability) into the corresponding interdependent asset.</li> <li>• The counterparties for each pair of interdependent liabilities and assets should not be the same.</li> </ul>	45
251	All other assets not included in above categories that qualify for 100% treatment	Include the carrying value of all other assets not included in the above categories.	43(c)
<b>B2) Off-balance sheet items</b>			
255	Irrevocable and conditionally revocable liquidity facilities	Balances of undrawn committed liquidity facilities extended by the bank that are either irrevocable or conditionally revocable.	47
256	Irrevocable and conditionally revocable credit facilities	Balances of undrawn committed credit facilities extended by the bank that are either irrevocable or conditionally revocable.	47
257	Unconditionally revocable liquidity facilities	Balances of undrawn liquidity facilities where the bank has the right to unconditionally revoke the undrawn portion of these facilities.	47
258	Unconditionally revocable credit facilities	Balances of undrawn credit facilities where the bank has the right to unconditionally revoke the undrawn portion of these facilities.	47
259	Trade finance-related obligations (including guarantees and letters of credit)	Balances of trade finance-related obligations (including guarantees and letters of credit)	47
260	Guarantees and letters of credit unrelated to trade finance obligations	Balances of guarantees and letters of credit unrelated to trade finance obligations.	47
261	Non-contractual obligations, such as:		

Row	Heading	Description	Basel III NSFR standards reference
262	Debt-buy back requests (incl related conduits)	Potential requests for debt repurchases of the bank's own debt or that of related conduits, securities investment vehicles and other such financing facilities.	47
263	Structured products	Structured products where customers anticipate ready marketability, such as adjustable rate notes and variable rate demand notes (VRDNs).	47
264	Managed funds	Managed funds that are marketed with the objective of maintaining a stable value such as money market mutual funds or other types of stable value collective investment fund, etc.	47
265	Other non-contractual obligations	Other non-contractual obligations not entered above.	47
266	All other off balance-sheet obligations not included in the above categories	All other off balance-sheet obligations not reported in lines 255 to 265 above. <b>Please refer to the instructions from your supervisor for the specification of this item.</b>	47

6.2.3 For completion only by banks in jurisdictions where deposits between banks within the same cooperative network are required by law to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements (panel D)

Panel D is only intended for banks in jurisdictions where deposits between banks within the same cooperative network are required by law to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements, and where such banks are applying the treatment in footnote 10 of the Basel III NSFR standards.

- The reporting institution must be the centralised institution of a cooperative network which has supervisory approval to use this treatment. **All other banks should leave this section blank.**
- This section should only be used to report deposits that exist between banks within the same cooperative network, provided they are required by law to be placed at the central organisation and are legally constrained within the cooperative bank network as minimum deposit requirements.
- The total amount of funding reported in this section should be equal to that reported in line 39 above.

This section **should not** be used by banks within the same cooperative network where deposits are placed in the context of common task sharing and legal, statutory or contractual arrangements.

Row	Heading	Description	Basel III NSFR standards reference
277–294	Categories are identical to those reported in Panel A	Category definitions are identical to rows 6 to 76 with the exception of rows 42 to 47 where all secured borrowings and liabilities may be reported and, unlike the first panel, there is no qualification on the type of assets used as collateral.	FN 10

## 6.2.4 For completion only by banks with assets encumbered for exceptional central bank liquidity operations, where the supervisor and central bank have agreed to a reduced RSF factor (Panel E)

Panel E collects data on assets that are encumbered for exceptional central bank liquidity operations. In accordance with paragraph 31 and FN 15 of the Basel III NSFR standards, this section should only include those balances where the supervisor and central bank have agreed to a reduced RSF factor. All other banks should leave this section blank. Values reported in this section should not be reported in Panel B(1) above to avoid double counting.

Row	Heading	Description	Basel III NSFR standards reference
302–378	Categories are identical to those reported in Panel B	Category definitions are identical to rows 88 to 205.	31, FN 15

## 7. Trading book

### 7.1 Introduction

As with the rest of the Basel III monitoring exercise, participation in the QIS on the fundamental review of the trading book is expected in particular from large internationally active banks. Participation of small and medium-sized banking institutions is also encouraged, as all of the banking institutions will likely be affected by some or all of the revisions to the reform being considered.

For the trading book-related worksheets, the reporting date is **the same as for the other worksheets**. The submissions date to the supervisors is the same as the submission date for the other worksheets.

This exercise focuses on **the entire non-securitisation part of a bank's trading book**. This means that **all securitisation desks, including securitisation positions and their hedges, as well as the entire correlation trading portfolio and its hedges, are not to be included for the purposes of this QIS**. A separate exercise focusing exclusively on the securitisation part of the trading book is slated to commence in due course.

All the computations related to the TB worksheets should be completed based on the revised boundary, as outlined in Annex 4, on a best-efforts basis. If applying the revised boundary is deemed not to be feasible within the timeframe envisaged for this exercise, the current boundary can be used as a proxy. **Only one boundary definition should be used across all panels** (ie either the revised or the current boundary definition should be used).

The **"TB SBA" worksheet** captures data on the sensitivities-based approach and **should be filled in by all banks participating in the trading book exercise. Specifically, this worksheet should be filled in drawing on data from the bank's entire non-securitisation trading book, including on the share of the non-securitisation trading book having received internal models approval.**

The **"TB IMA" worksheet** should be filled in by participating banks in the trading book exercise with approval to use the internal model approach (IMA). **Data provided in this worksheet should only be based on the share of a participating bank's non-securitisation trading book that has received IMA approval.**

The **"TB P&L attribution" worksheet** captures data on the model validation tool referred to as P&L attribution in the Fundamental review of the trading book.

For banks computing the IMA, no assumptions on the impact of the proposed backtesting requirements should be made.

## 7.2 TB general

The “TB general” worksheet, made of four panels, including closed form questions. For both panel A and panel B:

- (i) The computations on the internal models approach (current and proposed capital charge) are to be performed **only on the share of a participating bank’s non-securitisation trading book that has received IMA approval.**
- (ii) Computations on the standardised measurement method (current capital charges) are to be performed **only on the share of a participating bank’s non-securitisation trading book that does not currently have IMA approval.**
- (iii) Computations on the standardised approach: SBA (proposed capital charges) are to be performed **only on the share of a participating bank’s non-securitisation trading book that does not currently have IMA approval.** Specifically:
  - Banks that have no share of their non-securitisation trading book currently on the standardised measurement method should report “0” in the relevant cells.
  - Banks that have no share of their non-securitisation trading book with IMA approval should report figures in these cells that are consistent with the “TB SBA” worksheet.

### 7.2.1 Panel A: Current market risk capital charge under the revised boundary

Panel A gathers information on the current market capital risk charge. Computations are to be based on the revised boundary, as outlined in Annex 4.

Row	Column	Heading	Description
<b>A) Current market risk capital charge under the revised boundary</b>			
As mentioned in Section 7.1, computations for this panel should <b>exclude</b> all securitisation desks. This means all securitisation positions and their hedges, as well as the entire correlation trading portfolio and its hedges should be excluded.			
9	C	Standardised measurement method, general interest rate risk	Capital charge for <b>general</b> interest rate risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the standardised general interest rate risk capital charge.
10	C	Standardised measurement method, general equity position risk	Capital charge for <b>general</b> equity position risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the standardised general equity position risk capital charge.
12	C	Standardised measurement method, specific interest rate risk	Capital charge for <b>specific</b> interest rate risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the standardised specific interest rate risk capital charge.
13	C	Standardised measurement method, specific equity position risk	Capital charge for <b>specific</b> equity position risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the standardised specific equity position risk capital charge.

Row	Column	Heading	Description
14	C	Standardised measurement method, foreign exchange risk	Capital charge for foreign exchange position risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the foreign exchange risk capital charge.
15	C	Standardised measurement method, commodities risk	Capital charge for commodities position risk based on the standardised measurement method as applicable at the reporting date. The capital charge should be inclusive of all risks that enter the commodities risk capital charge.
17-21	C	Standardised measurement method, options risks (by methodologies)	Capital charge for options risk, depending on which approach is used (among the simplified approach, the delta-plus approach, and the scenario approach). Computations should be done only once (ie banks are not supposed to compute three times their capital charge, based on each of the methods: instead, the total capital on options risk is to be the sum of the capital computed for all methods). If banks are not using an approach, they should enter 0 in the related cells.
22	C	Internal models approach <b>without</b> the specific risk surcharge, <b>actual capital charge</b>	Capital charge for general and specific risk based on internal models. The capital charge should be inclusive of all positions that receive internal model treatment. This should only include the value-at-risk and, when applicable, the stressed value-at-risk capital requirement, and <b>reflect the actual multipliers</b> .
23	C	Current 10-day 99% value-at-risk ( <b>without</b> applying the multiplier)	Bank-wide 10-day value-at-risk inclusive of all sources of risk that are included in the value-at-risk calculation. The reported value-at-risk should not reflect any multiplier, rather the number entered in this cell should simply be the bank's estimate of the 10-day, 99% value-at-risk of the bank's trading book portfolio as of the reporting date.
25	C	10-day 99% stressed value-at-risk ( <b>without</b> applying the multiplier)	Bank-wide 10-day <b>stressed</b> value-at-risk inclusive of all sources of risk that are included in the stressed value-at-risk calculation. The reported stressed value-at-risk should not reflect any multiplier, rather the number entered in this cell should simply be the bank's estimate of the 10-day, 99% stressed value-at-risk of the bank's trading book portfolio as of the reporting date.
27	C	Internal models approach, specific risk surcharge (2011 only)	Surcharge for specific risk based on a multiplier of 4.0. Accordingly, the surcharge is equivalent to one times the internally modelled specific risk capital charge. Once the Revisions are in force, banks should enter 0 in this cell.
28	C	Incremental risk capital charge	Capital charge for incremental risk in the trading book.
<b>2) Other Pillar 1 capital requirements</b>			
As mentioned in Section 7.1, computations for this panel should exclude all securitisation positions and their hedges, as well as the entire correlation trading portfolio and its hedges.			
30	C	Risks not in VaR	Risks not in VaR
31	C	Other Pillar 1 requirements for market risk	Other Pillar 1 capital charges for market risk imposed by the national regulator. If no such requirements exist, 0 should be entered.
32	C	Market risk capital charge which the bank is unable to assign to one of the above categories	If a bank is unable to assign a portion of their market risk capital charge to one of the above categories in this panel, this portion should be reported in this row.

## 7.2.2 Panel B: Proposed market risk capital charge under the revised boundary

Panel B gathers information on the revised market risk capital charge. Computations are to be based on the revised boundary, as outlined in Annex 4.

Row	Column	Heading	Description
39	C	General interest rate risk	Capital requirements as defined in Annex 4, paragraph 54(d).
40	C	Credit spread risk: non-securitisations	Capital requirements as defined in Annex 4, paragraph 54(d).
41	C	Equity risk	Capital requirements as defined in Annex 4, paragraph 54(d).
42	C	Commodity risk	Capital requirements as defined in Annex 4, paragraph 54(d).
43	C	Foreign exchange risk	Capital requirements as defined in Annex 4, paragraph 54(d).
44	C	Default risk: non-securitisations	Capital requirements as defined in Annex 4.
47–49	C	Expected Shortfall at the trading book level ( <b>without</b> applying any multiplier)	Capital requirements as defined in Annex 4.
51–53	C	At the risk factor class level: interest rate risk	Capital requirements as defined in Annex 4.
55–57	C	At the risk factor class level: credit spread risk	Capital requirements as defined in Annex 4.
59–61	C	At the risk factor class level: equity risk	Capital requirements as defined in Annex 4.
63–65	C	At the risk factor class level: commodity risk	Capital requirements as defined in Annex 4.
67–69	C	At the risk factor class level: foreign exchange risk	Capital requirements as defined in Annex 4.
71	C	SES, of which: Interest rate non-modellable risk factors	Capital requirements as defined in Annex 4.
72	C	SES, of which: Credit spread non-modellable risk factors	Capital requirements as defined in Annex 4.
73	C	SES, of which: Equity non-modellable risk factors	Capital requirements as defined in Annex 4.
74	C	SES, of which: Commodity non-modellable risk factors	Capital requirements as defined in Annex 4.
75	C	SES, of which: Foreign-exchange non-modellable risk factors	Capital requirements as defined in Annex 4.
76	C	Assumed rho parameter	Set at 0.5 for the purpose of this QIS.
77	C	Internal models approach, default charge	Capital requirements as defined in Annex 4.

## 7.2.3 Panel C: Quantitative information about deviations from the presumption list

Paragraph 15 of Annex 4 includes a presumption that certain instruments are held in the trading book. It is important to get an idea about the possible deviations from this list both with regard to size and to reasoning for the deviation. Therefore, some quantitative information is collected in the reporting template. Because of the limitations of an Excel worksheet with regards to explanatory text, information about the reasons for the deviations is requested in a **separate Word file**. As the reasons might be different for the different instruments listed in paragraph 15 of Annex 4, please provide separate rationale for each of the five sub-categories of instruments (ie paragraphs 15(a) through 15(e)).

Row	Column	Heading	Description
<b>C) Quantitative information about deviations from the presumption list</b>			
84–89	C	Market value (assigned to trading book), net	Sum of market values of all of the respective instruments from the presumption list which have been assigned to the trading book.
87–89	D	Market value (assigned to trading book), positive	Sum of market values of all of the respective instruments from the presumption list with positive market value which have been assigned to the trading book.
84–89	E	Market value (assigned to trading book), negative	Sum of market values of all of the respective instruments from the presumption list with negative market value which have been assigned to the trading book. <b>Please enter as a negative number.</b>
84–89	F	Market value (assigned to banking book), net	Sum of market values of all of those respective instruments from the presumption list which have been assigned to the banking book.
84–89	G	Market value (assigned to banking book), positive	Sum of market values of all of those respective instruments from the presumption list with positive market value which have been assigned to the banking book.
84–89	H	Market value (assigned to banking book), negative	Sum of market values of all of those respective instruments from the presumption list with negative market value which have been assigned to the banking book. <b>Please enter as a negative number.</b>
90	C, D, E	Total	Total market value (respectively net, positive, and negative) of the <b>banking book</b> .
90	F, G, H	Total	Total market value (respectively net, positive, and negative) of the <b>trading book</b> .

#### 7.2.4 Panel D: Closed form questions

The Committee will circulate to banks up to 100 closed form questions in due course. For each question, a set of up to 100 answers will be available. Banks will have to pick in the list the answer relevant to them.

Row	Column	Heading	Description
94–193	C	Answer	Banks should pick in the list the answer relevant to them (as defined in due course by a document to be sent by the Committee).

### 7.3 The standardised approach: “sensitivities-based approach”

The “TB SBA” worksheet **should be filled in by all banks participating in the trading book exercise**. Specifically, this worksheet gathers data **at the bank-wide portfolio (ie top-of-the-house) level, including the share of the portfolio having received internal models approval**.

#### 7.3.1 Notations for delta risk, vega risk and curvature risk

In what follows, the collected data points are referred to following the same notations as in Annex 4. Additional notations are introduced in this section.

Row	Column	Heading	Description	
			Detailed notation	Remarks
<b>Delta risk</b>				
	F	Kb	$\sqrt{\sum_k WS_k^2 + \sum_{k \neq l} \rho_{kl} WS_k WS_l}$	Weighted sensitivities aggregated within each bucket, ie "bucket level capital". (See Annex 4, paragraph 54(c)). <b>The weighted sensitivities in this column must be multiplied by the applicable value(s) for <math>\rho_{kl}</math>, including any scaled values to capture basis risk</b> (see Annex 4).
	G	$\sum WS$	$\sum_k WS_k$	<ul style="list-style-type: none"> <li>Derive the risk weighted net sensitivity to each risk factor <math>k</math> (<math>WS_k</math>), following the steps in paragraph 54(a) and 54(b) of Annex 4.</li> <li>Sum the derived values for <math>WS_k</math> for <b>all</b> risk factors within a bucket.</li> </ul>
	H	$\sum WS^2$	$\sum_k WS_k^2$	<ul style="list-style-type: none"> <li>Square <b>each</b> of the derived values for <math>WS_k</math>, which were used for Column G.</li> <li>Sum these (<math>WS_k^2</math>) values within a bucket.</li> </ul>
	I	$\sum 1$	$\sum_{k \neq l} (1_{\rho_{kl}=1}) WS_k WS_l \rho_{kl}$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and 0 otherwise.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = 100\%$ . <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>
	J	$\sum (1-x)$	$\sum_{k \neq l} (1_{\rho_{kl}=1-x}) WS_k WS_l$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and 0 otherwise.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = 1-x$ (ie 99.90%). <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>
	K	$\sum rho^+$	$\sum_{k \neq l} (1_{\rho_{kl}=\rho_{kl}^{(+)}}) WS_k WS_l$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(+)}</math> taken from the "same sign" correlation matrix.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = \rho_{kl}^{(+)}$ . <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>
	M	$\sum rho^-$	$\sum_{k \neq l} (1_{\rho_{kl}=\rho_{kl}^{(-)}}) WS_k WS_l$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(-)}</math> taken from the "different signs" correlation matrix.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = \rho_{kl}^{(-)}$ . <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>

Row	Column	Heading	Description	
			Detailed notation	Remarks
	L	$\sum(rho^+) \cdot (1+x)$	$\sum_k \sum_{k \neq l} \left( 1_{\rho_{kl}=(1+x)\rho_{kl}^{(+)}} \right) WS_k WS_l$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(+)}</math> taken from the "same sign" correlation matrix.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = (1+x)\rho_{kl}^{(+)}$ . <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>
	N	$\sum(rho^-) \cdot (1-x)$	$\sum_k \sum_{k \neq l} \left( 1_{\rho_{kl}=(1-x)\rho_{kl}^{(-)}} \right) WS_k WS_l$ <p>With <math>1_{\rho_{kl}=z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(-)}</math> taken from the "different signs" correlation matrix.</p>	Calculate the cross sum of weighted sensitivities between different risk factors within each bucket for which $\rho_{kl} = (1-x)\rho_{kl}^{(-)}$ . <b>Note that the cross sum of weighted sensitivities must be reported without multiplication by <math>\rho_{kl}</math>.</b>
<b>Vega risk</b>				
		Kb	$\sqrt{\sum_k WS_k^2 + \sum_k \sum_{k \neq l} \rho_{kl} WS_k WS_l}$	Weighted sensitivities aggregated within each bucket, ie "bucket level capital". (See Annex 4, paragraph 54(c)). <b>The weighted sensitivities in this column must be multiplied by the applicable value(s) for <math>\rho_{kl}</math>.</b>
		$\sum WS$	$\sum_k WS_k$	<ul style="list-style-type: none"> <li>Derive the risk weighted net sensitivity to each risk factor <math>k</math> (<math>WS_k</math>), following the steps in paragraph 54(a) and 54(b) of Annex 4.</li> <li>Sum the derived values for <math>WS_k</math> for <b>all</b> risk factors within a bucket.</li> </ul>
		$\sum WS^2$	$\sum_k WS_k^2$	<ul style="list-style-type: none"> <li>Square <b>each</b> of the derived values for <math>WS_k</math>.</li> <li>Sum these (<math>WS_k^2</math>) values within a bucket.</li> </ul>
		$\sum \sum (a);$ $\sum \sum (b);$ and $\sum \sum (c)$	$\sum_k \sum_{k \neq l} \rho_{kl} WS_k WS_l$	Calculate the cross sum of weighted sensitivities (ie across risk factors) within each bucket, as defined in paragraph 54(c) of Annex 4, when applying the calibration as defined in the following scenarios descriptions below. <sup>57</sup>  <b>Please note that the cross sum of weighted sensitivities in this column must be multiplied by <math>\rho_{kl}</math>.</b> <b>Scenario a:</b> $\alpha = XXX$ and $\beta = XXX$ <b>Scenario b:</b> $\alpha = XXX$ and $\beta = XXX$ <b>Scenario c:</b> $\alpha = XXX$ and $\beta = XXX$

<sup>57</sup>  $\alpha$  is the parameter entering the equation  $e^{-\alpha(T_j - T_i)}$  and  $\beta$  is the parameter entering the equation  $\rho_{K_i, K_j} = e^{-\beta(K_j - K_i)}$ , c.f. Annex 4.

Row	Column	Heading	Description	
			Detailed notation	Remarks
<b>Curvature risk</b>				
		Kb	$\sqrt{\max(0, \sum_k \max(CVR_k, 0)^2) + \sum_{k \neq l} \rho_{kl} CVR_k CVR_l \varphi(CVR_k, CVR_l)}$	Weighted sensitivities aggregated within each bucket, ie "bucket level capital". (See Annex 4, paragraph 56(c)). <b>The weighted sensitivities in this column must be multiplied by the applicable value(s) for <math>\rho_{kl}</math> and <math>\varphi</math>.</b>
		$\sum CVR$	$\sum_k CVR_k$	<ul style="list-style-type: none"> <li>Calculate curvature risk exposure with respect to curvature risk factor <math>k</math> (<math>CVR_k</math>), as defined in paragraphs 56(a) and 56(b) of Annex 4.</li> <li>Sum the derived values for <math>CVR_k</math> across <b>all</b> risk factors within a bucket.</li> </ul>
		$\sum_k \max(CVR_k, 0)^2$	$\sum_k \max(CVR_k, 0)^2$	Calculate curvature risk exposure with respect to curvature risk factor $k$ ( $CVR_k$ ), as defined in paragraph 56(a) and 56(b) of Annex 4.
		$\sum (rho +)^2$	$\sum_{k \neq l} \left( 1_{\rho_{kl} = \rho_{kl}^{(+)}} \right) \rho_{kl} CVR_k CVR_l \varphi(CVR_k, CVR_l)$ <p>With <math>1_{\rho_{kl} = z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(+)}</math> taken from the "same sign" correlation matrix.</p>	Calculate the cross sum of weighted sensitivities (ie across curvature risk factors) within each bucket, as defined in paragraph 56(c) of Annex 4, <b>when <math>\rho_{kl} = \rho_{kl}^{(+)}</math>; please note that only the cross sum of weighted sensitivities multiplied by the <math>\varphi</math> function must be reported, without multiplication by <math>\rho_{kl}</math>.</b>
		$\sum (rho -)^2$	$\sum_{k \neq l} \left( 1_{\rho_{kl} = \rho_{kl}^{(-)}} \right) CVR_k CVR_l \varphi(CVR_k, CVR_l)$ <p>With <math>1_{\rho_{kl} = z} = 1</math> if <math>\rho_{kl} = z</math> and <math>\rho_{kl}^{(-)}</math> taken from the "different signs" correlation matrix.</p>	(i) Calculate the cross sum of weighted sensitivities (ie across curvature risk factors) within each bucket, as defined in paragraph 56(c) of Annex 4, when $\rho_{kl} = \rho_{kl}^{(-)}$ ; <b>please note that only the cross sum of weighted sensitivities multiplied by the <math>\varphi</math> function must be reported, without multiplication by <math>\rho_{kl}</math>.</b>

For the purpose of clarity, an exhaustive description (including concrete examples) of those data points is included in Annex 3.

### Treatment of residual buckets and "others" category

The template is designed in order to ensure all the computations can be done fully compliant with the draft accord text: no approximation is requested. For instance, all the currencies are to be treated applying the rules. Then, capital is to be reported twice (first only for the "listed currencies", ie those for which granular data is gathered in the QIS, and second taking into account all the currencies). The purpose is the following: with the "listed currencies" data, banks computations will be checked. With the "all currencies" data, capital impacts will be assessed.

### 7.3.2 Panel F: Default risk: non-securitisations

Row	Column	Heading	Description
Panel F.1. Summary instructions for reporting of positions for default risk (non-securitisations)			
	F–Q	Net long and net short JTD amount in each category after offsetting at the obligor level (with LGD as in the SBA standard) under each category / Y / Z	<p>Fill in the sum of the amounts of the positions in the same credit quality category in the relevant column depending on whether the position is long or short (Y) and on the type of the underlying (Z).</p> <p>The categories are</p> <ul style="list-style-type: none"> <li>• Corporate credit</li> <li>• Sovereign credit</li> <li>• Municipalities and local authorities</li> </ul> <p>Y will take the values</p> <ul style="list-style-type: none"> <li>• Long</li> <li>• Short</li> </ul> <p>Z will take the values:</p> <ul style="list-style-type: none"> <li>• Equity and non-senior debt</li> <li>• Senior debt</li> </ul> <p>In the summation of positions it is allowed to offset according to paragraph 143 of Annex 4.</p> <p>Both long and short JTD amounts should be reported as <i>positive</i> numbers.</p>

The capital amount in rows 193 and 195 is calculated automatically.

## 7.5 The internal models approach

The “TB IMA” worksheet gathers data **only on the share of a participating bank’s trading book portfolio having received internal models approval**.

### 7.5.1 Panel A: Names and risk assessment of each desk

In order for the Committee to better understand the desk structure defined by the banks, panel A gathers both the name internally used for each of the 100 most material desks, and the mapping of those desks to the list entitled “stylised example of ‘trading desk’ structure” defined in the first consultative document on the fundamental review of the trading book.<sup>58</sup> Hereafter, and in the templates, this list is referred to as “regulatory trading desks”. In order to allow assessing desks’ materiality, the current regulatory 99% stressed value-at-risk is collected per desk.

Row	Column	Heading	Description
5–104	C	Description (name internally used)	The text reported here should be the name internally used for referring to that desk.
5–104	F	Regulatory trading desk	One item in the list box those cells contain should be selected. The list comes from the “stylised example of ‘trading desk’ structure”. The item selected should be the one which best describes the reported trading desk.
5–104	G	sVaR	Current regulatory 99% stressed value-at-risk computed at the desk level, end-of-the-month value, <b>timed by the relevant multiplier</b> .

<sup>58</sup> Basel Committee on Banking Supervision, *Fundamental review of the trading book – consultative document*, May 2012, p 33, [www.bis.org/publ/bcbs219.htm](http://www.bis.org/publ/bcbs219.htm).

### 7.5.2 Panel B: Asset class level comparison of the risk measures based on the portfolio under model permission

This panel intends to compare the capital charges under the "Revised model", the "Current model" and the "SBA", asset class by asset class. Both the SBA and the current model are to be computed on the share of the trading book which will be subject to the revised internal models approach. In the "current model" column:

- The migration risk component in the current IRC model is to be summed together with the credit spread risk captured in the VaR and reported in the row "credit spread risk: non-securitisations".
- The default risk component of the current IRC model is to be reported in the "Default risk: non-securitisations" row.

Row	Column	Heading	Description
109–114	D	Current model	Capital charge according to the current model, on the share of the trading book which will be subject to the revised internal models approach, by asset class.
109–114	E	SBA	Capital charge according to the SBA, on the same share of the trading book, by asset class.

### 7.5.3 Worksheet "TB IMA P&L"

#### *Panel A: Hypothetical P&L at desk level*

The actual profit and loss of each desk is gathered, with "actual profit and loss" defined as in Annex 4 (revised Internal models approach).

Banks are free to decide on which date they want to start reporting data. **The longest time series available should be reported.** Ideally, 120 days of historical look-back period would be used. This means T should ideally be 30 June 2014. If banks have data available only from 31 December 2014, they should set T at that date.

Row	Column	Heading	Description
8–107	D–DS	Hypothetical P&L at desk level	Banks should report here their hypothetical one-day profit and loss with the impact of fees and commissions removed

#### *Panel B: Theoretical P&L at desk level – internal models approach*

The P&L attribution framework is described in Annex 4 (revised internal models approach). For assessing its impact, and given the data already gathered in panel A, panel B focuses on the theoretical P&L.

Row	Column	Heading	Description
112–211	D–DS	Theoretical P&L at desk level <b>based on the IMA</b>	Banks should report their risk-theoretical P&L (ie the daily desk-level P&L that would be produced by the risk management model conditional on a realisation of all relevant risk factors <b>that enter the model</b> ).

### Panel C: Theoretical P&L at desk level – sensitivities based approach

This panel gathers the result of the P&L attribution based on the SBA. Banks with internal model approval are requested to provide data in this panel, under the same conditions described in Annex 4 (revised internal models approach). Banks that do not have internal model approval may also wish to provide data in this panel on a best efforts basis.<sup>59</sup>

Row	Column	Heading	Description
216–315	D–DS	Theoretical P&L at desk level <b>based on the SBA</b>	Banks should report their risk-theoretical P&L (ie the daily desk-level P&L that would be produced by the risk management model conditional on a realisation of all relevant risk factors <b>prescribed by the SBA</b> ).

## 8. Standardised approach to credit risk

The templates covering the standardised approach to credit risk are designed to collect data for two purposes: first, to identify the impact of the changes to the approach as set out in the consultative document on Revisions to the Standardised Approach for credit risk (in this section, “the consultative document”),<sup>60</sup> and second, to assist the Committee in determining the appropriate calibration of the revised approach, including specific design elements. The data requested in these templates will also be used to calibrate the floor to capital requirements under the Internal Ratings-Based Approach.<sup>61</sup> As such, it is crucial that all banks (large and small) fill in as many items as possible in these templates.

All banks are expected to provide data in the summary section of the “BB SA general” worksheet in order to provide the Committee with information on the entirety of their credit risk portfolio. It is expected that large banks, particularly including those regularly involved in the QIS process, will provide a full – or close to full – breakdown of exposures in the remainder of the “BB SA general” worksheet, including the relevant IRB data for banks using such approaches. For smaller banks, the breakdown will be expected for all material asset classes. Breakdowns should be provided on a best efforts basis according to the instructions below, including suitable estimates of necessary risk drivers if needed.

For the “BB SA additional” worksheet, all banks are expected to fill in panels A and B. IRB banks will also provide information in panels C and D.

<sup>59</sup> The introduction of an P&L attribution panel for the SBA should not be construed to be a new policy proposal. Rather, the purpose of gathering this information is for calibration purposes only.

<sup>60</sup> See [www.bis.org/bcbs/publ/d307.pdf](http://www.bis.org/bcbs/publ/d307.pdf).

<sup>61</sup> See the consultative document *Capital floors: the design of a framework based on standardised approaches*; available at [www.bis.org/bcbs/publ/d306.htm](http://www.bis.org/bcbs/publ/d306.htm).

## 8.1 Paragraph references

	Basel II	Consultative document (see Annex 1)
Exposures to sovereigns	53–56	4–7
Exposures to PSEs	57–58	8–9
Exposures to MDBs	59	10–11
Exposures to banks	60–64	12–18
Exposures to securities firms	65	19
Exposures to corporates	66–68	20–32
Exposures to retail	69–71	33–35
Exposures secured on real estate	72–74	36–48
Past due loans	75–78	
Other assets	81	61
Off-balance sheet exposures	82–89	49–59
CRM	109–210	61–138

## 8.2 The “BB SA general” worksheet

The “BB SA general” worksheet consists of a summary panel, and sections for each asset class. In each asset class section, the rows refer to different buckets within that asset class partitioned by both the existing and proposed exposure buckets. The columns refer to different data items needed for the exposures collected in each row.

The summary table at the top of the worksheet (rows 6 to 21) collects aggregate data by asset class as well as additional information on partial use, expected loss (EL) and provisions, as necessary to assess the impact of the proposed capital floor. Rows 8 to 19 and row 21 should include only performing (non-defaulted) exposures. All past due or defaulted exposures – according to the IRB definition in Basel II, paragraph 452 – should be included in row 20.

Following the summary panel, there is a cross-check panel (rows 22 to 51) to summarise what is included in the asset class sections. The Committee acknowledges that requiring a breakdown for small sets of niche exposures may be an undue burden on firms. Such niche exposures should be included in the summary table but they may be excluded from the breakdown and cross-check panels. However, it is expected that the vast majority of exposures will be included in the breakdown panels (certainly for large banks typically participating in QIS exercises).

Counterparty credit risk exposures such as non-cleared derivatives and securities financing transactions should be included in these panels. For columns I to K, banks can use their current approach to counterparty credit risk; however, for columns L to N banks will have to use supervisory haircuts for SFTs; and SA-CCR for OTC derivatives. In the IRB-only columns, banks can use their current approach to counterparty credit risk (including IMM and repo-VaR).

Exposures treated under other specific frameworks (eg securitisation, equity investments in funds and exposures to central counterparties) should **not** be included in the BB SA worksheets.

### 8.2.1 Options

The current standardised approach contains a number of options for the treatment of certain asset classes. These are reflected in column C. Banks should only report data for the relevant option which has been implemented in their jurisdictions.

In the proposed revisions, the Committee is considering several alternatives for particular asset classes as outlined in the consultative document and these instructions. These options are all included in the template in different panels (eg see panel F. Retail exposures) Banks should complete data requested for all options under consideration. The total exposure for each option should be the same.

### 8.2.2 Background on column definitions

- Data should be provided in the reporting unit and currency specified on the “General Info” worksheet.
- On-balance sheet exposures (column G) should be net of specific provisions.
- Non-performing loans (NPL) (column O) should represent the losses for each portfolio experienced during the last reporting year.
- Exposures treated under the Simple Approach for recognising collateral or for which guarantees allow risk weight substitution should be included in the rows relevant for the **direct** obligor for on/off balance sheet exposure and pre-CRM columns (ie columns G to I and L). For all other columns, these exposures should be included in the rows relevant for the **guarantor** or collateral originator.
- IRB banks should submit data in columns P to W. Data should be provided aggregating all exposures that meet the criteria set out in columns C to F. Banks without approval for the IRB approach to credit risk should leave columns P to W empty. (Note: As for SA columns, rows 8 to 19 and row 21 should include all performing exposures. Defaulted exposures will be reported in row 20 only.)
- For the cross-check and breakdown panels (row 22 onwards) IRB parameters, average risk weight, and EL amounts provided in columns P to S, should not include defaulted exposures. Columns T to W are not required for the cross-check or breakdown panels.
- Columns Q to T should be left blank for rows in which the bank’s IRB exposure as reported in column P is zero. Similarly, column V should be left blank in rows with zero exposure subject to partial use as reported in column U.
- Provisions in column W should be the amount of total eligible provisions according to paragraph 380 of the Basel II framework.
- Average RW is defined as total RWA / total EAD. For the calculation of the average RW, PD and LGD should include the applicable floors.
- Average PD and LGD should be calculated on an exposure-weighted basis. For this purpose, PD and LGD should not be floored.

### 8.2.3 Background on row definitions

- The set of exposures to be aggregated in each row is determined in columns C to F. These categories refer to the options and definitions given in the Basel II standardised approach, the consultative document, and these instructions.
- All exposures should be categorised based on their treatments under the existing and revised standardised approaches. Current IRB treatments will therefore be reflected in the IRB RWA column only.

## 8.3 Asset class specific information in “BB SA general”

### 8.3.1 Sovereigns, exposures to PSEs and MDBs

- Although sovereign exposures are out of the scope of the consultation, they are included in the QIS for completeness in order to assess the impact of revisions with respect to total current capital requirements under the standardised approach.
- Sovereign claims on official entities as given in Basel II paragraph 4 and paragraph 7 of Annex A of the consultative document should be included in row 54.
- The current treatment for exposures to MDBs is given in Basel II paragraphs 5 and 6. In some cases MDBs may currently be treated as banks.
- Exposures to MDBs should be included in panel 4 (rows 93 to 100) according to the treatment proposed in given in paragraphs 10 and 11 of the Annex A of the consultative document. MDB exposures that are currently treated as banks but under the proposed revisions should be treated as corporates are to be reported in row 100 (just for columns G and H). Note however that these data will be used as memorandum item only to assess how many MDBs will be treated as corporates. These cells will not add-up to the total exposures. Instead, these MDB exposures that will be treated as corporates under the proposed revisions should also be reported in the corporate panel.

### 8.3.2. Exposures to banks

- Banks should report data in panel 1 wherever possible, ie where the obligor's disclosure is sufficient. Within a jurisdiction, banks will only fill in rows labelled option 1 or option 2 as appropriate, referring to the method currently in use in their jurisdiction under Basel II. Under option 1, it is the rating of the obligor's home sovereign that is used. Panel 2 should be used where data for assigning the proposed new buckets are unavailable.
- To calculate the CET1 ratio, banks must use their obligor banks' most recent Pillar 3 reports. To calculate the net NPA ratio, banks must use their obligor banks' most recent financial year data available. In all circumstances, the CET1 ratio and the net NPA ratio should be calculated for the same reporting period.
- The net NPA ratio risk driver must be calculated according to paragraph 15 of Annex 1 of the consultative document, and **not** following the Basel II framework definition of default (paragraph 452). (Note that, as mentioned above, for column O, NPL follows the definition of the default described in the Basel II framework, paragraph 452.)
- The CET1 ratio and the net NPA ratio should be calculated for the obligor bank and not its upstream consolidated group, that is at the consolidated or sub-consolidated level as specified in Basel Committee guidance. If the information is not available for the obligor entity, estimates of these ratios may be used for the purposes of the QIS. These estimates may be based either on the relevant ratios at the consolidated group or on other suitable regulatory or accounting data. The CET1 ratio and the net NPA ratio should be calculated for the same entity.
- Banks must apply a 300% risk weight to exposures:
  - to banks for which the relevant information is not published within the frequency required by the Pillar 3 disclosure requirements; and
  - in cases where they are aware that one of their obligor banks has breached any binding minimum prudential standard to which they are subjected by their national supervisor.
- For short term claims, banks may apply a 20 percentage point reduction to the risk weight assigned by the table in paragraph 13 of Annex 1 of the consultative document, provided that

such risk weight is no greater than 100%. The risk weight applied to short-term claims will in no case be lower than 30%. Short-term claims are defined as interbank claims having an original maturity of three months or less that are not expected to be rolled over. (See paragraph 18 of Annex 1 of the consultative document.)

### 8.3.3 Corporate

- Note that for the purposes of the QIS, revenue, leverage and profitability data need not be from published accounts if the bank has reliable evidence that these data are accurate.
- If data are insufficient to categorise senior corporate exposures in panel 1 (rows 565 to 734 and 735 to 856), they should be categorised as such in panel 2 (rows 858 to 918), either as “New company < 1 year old” (as covered in paragraph 26) or “No leverage/revenue data”.
- Remaining corporate exposures (as covered in paragraphs 28 to 32) should also be categorised in panel 2.

#### *Option A*

- For Corporate option A, the template is collecting data on revenue crossed with leverage.
- The obligor’s revenue and leverage used for assigning risk weights under paragraph 22 of Annex A of the consultative document should be those of the legal entity against which the exposure is held. If the information is not available on an obligor entity basis, ratios for the consolidated group of the obligor entity could be used.
- To calculate leverage and revenue, banks must use the obligor’s year-end accounts for the most recent financial year available. Revenue includes all income the company received from business activities as determined by the accounting standards of the relevant jurisdiction (ie it is a sales measure not a profit measure). Leverage means total assets/total equity, where both total assets and total equity are determined by the accounting standards of the relevant jurisdiction.

#### *Option B*

- For Corporate option B, the template is collecting data on profitability crossed with leverage.
- Profitability is defined as (Earnings Before Interest Taxes, Depreciation and Amortisation - EBITDA) / (Total Assets - TA) for audited companies only. Non-audited firms should be treated as a separate category. The buckets for profitability are:
  - $EBITDA/TA \leq 0\%$
  - $0\% < EBITDA/TA \leq 5\%$
  - $5\% < EBITDA/TA \leq 10\%$
  - $10\% < EBITDA/TA$
  - Non-audited firms
- RWA data is not collected for corporates panel 1B, as no risk weights have been proposed for this methodology.

#### *General remarks for Options A and B*

- Exposures that are currently treated under the supervisory slotting criteria approach (Basel II paragraph 249 ff) should be included in the summary information panel (Rows 6-21). Where material, these exposures should also be included in the breakdown panels as appropriate, but need not be reflected in columns P to W for IRB exposures.

- Paragraphs 28 and 29 of the consultative document specify that risk weights should be the higher of counterparty risk weight and the applicable specialised lending risk weight. However, for the purposes of the QIS, exposures may be assigned the corresponding specialised lending risk weight (120% or 150%) to calculate risk-weighted assets, without comparing to the counterparty risk weight.

#### 8.3.4 Exposures secured by residential real estate (RRE)

##### *Option A*

- Option A collects exposures according to loan-to-value (LTV) and debt service coverage (DSC) ratios, as defined in paragraphs 40 and 41, respectively, of Annex 1 in the consultative document.

##### *Option B*

- Option B collects exposures according to loan-to-value (LTV) and debt-to-income (DTI) ratios.
- DTI should be calculated as follows:
  - "Debt" is the total amount of the loan at origination as defined in the first bullet point of paragraph 40 of Annex 1 in the consultative document, plus any other known debt.
  - "Income" is the obligor's total income, as described in the second bullet point of paragraph 41 of Annex 1 in the consultative document, calculated on an annual basis.

##### *General remark for both options*

- "Currency of main income" cells should include the total of all exposures for the applicable asset type where the loan and the primary income of the borrower is in the same currency.

#### 8.3.5 Exposures secured by commercial real estate (CRE)

##### *Option A*

- Option A in paragraph 44 of Annex 1 of the consultative documents risk weights exposures secured by commercial real estate according to the risk weight applicable to an unsecured exposure to the counterparty. This is grouped in buckets in column D.
- Column E collects data to assess the impact of the national discretion allowed under conditions laid out in footnote 59 of the consultative document.

##### *Option B*

- Option B in paragraph 45 and 46 of Annex 1 of the consultative documents risk weight exposures secured by commercial real estate based on LTV ratio.
- Exposures reported in this panel must meet the requirements in paragraph 45 of Annex 1 of the consultative document. In this regards, see paragraph 47.
- According to Column F, exposures should be distinguished between:
  - Exposures secured by mortgages on office and/or multipurpose commercial premises and/or multi-tenanted commercial premises, and
  - Other exposures.

### 8.3.6 Retail

- “Currency of main income” cells should include the total of all exposures for the applicable asset type where the loan and the primary income of the borrower is in the same currency.
- Cells should be filled in according to new standardised approach definitions, eg with the 0.2% granularity limit. However, where applying the new retail definition criteria would be an excessive burden, the retail definitions currently in use may be applied.
- “Length of established relationship” is defined in the following way: the length of time for which a customer has had at least one product from the bank – either a transactional account or credit product.
- DSC is defined as per the definition for residential real estate exposures (see paragraph 41 of Annex 1 of the consultative document).

## 8.4 Background on the “BB SA additional” worksheet

The “BB SA additional” worksheet collects further information on exposures to banks, exposures secured by residential real estate collateral, exposures with a currency mismatch (ie where the currency of the loan is different from that of the borrower’s main source of income); as well as for estimated credit conversion factors (CCFs) under the Advanced IRB approach.

### 8.4.1 Panel A – Exposures to banks

- Exposure for top counterparties should be measured by post-CCF, pre-CRM exposure under the proposed standardised approach.
- Consistent with the proposal, the top counterparty determination should be made at the legal entity level, not the consolidated group level. As a reminder, panel A is identifying the top 20 counterparties that qualify to be risk weighted as bank under the proposal.

### 8.4.2 Panel B – Residential real estate exposures

- Panel B is intended to identify differences in debt service coverage (DSC) ratios net of taxes and gross of taxes.
- For each obligor in the bank’s residential real estate portfolio, the DSC should be computed according to paragraph 41 of Annex A of the consultative document. This is termed the “net basis DSC”. The “gross basis DSC” should be computed for each obligor applying the definition of paragraph 41 but without deducting taxes.
- Exposures in the RRE portfolio should be grouped into deciles according to the net basis DSC (lowest 10%, next 10% and so on to highest 10%). For each decile group, column D should be populated with the the mean of the net basis DSC for those exposures, and column E should be populated with the mean of the gross basis DSC for those exposures.

### 8.4.3 Panel C – Exposures with a currency mismatch

Stressed PD and LGD may be calculated as follows.

- $LGD_{Stress} = (LGD+r) / (1+r)$ , where  $r$  is respectively, 40% and 77% depending on the assumed FX rate stress.
- One of the possible solutions to calculate stressed PD is to use a distance-to-default approach (used eg similarly to the KMV model). One approach assumes that the obligor defaults when the level of the monthly instalments (capital plus interest) exceeds a specific portion of an

obligor's monthly income (this value should be lower than 100% since the obligor has additional expenses apart from repaying his debt).

- Looking at an individual obligor, a stressed debt service coverage ratio can be based on his current debt service coverage:  $DSC_{Stress} = DSC_{Current} * (1+r)$ . The portion of the portfolio for which  $DSC_{Stress}$  exceeds the given threshold, is assumed to be in default. The "newly defaulted" portion of portfolio is a proxy for the necessary uplift in PD to give the stressed PD.
- If the stressed PD or LGD is calculated in another way please provide an explanation via your national supervisor.

#### 8.4.4 Panel D – CCFs applied by AIRB banks

- This panel collects data on credit conversion factors (CCFs) and should be filled in by banks using advanced IRB. For each of the categories specified in rows 54 to 62, banks should provide the total amount of the facility limits (including both drawn and undrawn exposures) for such exposures, the total amount of undrawn exposures, and the average credit conversion factor as a percentage.
- Paragraphs 49 to 59 of Annex A of the consultative document provide more details on the category definitions for panel D.

## 9. TLAC

### 9.1 Scope of application

The TLAC proposals apply at various different levels within a G-SIB. These are set out in the following table. Please refer to the TLAC Term Sheet<sup>62</sup> carefully when filling out TLAC related worksheets.

TLAC proposals			
Element of TLAC proposals	Application	Term sheet reference	QIS worksheets
External TLAC requirement – SPE	G-SIB consolidated level	Section 9	G-SIB TLAC External + G-SIB TLAC External (location)
External TLAC requirement – MPE	G-SIB consolidated level <sup>63</sup> + sub consolidated level for each resolution group	Section 9	General info for MPE+ G-SIB TLAC External + G-SIB TLAC External (location: resolution entity level only)
Internal TLAC	For each G-SIB material subsidiary	Section 21	G-SIB TLAC Internal
Treatment of holdings of TLAC	All non-G-SIB internationally active banks (consolidated basis)	Section 18	TLAC holdings (non-GSIB)

<sup>62</sup> See [www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf](http://www.financialstabilityboard.org/wp-content/uploads/TLAC-Condoc-6-Nov-2014-FINAL.pdf).

<sup>63</sup> TLAC minimum requirements will be applied to each resolution entity within a G-SIB. For MPE, this may not necessarily include meeting TLAC at the G-SIB consolidated group level if this is not itself a resolution entity. However, for the purpose of the QIS and in order to understand any differences between the application of the requirements between SPE and MPE G-SIBs, MPE G-SIBs should also complete the QIS at the consolidated level.

G-SIBs under a Single-Point-of-Entry (SPE) strategy will fill out the “G-SIB TLAC External” and “G-SIB TLAC location” worksheets on a **consolidated** basis. G-SIBs under a Multiple-Point-of-Entry (MPE) strategy will fill out the “G-SIB TLAC External”, “G-SIB TLAC location” and “General info for MPE firms” worksheets for each resolution group level, ie data should be **sub-consolidated** at the level of a resolution group. Each resolution group should fill out a separate “TLAC MPE reporting template”. In addition, MPE G-SIBs will also fill out the “G-SIB TLAC External” worksheet on a **consolidated** level<sup>63</sup> by filling out the Basel III monitoring reporting template. The purpose of this is to analyse any differences between SPE and MPE strategies.

All G-SIBs, both SPE firms and each resolution entity of MPE firms, should fill out the “Internal TLAC” worksheet to calculate and sum up internal TLAC requirements of material subsidiaries. If the material subsidiary is located in a jurisdiction that has not yet implemented Basel III, then data should be provided on the basis that Basel III is implemented and fully phased-in (on a best efforts basis).

Each G-SIB needs to work closely with its home supervisor (who will in turn coordinate with the relevant Crisis Management Group (CMG)) to confirm the approach according to its resolution strategy.

Non-G-SIBs will complete the “TLAC holdings” worksheet. All data in this worksheet should be filled out on a banking group consolidated basis.

All banks should enter the TLAC related amounts (eg when calculating regulatory capital as well as TLAC liabilities that are not included in regulatory capital) according to the national implementation of the Basel III standards fully phased in as in 2022.

## 9.2 General info for MPE

G-SIBs under an SPE strategy **do not need to fill out this section** as they will already complete the “General info” worksheet at the consolidated level as part of the Basel III monitoring exercise.

For G-SIBs under an MPE strategy, each resolution group will fill out the “General Info for MPE” worksheet **on a sub-consolidated basis**. The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
<b>A1) Reporting data</b>			
3	C	Country code	Leave blank
4	C	Region code	Leave blank
5	C	Resolution Group number	Leave blank
6	C	Bank number	Leave blank
7	C	Domestic surcharges, CET1 capital	Leave blank
8	C	Domestic surcharges, Tier 1 capital	Leave blank
9	C	Domestic surcharges, total capital	Leave blank
10	C	Conversion rate (in euros/reporting currency)	Leave blank
11	C	Submission date (yyyy-mm-dd)	Leave blank
12	C	Reporting date (yyyy-mm-dd)	Date as of which all data are reported in worksheets.
13	C	Reporting currency (ISO code)	<b>Three-character</b> ISO code of the currency in which all data are reported (eg USD, EUR).

Row	Column	Heading	Description
14	C	Unit (1, 1000, 1000000)	Units (single currency units, thousands, millions) in which results are reported.
15	C	Accounting standard	Indicate the accounting standard used.
16	C	Accounting total assets	Total assets following the relevant accounting balance sheet (considering the regulatory consolidation).
20	C	Total capital	Automatic calculation
21	C	Total Common Equity Tier 1 capital (after regulatory adjustments)	Enter the amount of Total Common Equity Tier 1 capital after regulatory adjustments on a sub-consolidated (ie resolution-group) basis. This includes CET1 issued from the resolution entity and CET1 issued from subsidiaries within the same resolution group (subject to the limits specified in paragraphs 62 to 64 of the Basel III framework). Please refer to DefCap D64 for the calculation method.
22	C	Additional Tier 1 capital (after regulatory adjustments)	Enter the amount of Additional Tier 1 capital after regulatory adjustments on a sub-consolidated basis. This includes AT1 instruments issued from the resolution entity and AT1 instruments issued from its subsidiaries within the same resolution group (subject to the limits specified in paragraphs 62 to 64 of the Basel III framework). Please refer to DefCap D82 for the calculation method.
23	C	Tier 1 capital (after regulatory adjustments)	Automatic calculation
24	C	Tier 2 capital (after regulatory adjustments)	Enter the amount of Tier 2 capital after regulatory adjustments on a sub-consolidated basis
27	C	Total RWA <b>at the reporting date before</b> application of the transitional floors	Enter the amount of risk-weighted assets of the resolution group on a sub-consolidated basis as <b>at the reporting date</b> before any changes for RWA effects from Basel III definition of capital and other national phase-in arrangements.
28	C	RWA impact of applying future definition of capital rules	Enter the amount of the RWA impact of applying fully the phased-in national implementation of the Basel III definition of capital. If items which will be deducted in the fully phased-in treatment are currently risk weighted, this amount should be reported as a <b>negative</b> number.
29	C	RWA impact of national phase-in arrangements for CVA if any	Incremental impact of full implementation of the national CVA capital requirements. If the CVA capital requirements have already been fully phased-in, banks should report 0.
30	C	RWA impact of any other national phase-in arrangements	Incremental impact of full implementation of the national implementation of Basel III capital requirements. If the capital requirements have already been fully phased-in or no phase-in agreements exist, banks should report 0.
31	C	Total RWA	Automatic calculation
34	C	Leverage ratio exposure measure	Enter the exposure amount of the Basel III leverage ratio (published in January 2014) for the resolution group on a sub-consolidated basis. Please refer to J103 in the "Leverage Ratio" worksheet in the Basel III monitoring reporting template.

Row	Column	Heading	Description
40, 43, 46	C, D	Deduction for investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the bank does not own more than 10% of the issued common share capital (excluding amounts held for underwriting purposes only if held for 5 working days or less)	Please refer to rows 53, 76 and 96 in the DefCap worksheet in the Basel III monitoring reporting template.
41, 44, 47	C, D	Deduction for significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (ie where the bank owns more than 10% of the issued common share capital or where the entity is an affiliate), excluding amounts held for underwriting purposes only if held for 5 working days or less	Please refer to rows 55, 77 and 97 in the DefCap worksheet in the Basel III monitoring reporting template.
52	C, D	Holdings of Common Equity Tier 1 net of short positions subject to risk weighting treatment	Please refer to row 106 in the DefCap worksheet in the Basel III monitoring reporting template.
53	C, D	Holdings of Additional Tier 1 capital net of short positions subject to risk weighting treatment	Please refer to row 107 in the DefCap worksheet in the Basel III monitoring reporting template.
54	C, D	Holdings of Tier 2 capital net of short positions subject to risk weighting treatment	Please refer to row 108 in the DefCap worksheet in the Basel III monitoring reporting template.
56	C, D	Holdings of Common Equity Tier 1 net of short positions subject to risk weighting treatment	Please refer to row 110 in the DefCap worksheet in the Basel III monitoring reporting template.
57	C, D	Holdings of Additional Tier 1 capital net of short positions subject to risk weighting treatment	Please refer to row 111 in the DefCap worksheet in the Basel III monitoring reporting template.
58	C, D	Holdings of Tier 2 capital net of short positions subject to risk weighting treatment	Please refer to row 112 in the DefCap worksheet in the Basel III monitoring reporting template.

### 9.3 External TLAC and deduction treatment for G-SIBs according to the national implementation of Basel III

The "G-SIB TLAC External" worksheet collects **consolidated data for each resolution group** of a G-SIB, as defined by the relevant CMG. For **SPE G-SIBs**, there is only one resolution group which is equal to the group consolidated level.

For **MPE G-SIBs**, there will be more than one resolution group and therefore each resolution group needs to prepare a “G-SIB TLAC External” worksheet at the sub-consolidated level (by using separate files, ie “TLAC MPE reporting template 144-”). In addition, MPE G-SIBs should also prepare this worksheet at a group consolidated level (like SPE firms). When doing so, they should assume that the top parent company is the relevant resolution entity and that the resolution group is equal to the group consolidated level.

**Panel A** of this worksheet identifies the regulatory capital instruments issued by each resolution group which is partially based on information that G-SIBs already provide as part of the “DefCap” worksheet. **Panel B** identifies liabilities that do not qualify as regulatory capital instruments but that might either qualify as TLAC or that could potentially be replaced by TLAC-eligible debts once liabilities mature. The worksheet is designed to test four different “cases” using a menu approach to test the impact of specific features of TLAC instruments as follows:

- **Case 1** includes all non-regulatory capital instruments that meet all of the criteria on the proposed TLAC term sheet.
- **Case 2** includes all non-regulatory capital instruments that meet all of the criteria on the TLAC term sheet plus additional criteria that are currently applied to Tier 2 instruments under Basel III. The purpose of gathering this data is to analyse the impact of requiring these additional features.
- **Case 3** analyses the subordination requirement. Case 3 includes all instruments that are captured in case 1 plus instruments that meet the TLAC term sheet criteria except for subordination. The purpose of case 3 is to analyse the impact of requiring TLAC instruments to be subordinated and how this impacts on the shortfalls observed in G-SIBs (by comparison with case 1).
- **Case 4** is the widest case and includes all unsecured liabilities except liabilities arising from derivatives, liabilities not arising through contract, or deposits. Cases 4i and 4ii differ only by the subordination requirement. The purpose of case 4 is to gain insights into liabilities that could potentially, once matured, be replaced by liabilities that do qualify for TLAC. **Please read the general instructions on panel B below carefully before filling out this part of the worksheet.**

**Panel C** of this worksheet collects information on holdings of TLAC instruments following the same four cases set out above.

**Panel D** should be completed only by EU G-SIBs. This information is being used by the European Banking Authority to conduct analysis relating to the implementation of minimum requirement for own funds and eligible liabilities (MREL) under the EU Banking Recovery and Resolution Directive (BRRD).

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
<b>A) Regulatory capital</b>			
4	C	Is the resolution entity a holding company or intermediate holding company?	Please select “yes” if the resolution entity is a non-operating holding company or intermediate holding company, or “no” if the resolution entity is the bank operating company.
8	C	Total Common Equity Tier 1 capital (after regulatory adjustments)	Automatic calculation.
9	C	Total Additional Tier 1 instruments (after regulatory adjustments); of which:	Automatic calculation.

Row	Column	Heading	Description
10	C	Additional Tier 1 instruments issued under third country law without any contractual bail-in clause and no equivalent binding statutory provision for cross-border recognition of resolution actions (before regulatory adjustments)	<p>This only includes those Additional Tier 1 instruments included in row 9 that are not issued under the law of the resolution entity and where (i) the instrument does not contain contractual terms that allow the home authority to expose the instruments to loss at the point of non-viability or in resolution and (ii) the law under which the instruments are issued does not recognise bail-in by the home jurisdiction of the resolution entity on a statutory basis.</p> <p>Please enter the amount before regulatory adjustments (eg deductions) when completing this cell. This means that the number in cell C10 could be larger than the number in C9.</p>
11	C	Total Tier 2 instruments issued by the resolution entity ( <b>prior to</b> amortisation, ie nominal amount) with a residual maturity $\geq 1$ year (after other regulatory adjustments, eg corresponding deduction); of which	<p>This includes all Tier 2 capital instruments issued by the resolution entity that have a residual contractual maturity of <b>more than one year</b>.</p> <p>Numbers should be given <b>before amortisation</b>, ie <b>before</b> applying any prudential amortisation schedules (but after other regulatory adjustments, eg corresponding deduction under the Basel III framework if relevant).</p>
12	C	Tier 2 instruments issued under third country law without any contractual bail-in clause and no equivalent binding statutory provision for cross-border recognition of resolution actions (prior to regulatory adjustments)	<p>This only includes those Tier 2 instruments included in row 11 that are not issued under the law of the resolution entity and where (i) the instrument does not contain contractual terms that allow the home authority to expose the instruments to loss at the point of non-viability or in resolution and (ii) the law under which the instruments are issued does not recognise bail-in by the home jurisdiction of the resolution entity on a statutory basis.</p> <p>Please enter the nominal amount before regulatory adjustments (eg deductions) when completing this cell. This means that the number in cell C12 could be larger than the number in C11.</p>
13	C	Total Tier 2 instruments issued by subsidiaries ( <b>after</b> amortisation) eligible to count towards the consolidated Tier 2 capital of the resolution group (with a residual maturity $\geq 1$ year)	<p>This includes all Tier 2 capital instruments issued by subsidiaries of the resolution entity and eligible to count towards the resolution group's Tier 2 position (as determined by the limits specified in paragraphs 62 to 64 of the Basel III framework) that have a residual contractual maturity of <b>more than one year</b>.</p> <p>Numbers should be given on an <b>amortised basis</b>, ie <b>after</b> applying any prudential amortisation schedules.</p>
14	C	Total Tier 2 instruments (after amortisation but before other regulatory adjustments eg corresponding deduction) with a residual maturity $< 1$ year	<p>This includes all Tier 2 capital instruments issued by the resolution entity or its subsidiaries within the same resolution group (subject to the limits specified in paragraphs 62 to 64 of the Basel III framework) that have a residual contractual maturity of <b>less than one year to the extent that these are allowed to qualify as regulatory capital requirements under the domestic implementation of Basel III</b>.</p> <p>Numbers should be given on an <b>amortised basis</b>, ie <b>after</b> applying any prudential amortisation schedules.</p> <p>Please enter the amount (<b>after amortisation but</b> before regulatory adjustments eg corresponding deductions) when completing this cell.</p>

Row	Column	Heading	Description
11-14	D	Average residual maturity (Years)	<p>Please enter the weighted average residual (contractual) maturity of the instruments entered in cells C11 to C14. For perpetual instruments, you should assume a residual maturity of 10 years.</p> <p>For instruments in cells C11 to C14 the average maturity should be calculated before applying amortisation schedules, ie all instruments should be weighted on a nominal basis. The weighted average residual maturity should be calculated by the following formula.</p> $\sum \frac{\text{Residual maturity} \cdot \text{Amount with the residual maturity}}{\text{Total amount}}$
8-10, 14	E	Of which issued externally out of non-resolution entities	<p>Enter the amount of the capital instruments entered in cells C8 to C10 and C14 that have been issued by subsidiaries within the same resolution group.</p> <p>Please enter the amount before regulatory adjustments eg corresponding deductions. This means that the numbers in cells E8 to E14 could be larger than the numbers in cells C8 to C14.</p>
9	F	Of which issued in the form of debt (liabilities in balance sheet)	Enter the amount of Additional Tier 1 capital instruments issued in the form of debt, ie those that are classified as liabilities for accounting purposes.
9	G	Of which issued in the form of debt (not shares)	Enter the amount of Additional Tier 1 capital instruments that are not shares, eg common shares or preferred shares.
8-14	H	(only for MPE groups) Of which held by entities in other resolution groups	<p>Enter the amount of the capital instruments entered in cells C8 to C14 that have been issued to entities that are part of the same consolidated group but belonging to another resolution group. Please enter the amount before regulatory adjustments eg corresponding deduction when completing this cell.</p> <p>Leave these fields blank unless the template is being filled out for an individual resolution group of an MPE bank.</p>

## **B) Unsecured liabilities**

Please use nominal outstanding amounts (rather than accounting values) for rows 19 to 46. Liabilities include bonds and other forms of wholesale funding as well as deposits that meet the criteria outlined below. Throughout rows 19 to 46, please do not include any regulatory capital instruments or the amortised portion of Tier 2 instruments that no longer qualifies as a regulatory capital as these are already captured in cell C11.

'Subordinated liabilities' are liabilities that rank junior to all 'excluded liabilities' (specified in the TLAC term sheet) in the creditor hierarchy of the resolution entity. Excluded liabilities are (a) insured deposits; (b) any liability that is callable on demand without supervisory approval; (c) liabilities that are funded directly by the issuer or a related party of the issuer; (d) liabilities arising from derivatives or debt instruments with derivative-linked features; (e) liabilities arising other than through a contract, such as tax liabilities, (f) liabilities which are preferred to normal senior unsecured creditors under the relevant insolvency law; and (g) any other liabilities that, under the laws governing the issuing entity, cannot be effectively written down or converted into equity by the relevant resolution authority. Please note that in order for liabilities to meet criterion b (not callable on demand without supervisory approval), this could be implemented through supervisory regulations. Banks can therefore assume that all instruments will meet this criterion. Likewise, for criterion c (not funded directly by the issuer or a related party of the issuer), this is subject to the agreement of the CMG. Banks can therefore assume, for the purpose of the QIS, that the CMG agrees that liabilities issued to a parent of a resolution entity can count towards TLAC.

Subordination can be achieved by three methods:

- (a) contractually subordinated to excluded liabilities on the balance sheet of the resolution entity,
- (b) junior in the statutory creditor hierarchy to all excluded liabilities
- (c) issued by a resolution entity that does not have excluded liabilities on its balance sheet (for example a holding company).

**Please note that the term sheet allows for G-SIBs from jurisdictions with certain resolution regimes to permit liabilities that rank alongside excluded liabilities to contribute towards TLAC. This is explained in the final two**

Row	Column	Heading	Description
<p><b>paragraphs of Section 13 of the term sheet. For the purposes of the TLAC QIS, G-SIBs should not take these into consideration when populating the template. This will be dealt with in the analysis.</b></p> <p>The TLAC term sheet specifies that in order to be eligible as TLAC, liabilities must</p> <ul style="list-style-type: none"> <li>• be issued and maintained by resolution entities</li> <li>• be unsecured</li> <li>• not include insured deposits</li> <li>• not be callable on demand without supervisory approval</li> <li>• not arise from derivatives or having derivative-linked features (eg structured notes)</li> <li>• not arise other than through contract (eg tax liabilities)</li> <li>• not be preferred to normal senior unsecured creditors</li> <li>• be able to be effectively written down or converted into equity under the laws governing the issuing entity<sup>64</sup></li> <li>• not be subject to set off/netting</li> <li>• not be funded directly by the issuer or a related party of the issuer</li> <li>• be subordinated in the sense discussed above</li> </ul> <p>Where the worksheet asks for liabilities that satisfy the criteria in the TLAC term sheet you should only include liabilities that satisfy the requirements above. The exception to this approach is the requirement that liabilities should have a residual maturity of <math>\geq 1</math> year. <b>You should include all maturities unless explicitly specified otherwise.</b></p>			
19	D–G	<b>Case 1:</b> Total subordinated liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria not taking into consideration instruments qualifying by way of the last two paragraphs of section 13 of the term sheet, of which:	<p>Please enter liabilities that satisfy all of the criteria in the TLAC term sheet (except the final two paragraphs of section 13), as defined in the grey box above.</p> <p>Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G. The sum of columns E to G will give the overall amount of liabilities that satisfy the conditions described in the term sheet (excluding regulatory capital instruments).</p>
20	C	not paid-in	<p>This only covers liabilities that are not paid-in but that have been included in row 19.</p> <p>The number entered in cell C20 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C19.</p>
21	C	with credit sensitive feature	<p>This only covers liabilities that contain 'credit-sensitive-features' (eg where interest payments are tied to the financial condition of the issuer) and that have been included in row 19.</p> <p>The number entered in cell C21 cannot be larger than the corresponding number in cell C19.</p>
22	C	with a right of acceleration of the principal and interest outstanding in respect of the instrument outside liquidation	<p>This only covers liabilities that contain clauses which permit a creditor to accelerate payment of the principal and interest outstanding even if the firm does not enter liquidation, and that have been included in row 19.</p> <p>The number entered in cell C22 cannot be larger than the corresponding number in cell C19.</p>

<sup>64</sup> Liabilities can be exposed to loss by the relevant authorities if they are within the scope of statutory resolution tools or contain contractual terms that allow them to be written down and/or converted into equity by the resolution authorities. If liabilities are issued under foreign law they have to (a) contain contractual bail-in clauses, (b) contain contractual terms acknowledging that they are subject to resolution actions by the home authorities, or (c) the law that they are governed by must acknowledge resolution actions by the home authorities on a statutory basis.

Row	Column	Heading	Description
23	D–G	including an incentive to redeem	<p>This only covers liabilities that contain explicit incentives to redeem the liability ahead of its contractual maturity date and that have been included in row 19.</p> <p>For example, explicit incentives to redeem a liability early may consist of step-up clauses where interest payments increase after a number of years.</p> <p>Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G.</p> <p>The number calculated in cell C23 cannot be larger than the corresponding number in cell C19.</p>
24	D–G	including an incentive to redeem (where the effective maturity date is the date of the incentive to redeem)	<p>This covers the same liabilities as in row 23. However, please split the total amount by the <b>effective</b> residual maturity (which is defined as the time remaining until the first step-up clause becomes effective) and enter the corresponding amounts in columns D to G. The sum of columns E to G will give only liabilities for which the <b>effective</b> residual maturity is at least one year.</p>
25	C	subordinated uninsured deposits	<p>This covers any uninsured term deposits that have been included in row 19.</p> <p>The number entered in cell C25 cannot be larger than the corresponding number in cell C19.</p>
26	D–G	<b>Case 2:</b> Total subordinated unsecured liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria, excluding liabilities of row 20, 21 and 22. Please use effective residual maturity as described in row 24.	<p>Please enter only liabilities that satisfy all of the criteria in the TLAC term sheet as well as (a) being paid-in, (b) having no credit sensitive feature, (c) having no right of acceleration of the principal and interest outstanding in respect of the instrument outside liquidation.</p> <p>Please split the liabilities according to their <b>effective</b> residual maturity, which is defined as the time remaining until the first incentive to redeem becomes effective (see row 24).</p>
27	D–G	<b>Case 3:</b> Total subordinated liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria (same as case 1) plus senior liabilities meeting the term sheet except the subordination criterion (Section 13a, 13b and 13c); of which:	<p>Please enter liabilities that satisfy all of the criteria in the TLAC term sheet <b>plus</b> those satisfying all of the criteria except for the subordination requirement.</p> <p>Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G. The sum of columns E to G will give the overall amount of liabilities that satisfy these conditions.</p> <p>Note: this row includes liabilities that have been included in row 19.</p>
28	C	not paid-in	<p>This only covers liabilities that are not paid-in but that have been included in row 27.</p> <p>The number entered in cell C28 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C27.</p>
29	C	with credit sensitive feature	<p>This only covers liabilities that contain 'credit-sensitive-features' (eg where interest payments are tied to the financial condition of the issuer) and that have been included in row 27.</p> <p>The number entered in cell C29 only includes liabilities &gt;1 year residual maturity and cannot be larger than the corresponding number in cell C27.</p>

Row	Column	Heading	Description
30	C	with a right of acceleration of the principal and interest outstanding in respect of the instrument outside liquidation	This only covers liabilities that contain clauses which permit a creditor to accelerate payment of the principal and interest outstanding even if the firm does not enter liquidation, and that have been included in row 27.  The number entered in cell C30 only includes liabilities > 1 year residual maturity and cannot be larger than the corresponding number in cell C27.
31	D–G	including an incentive to redeem	This only covers liabilities that contain explicit incentives to redeem the liability ahead of its contractual maturity date and that have been included in row 27.  For example, explicit incentives to redeem a liability early may consist of step-up clauses where interest payments increase after a number of years.  Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G.  The number entered in cell C31 cannot be larger than the corresponding number in cell C27.
32	D–G	including an incentive to redeem (where the effective maturity date is the date of the incentive to redeem)	In principle, this covers the same liabilities as in row 31.  However, please split the total amount by the <b>effective</b> residual maturity (which is defined as the time remaining until the first step-up clause becomes effective) and enter the corresponding amounts in columns D to G. The sum of columns E to G will give only liabilities for which the <b>effective</b> residual maturity is at least one year.
33	C	uninsured deposits	This covers any uninsured term deposits that have been included in row 27.  The number entered in cell C33 cannot be larger than the corresponding number in cell C27.
34	D–G	<b>Case 4 (i):</b> Total subordinated unsecured liabilities excluding (i), regulatory capital, (ii) liabilities arising from derivatives, (iii) liabilities arising not through contract (Section 12e) and (iv) deposits; of which:	This row captures the amount of all subordinated unsecured liabilities excluding (i), regulatory capital, (ii) liabilities arising from derivatives, (iii) liabilities arising not through contract (Section 12e) and (iv) deposits.  Liabilities in these cells don't need to meet the TLAC term sheet criteria. Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G.  This cell should be reported on a consolidated basis (intra-resolution group liabilities should be netted out), including issuance by non-resolution entities.
35	C	issued by the resolution entity	This only covers liabilities that have been issued by the resolution entity and that have been included in cell C34.  The number entered in cell C35 only includes liabilities > 1 year residual maturity and cannot be larger than the corresponding number in cell C34.
36	C	currently issued by an operating bank immediately below a resolution entity that is a holding company	This only covers liabilities that have been issued by a direct subsidiary of the resolution entity if the resolution entity is a holding company (or intermediate holding company) and that have been included in row C34.  The number entered in cell C36 only includes liabilities > 1 year residual maturity and cannot be larger than the corresponding number in cell C34.

Row	Column	Heading	Description
38	C	containing a contractual trigger or being subject to a statutory mechanism which permits the relevant resolution authority to expose TLAC to loss or convert to equity in resolution (Section 17)	<p>This only covers liabilities that can be bailed in (or otherwise exposed to loss) by the relevant resolution authorities of the resolution entity (ie meeting the TLAC term sheet Section 17) and that have been included in row 34.</p> <p>Liabilities can be exposed to loss by the relevant authorities if they are within the scope of statutory resolution tools or contain contractual terms that allow them to be written down and/or converted into equity by the resolution authorities. If liabilities are issued under foreign law they have to</p> <ul style="list-style-type: none"> <li>(a) contain contractual bail-in clauses,</li> <li>(b) contain contractual terms acknowledging that they are subject to resolution actions by the home authorities, or</li> <li>(c) the law that they are governed by must acknowledge resolution actions by the home authorities on a statutory basis.</li> </ul> <p>The number entered in cell C38 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C34.</p>
39	D–G	<b>Case 4 (ii):</b> Total senior unsecured liabilities excluding (i) liabilities arising from derivatives, (ii) liabilities arising not through contract (Section 12e) and (iii) deposits; of which:	<p>This row captures the amount of all senior unsecured liabilities excluding (i) liabilities arising from derivatives, (ii) liabilities arising not through contract (Section 12e) and (iii) deposits.</p> <p>Please split the total amount by residual contractual maturity and enter the corresponding amounts in columns D to G.</p> <p>This cell should be reported on a consolidated basis (intra-resolution group liabilities should be netted out), including issuance by non-resolution entities.</p> <p>Do not include any liabilities that have been included in row 34. The only difference between rows 34 and 39 is subordination.</p>
40	C	issued by the resolution entity	<p>This only covers liabilities that have been issued by the resolution entity and that have been included in cell C39.</p> <p>The number entered in cell C40 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C39.</p>
41	C	currently issued by an operating bank immediately below a resolution entity that is a holding company	<p>This only covers liabilities that have been issued by a direct subsidiary of the resolution entity if the resolution entity is a holding company (or intermediate holding company) and that have been included in cell C39.</p> <p>This column intends to capture the impact of senior unsecured liabilities currently not meeting the Term Sheet criteria particularly with regard to subordination but where there is reasonable expectation that the subordination criterion of section 13c would be met, once the liabilities issued by an operating bank immediately below a resolution entity are transferred to the resolution entity.</p> <p>The number entered in cell C41 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C39.</p>

Row	Column	Heading	Description
43	C	Structured notes	<p>Please enter the amount of structured notes. Structured notes should be defined as debt obligations that contain an embedded derivative component, with returns linked to an underlying security or index (public or bespoke, such as equities or bonds, fixed income rates or credit, FX, commodities etc).</p> <p>Structured notes do not include debt instruments that include call or put options only, ie the value of the instrument does not depend on any embedded derivative component.</p>
44	C	containing a contractual trigger or being subject to a statutory mechanism which permits the relevant resolution authority to expose TLAC to loss or convert to equity in resolution (Section 17)	<p>This only covers liabilities that can be bailed in (or otherwise exposed to loss) by the relevant resolution authorities of the resolution entity (ie meeting the TLAC term sheet Section 17) and that have been included in row 39.</p> <p>Liabilities can be exposed to loss by the relevant authorities if they are within the scope of statutory resolution tools or contain contractual terms that allow them to be written down and/or converted into equity by the resolution authorities. If liabilities are issued under foreign law they have to:</p> <ul style="list-style-type: none"> <li>(a) contain contractual bail-in clauses;</li> <li>(b) contain contractual terms acknowledging that they are subject to resolution actions by the home authorities; or</li> <li>(c) the law that they are governed by must acknowledge resolution actions by the home authorities on a statutory basis.</li> </ul> <p>The number entered in cell C44 only includes liabilities &gt; 1 year residual maturity and cannot be larger than the corresponding number in cell C39.</p>
45	C	(only for MPE groups) Total subordinated liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria not taking into consideration the criterion of not being funded directly by a related party (Section 12c), ie such liabilities held by entities in other resolution groups	<p>For MPE banks at a 'resolution group' level: Total amount of subordinated liabilities (excluding regulatory capital) that meet the Term Sheet criteria except for the criterion of not being funded directly by a related party (Section 12c).</p> <p>These are only liabilities that are held by related entities belonging to other resolution groups.</p> <p>Leave this row blank unless the template is being filled out for an individual (ie sub-consolidated) resolution group of an MPE bank.</p>
46	C	(only for MPE groups) Total senior liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria not taking into consideration the subordination criterion (Section 13) and the criterion of not being funded directly by a related party (Section 12c), ie such liabilities held by entities in other resolution groups	<p>For MPE banks at a 'resolution group' level: Total amount of senior liabilities (excluding regulatory capital) that meet the Term Sheet criteria except for the subordination criterion (Section 13) and the criterion of not being funded directly by a related party (Section 12c).</p> <p>These are only liabilities that are held by related entities belonging to other resolution groups.</p> <p>Do not include any liabilities that have been included in row 44.</p> <p>Leave this row blank unless the template is being filled out for an individual (ie sub-consolidated) resolution group of an MPE bank.</p>

Row	Column	Heading	Description
19–39	H	Average residual maturity (years)	<p>Please enter the weighted average residual maturity of all instruments in a given row.</p> <p>You should use the average <b>contractual</b> residual maturity in relevant rows except for rows 24, 26 and 32. Please use the average <b>effective</b> residual maturity in rows 24, 26 and 32, as defined above.</p> <p>The weighted average residual maturity should be calculated by the following formula.</p> $\sum \frac{\text{Residual maturity} * \text{Amount with the residual maturity}}{\text{Total amount}}$
34, 39	I	Of which not governed by home law and with no equivalent binding statutory or contractual provision for cross-border recognition of resolution actions and $\geq 1$ yr (Section 16)	<p>Please enter all instruments that are issued under third country law and that do not</p> <ul style="list-style-type: none"> <li>(a) contain contractual bail-in clauses,</li> <li>(b) contain contractual terms acknowledging that they are subject to resolution actions by the home authorities, and</li> <li>(c) where the law that they are governed by does not acknowledge resolution actions by the home authorities on a statutory basis.</li> </ul> <p>The number entered here is a sub-set of, and should not therefore be greater than, the number in 34C and 39C respectively.</p>
19, 26, 34	J	Of which contractually subordinated and $\geq 1$ yr (Section 13 a)	<p>Please enter all instruments that meets contractual subordination criterion (Section 13a) with a residual contractual maturity of more than or equal to one year.</p> <p>The number entered here is a sub-set of, the number in cells C19, C26 and C34 respectively. The sum of the numbers in cells J and K should be exactly equal to the number in cell C.</p>
19, 26, 34	K	Of which structurally subordinated and $\geq 1$ yr (Section 13 c)	<p>Please enter all instruments that meets structural subordination criterion (Section 13c) with a residual contractual maturity of more than or equal to one year.</p> <p>The cells in this column should be zero unless the resolution entity is a holding company which does not have excluded liabilities on its balance sheet. Instruments that meet the structural subordination requirements should only be included in this column and not in column J even if they are in the form of subordinated debt (issued by a holding company).</p> <p>The number entered here is a sub-set of, the number in cells C19, C26 and C34 respectively. The sum of the numbers in cells J and K should be exactly equal to the number in cell C.</p>
<b>C) Deductions</b>			
51	C	Holdings of Common Equity Tier 1 net of short positions	<p>Enter the whole amount of holdings of Common Equity Tier 1 of banking, financial and insurance entities excluding entities that are both regulatory consolidated and included in own resolution group where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).</p> <p>This number should be net of short positions, ie deduct permitted offsetting short positions.</p>

Row	Column	Heading	Description
52	C	Holdings of Additional Tier 1 capital net of short positions	Enter the whole amount of holdings of additional Tier 1 capital of banking, financial and insurance entities excluding entities that are both regulatory consolidated and included in own resolution group and where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). This number should be net of short positions, ie deduct permitted offsetting short positions.
53	C	Holdings of Tier 2 capital net of short positions	Enter the whole amount of holdings of Tier 2 capital of banking, financial and insurance entities excluding entities that are both regulatory consolidated and included in own resolution group and where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). This number should be net of short positions, ie deduct permitted offsetting short positions.
57	C	Gross holdings of unsecured liabilities in Case 1 issued by other G-SIBs (or subsidiaries of G-SIBs) not taking into consideration instruments counting towards TLAC by way of the last two paragraphs of section 13 of the term sheet (same as row 19)	Enter the whole amount of unsecured liabilities in case1 (see definition of row 19), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). There is no need to include instruments that might count towards TLAC by way of the last two paragraphs of section 13 in the term sheet.
57	D	Gross holdings of unsecured liabilities in Case 2 issued by other G-SIBs (or subsidiaries of G-SIBs) not taking into consideration instruments counting towards TLAC by way of the last two paragraphs of Section 13 of the term sheet (same as row 26)	Enter the whole amount of unsecured liabilities in case2 (see definition of row 26), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). There is no need to include instruments that might count towards TLAC by way of the last two paragraphs of section 13 in the term sheet.
57	E	Gross holdings of unsecured liabilities in Case 3 issued by other G-SIBs (or subsidiaries of G-SIBs) (same as rows 27)	Enter the whole amount of unsecured liabilities in case3 (see definition of row 27), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
57	F	Gross holdings of unsecured liabilities in Case 4 issued by other G-SIBs (or subsidiaries of G-SIBs) (same as row 34 and 39)	Enter the whole amount of unsecured liabilities in case4 (see definition of row 34 and 39), excluding regulatory capital, issued by other G-SIBs/other resolution entities, where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
58	C–F	Permitted offsetting short positions in relation to the specific gross holdings included above	Enter the amount of permitted offsetting short position of unsecured liabilities included in row 57 in each case. Please use the same criteria as for regulatory capital holdings.
60	C–F	Risk weighted assets related to above, included in total risk-weighted assets	Enter risk weighted assets that are related to row 59 and that are included in total risk-weighted assets.

Row	Column	Heading	Description
62	C-F	Common Equity Tier 1 capital after all regulatory adjustments that do not depend on a threshold	[For SPE banks and MPE banks at a group consolidated level] The cell refers to DefCap worksheet cell D52. Please leave as it is. [For MPE banks at a 'resolution group' level] Enter the amount of Common Equity Tier 1 capital after all regulatory adjustments that do not depend on a threshold. Please refer to DefCap worksheet cell D52 for the calculation.
85	C-F	Holdings of Common Equity Tier 1 net of short positions (ie risk weighted assets of exposures in row 75)	Enter risk weighted assets that are related to row 75 (ie amounts not deducted).
86	C-F	Holdings of Additional Tier 1 capital net of short positions (ie risk weighted assets of exposures in row 76)	Enter risk weighted assets that are related to row 76 (ie amounts not deducted).
87	C-F	Holdings of Tier 2 capital net of short positions (ie risk weighted assets of exposures in row 77)	Enter risk weighted assets that are related to row 77 (ie amounts not deducted).
88	C-F	Holdings of unsecured liabilities net of short positions (ie risk weighted assets of exposures in row 78)	Enter risk weighted assets that are related to row 78 (ie amounts not deducted).
90	C-F	Holdings of Common Equity Tier 1 net of short positions (ie risk weighted assets of exposures in row 80)	Enter risk weighted assets that are related to row 80 (ie amounts not deducted).
91	C-F	Holdings of Additional Tier 1 capital net of short positions (ie risk weighted assets of exposures in row 81)	Enter risk weighted assets that are related to row 81 (ie amounts not deducted).
92	C-F	Holdings of Tier 2 capital and unsecured liabilities net of short positions (ie risk weighted assets of exposures in row 82)	Enter risk weighted assets that are related to row 82 (ie amounts not deducted).
96	C	Gross holdings of unsecured liabilities in Case 1 issued by other G-SIBs (or subsidiaries of G-SIBs) not taking into consideration instruments qualifying as TLAC by way of the last two paragraphs of section 13 of the term sheet	Enter the whole amount of unsecured liabilities in case1 (see definition of row 19), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). There is no need to include instruments that might count towards TLAC by way of the last two paragraphs of section 13 in the term sheet.
96	D	Gross holdings of unsecured liabilities in Case 2 issued by other G-SIBs (or subsidiaries of G-SIBs) not taking into consideration instruments qualifying as TLAC by way of the last two paragraphs of section 13 of the term sheet	Enter the whole amount of unsecured liabilities in case2 (see definition of row 26), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). There is no need to include instruments that might count towards TLAC by way of the last two paragraphs of section 13 in the term sheet.

Row	Column	Heading	Description
96	E	Gross holdings of unsecured liabilities in Case 3	Enter the whole amount of unsecured liabilities in case3 (see definition of row 27), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
96	F	Gross holdings of unsecured liabilities in Case 4	Enter the whole amount of unsecured liabilities in case4 (see definition of row 34 and 39), excluding regulatory capital, issued by other G-SIBs/other resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
97	C-F	Permitted offsetting short positions in relation to the specific gross holdings included above	Enter the amount of permitted offsetting short position of TLAC eligible liabilities included in row 96 in each case. Please use the same criteria as for regulatory capital holdings.
99	C-F	Risk weighted assets related to above, included in total risk-weighted assets	Enter risk weighted assets that are related to row 98 and that are included in total risk-weighted assets.
<b>D) Deposit breakdown for EU banks (EU banks only, see BRRD Article 108)</b>			
106	C-G	Senior deposits; of which:	Please include deposits from all classes of depositor. Demand deposits should be included under column D (<1 year residual maturity). The total should equal the sum of rows 107 to 110.
107	C-G	Covered by a deposit guarantee scheme under Directive 2014/49/EU	Please enter deposits covered by any EU or EEA deposit guarantee scheme officially recognised under either the 2014 or 1994 Deposit Guarantee Schemes Directive. Include only deposits below €100,000 (or local currency equivalent).
108	C-G	That part of deposits eligible for coverage but in excess of the coverage limit	Please enter the amount of deposits from eligible depositors (natural persons, or micro-, small-, and medium-sized enterprise) in excess of €100,000 (or local currency equivalent).
109	C-G	Would be eligible for coverage were they not made through branches outside the Union	Please enter the whole amount of deposits in branches outside of the EU or EEA from depositors who would be eligible if depositing in the EU/EEA (natural persons, or micro-, small-, and medium-sized enterprise). Include the entire amount of such deposits.
110	C-G	Not eligible for coverage	Please enter the full amount of any other deposits
106-110	H	Average residual maturity (years)	Average maturity only of time deposits with residual maturity of over one year.
106-110	I	Non-maturity deposits	Non-maturity deposits (NMDs) are generally defined as liabilities of banks in which the claimant (ie depositor) is free to withdraw anytime since they have no contractually agreed maturity date

## 9.4 Internal TLAC

The “G-SIB TLAC Internal” worksheet collects and sums up data on internal TLAC of material subsidiaries for a G-SIB (both SPE and MPE). One column (columns D to AB) should be completed for each material subsidiary, ie an entity incorporated in a national jurisdiction other than that in which the resolution entity is incorporated and meeting at least one of the criteria in section 21 of the term sheet:

- (a) has more than 5% of the consolidated risk-weighted assets of the G-SIB group; or
- (b) generates more than 5% of the consolidated revenues of the G-SIB group; or
- (c) has a total leverage exposure measure larger than 5% of the G-SIB group's total leverage ratio measure; or
- (d) has been identified by the firm's CMG as material to the exercise of the firm's critical functions.

If the CMG has not yet determined the scope of the material subsidiaries, then for the purpose of the QIS, the material subsidiaries should be based on the quantitative thresholds listed in a-c above.

The worksheet is designed to test three different "cases" using a menu approach to test the impact of specific features of internal TLAC instruments as follows:

- **Case 1** includes all non-regulatory capital instruments that meet all of the criteria on the proposed TLAC term sheet.
- **Case 2** analyses the subordination requirement. This case includes instruments that meet the TLAC term sheet criteria except for subordination. The purpose is to analyse the impact of requiring TLAC instruments to be subordinated and how this impacts on the shortfalls of internal TLAC observed in G-SIBs. Note this is the same case as case 3 in the G-SIB TLAC external worksheet.
- **Case 3** is the widest case and includes all unsecured liabilities excluding regulatory capital, liabilities arising through derivatives, liabilities not arising through contract and deposits. Cases 3i and 3ii differ only by the subordination requirement. The purpose of case 3 is to gain insights into liabilities that could potentially, once matured, be replaced by liabilities that do qualify for TLAC. Note this is the same case as case 4 in the G-SIB TLAC external worksheet.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
<b>A) Regulatory capital</b>			
5	D-AB	Resolution group number to which the material subsidiary belongs (only for MPE)	Please enter the resolution group number to which the material subsidiary belongs. This is only relevant for MPE. To find out the relevant number please refer to your national supervisor.
8	D-AB	Total Common Equity Tier 1 capital of the subsidiary (after regulatory adjustments): of which	Enter the amount of net Common Equity Tier 1 capital issued by the material subsidiary according to national rules in 2022 (fully phased in). Please refer to Section 20 of the term sheet to fill out this cell, eg for CET1 instruments issued externally by the subsidiary, please only count towards TLAC to the extent that they count towards the resolution group's consolidated CET 1 position.
9	D-AB	owned directly by the <b>resolution entity</b> (before regulatory adjustments) ie no intermediate entities	Enter the nominal amount of Total Common Equity Tier 1 capital that is owned <b>directly</b> by the resolution entity and that is included in row 8. Please note that the value in row 9 could be higher than the amount in row 8 because row 8 is after regulatory adjustments.
10	D-AB	Issued <b>indirectly</b> to the resolution entity via intermediate entities (before regulatory adjustments). Note that if the intermediate entity is itself another material subsidiary then it should not populate the amount in rows 9 and 10 to avoid double counting of internal TLAC	Enter the nominal amount of Total Common Equity Tier 1 capital that is owned indirectly by the resolution entity (ie via intermediate entities) and that is included in row 8. Please note that the value in row 10 could be higher than the amount in row 8 because row 8 is after regulatory adjustments.

Row	Column	Heading	Description
11	D-AB	issued to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20)	Enter the nominal amount of Total Common Equity Tier 1 capital that is issued to external investors and eligible for inclusion in the resolution group's regulatory capital according to paragraphs 62 to 64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 8.
12	D-AB	issued, via subsidiary of the material subsidiary, to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20)	Enter the nominal amount of Total Common Equity Tier 1 capital that is issued, via subsidiary of the material subsidiary, to external investors and eligible for inclusion in the resolution group's regulatory capital according to paragraphs 62 to 64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 8.
13	D-AB	Total Additional Tier 1 of the subsidiary (after regulatory adjustments); of which	Enter the amount of net Additional Tier 1 instruments issued by the material subsidiary according to national rules in 2022 (fully phased in). Please refer to Section 20 of the term sheet to fill out this cell, eg for Additional Tier 1 instruments issued externally by the subsidiary, please only count towards TLAC to the extent that they count towards the resolution group's consolidated Tier 1 position.
14	D-AB	owned <b>directly</b> by <b>resolution entity</b> (before regulatory adjustments)	Enter the nominal amount of Additional Tier 1 instruments that is owned <b>directly</b> by the resolution entity and that is included in row 13. Please note that the value in row 14 could be higher than the amount in row 13 because row 13 is after regulatory adjustments.
15	D-AB	Issued <b>indirectly</b> to the resolution entity via intermediate entities (before regulatory adjustments). Note that if the intermediate entity is itself another material subsidiary then it should not populate the amount in rows 14 and 15 to avoid double counting of internal TLAC	Enter the nominal amount of Additional Tier 1 capital that is owned <b>indirectly</b> by the resolution entity (ie via intermediate entities) and that is included in row 13. Please note that the value in row 15 could be higher than the amount in row 13 because row 13 is after regulatory adjustments.
16	D-AB	issued to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20)	Enter the nominal amount of Additional Tier 1 instruments that is issued to external investors and eligible for inclusion in the resolution group's regulatory capital according to para. 62 to 64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 13.
17	D-AB	issued, via subsidiary of the material subsidiary, to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20)	Enter the nominal amount of Additional Tier 1 instruments that is issued, via subsidiary of the material subsidiary, to external investors and eligible for inclusion in the resolution group's regulatory capital according to para. 62 to 64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 13.
18	D-AB	issued under third country law without any contractual bail-in clauses and no equivalent binding statutory provision for cross-border recognition of resolution actions (before regulatory adjustments)	Enter the nominal amount of Additional Tier 1 instruments that is issued under the third country law without any contractual bail-in clauses and no equivalent binding statutory provision for cross-border recognition of resolution actions and that is included in row 13.

Row	Column	Heading	Description
19	D-AB	Total Tier 2 of the subsidiary (after regulatory adjustments); of which	Enter the amount of net Tier 2 instruments issued by the material subsidiary recognised in its <b>resolution entity's consolidated regulatory capital</b> according to national rules in 2022 (fully phased in). Please refer to Section 20 of the term sheet to fill out this cell. For more detail, <ul style="list-style-type: none"> <li>(a) For Tier 2 instruments issued externally by the subsidiary, please only count towards TLAC to the extent that they count towards the <b>resolution group's consolidated Tier 2</b> position.</li> <li>(b) For Tier 2 issued to the resolution entity, please include the full nominal amount with a residual maturity of &gt; 1 yr. To the extent that part of the instruments no longer qualifies as Tier 2 due to amortisations it still qualifies as "eligible liabilities".</li> <li>(c) Please include the non-amortised fraction of Tier 2 instruments with a residual maturity of less than one year if any.</li> </ul>
20	D-AB	owned <b>directly</b> by resolution entity (before regulatory adjustments and prior to amortisation)	Enter the nominal amount of Tier 2 instruments that is owned <b>directly</b> by the resolution entity and that is included in row 19. Please note that the value in row 20 could be higher than the amount in row 19 because row 19 is after regulatory adjustments.
21	D-AB	issued <b>indirectly</b> to the resolution entity via intermediate entities (before regulatory adjustments). Note that if the intermediate entity is itself another material subsidiary then it should not populate the amount in rows 20 and 21 to avoid double counting of internal TLAC	Enter the nominal amount of Tier 2 capital that is owned <b>indirectly</b> by the resolution entity (ie via intermediate entities) and that is included in row 19. Please note that the value in row 21 could be higher than the amount in row 19 because row 19 is after regulatory adjustments.
22	D-AB	issued to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20) (before regulatory adjustments but <b>after</b> amortisation)	Enter the amount of Tier 2 instruments (before regulatory adjustments but <b>after</b> amortisation) that is issued to external investors and eligible for inclusion in the resolution group's regulatory capital according to para. 62-64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 19.
23	D-AB	issued, via subsidiary of the material subsidiary, to external investors but counting towards the resolution group's consolidated capital requirements (as per Section 20)	Enter the amount of Tier 2 instruments (before regulatory adjustments but after amortisation) that is issued, via subsidiary of the material subsidiary, to external investors and eligible for inclusion in the resolution group's regulatory capital according to para. 62-64 of Basel III (ie meeting TLAC term sheet Section 20) and that is included in row 19.
24	D-AB	issued under third country law without any contractual bail-in clause and no equivalent binding statutory provision for cross-border recognition of resolution actions (before regulatory adjustments but <b>after</b> amortisation)	Enter the amount of Tier 2 instruments (before regulatory deductions but <b>after amortisation</b> ) that is issued under the third country law without any contractual bail-in clauses and no equivalent binding statutory provision for cross-border recognition of resolution actions and that is included in row 19.

Row	Column	Heading	Description
<b>B) Unsecured liabilities excluding regulatory capital</b>			
28	D-AB	<b>Case 1:</b> Total liabilities excluding regulatory capital, issued directly or indirectly to the resolution entity, meeting the Term Sheet criteria	Enter the total amount of liabilities excluding regulatory capital, issued by the material subsidiary directly or indirectly to the resolution entity, meeting the Term Sheet criteria. Include only instruments that meet all of the requirements in the term sheet. However, please do not take into consideration instruments that only qualify by means of the last two paragraphs of section 13.
30	D-AB	<b>Case 2:</b> Total liabilities excluding regulatory capital issued directly or indirectly to the resolution entity, meeting the Term Sheet criteria not taking into consideration the subordination criterion (Section 13a, b, c)	Enter the total amount of liabilities excluding regulatory capital issued directly or indirectly to the resolution entity, meeting the Term Sheet criteria except for the subordination criterion (Section 13a, b, c). This case also includes instruments meeting case 1 and should, in the majority of cases, be a larger number than the number in row 28.
32	D-AB	<b>Case 3(i):</b> Total subordinated unsecured liabilities excluding regulatory capital, liabilities arising through derivatives, liabilities not arising through contact and deposits	Enter the total amount of subordinated unsecured liabilities issued by the material subsidiary, not eligible to regulatory capital and deposits
33	D-AB	of which held by the resolution entity	Enter the amount of liabilities that is held by the resolution entity and that is included in row 32.
35	D-AB	<b>Case 3(ii):</b> Total senior unsecured liabilities excluding regulatory capital, liabilities arising through derivatives, liabilities not arising through contract and deposits	Enter the total amount of senior unsecured liabilities issued by the material subsidiary, not eligible to regulatory capital. Do not include any liabilities that have been included in row 32.
36	D-AB	of which held by the resolution entity	Enter the amount of liabilities that is held by the resolution entity and that is included in row 35.
38	D-AB	Deposits	Enter the amount of deposits of the material subsidiary.
<b>C) Collateralised guarantees</b>			
41	D-AB	Collateralised guarantees provided by the resolution entity to the material subsidiary (meeting conditions in the term sheet Section 23)	Enter the total amount of guarantees that are provided to the material subsidiary by the resolution entity that are collateralised and in addition meet the conditions in section 23 of the TLAC term sheet.
<b>D) Denominator</b>			
44	D-AB	Total risk-weighted assets of the material subsidiary (sub-consolidated basis)	Enter the total amount of risk-weighted assets of the reporting subsidiary on a sub-consolidated basis.
45	D-AB	Basel leverage exposure measure of the material subsidiary (sub-consolidated basis)	Enter the exposure measure (the denominator) according to the Basel III leverage ratio framework (published in January 2014) for the reporting subsidiary on a sub-consolidated basis.
46	D-AB	Total risk-weighted assets of the material subsidiary (stand-alone)	Enter the total amount of risk-weighted assets of the reporting subsidiary on a standalone basis.
47	D-AB	Basel leverage exposure measure of the material subsidiary (stand-alone)	Enter the exposure measure (the denominator) according to the Basel III leverage ratio framework (published in January 2014) for the reporting subsidiary on a standalone basis.

## 9.5 Holdings of TLAC (non-G-SIBs)

The “TLAC holdings” worksheet collects data on non-G-SIB’s holdings of TLAC **on a consolidated basis**. Data on regulatory capital should be filled out according to national rules fully phased in as in 2022. The worksheet is designed to test three different “cases” using a menu approach to test the impact of specific features of TLAC instruments as follows:

- **Case 1** includes all non-regulatory capital instruments that meet all of the criteria on the proposed TLAC term sheet.
- **Case 2** analyses the subordination requirement. This case includes instruments that meet all the TLAC term sheet criteria (excluding regulatory capital) **plus** instruments that meet all the TLAC criteria except for subordination. The purpose is to analyse the impact of requiring TLAC instruments to be subordinated (by comparing to case 1).
- **Case 3** is the widest case and includes all unsecured G-SIB liabilities (excluding regulatory capital), not arising from derivatives or through contract or deposits. The purpose of case 3 is to gain insights into liabilities that could potentially, once matured, be replaced by liabilities that do qualify for TLAC.

The following table provides a description of the data to be entered in each row.

Row	Column	Heading	Description
<b>A) Regulatory capital</b>			
5	C	Total Common Equity Tier 1 capital after all regulatory adjustments	Automatic calculation (refer to DefCap D64).
6	C	Total Additional Tier 1 instruments after all regulatory adjustments	Automatic calculation (refer to DefCap D82).
7	C	Total Tier 2 instruments after all regulatory adjustments	Automatic calculation (refer to DefCap D101).
<b>B) Holding of TLAC instruments</b>			
12	C	Holdings of Common Equity Tier 1 net of short positions	Enter the whole amount of holdings of Common Equity Tier 1 of banking, financial and insurance entities excluding entities that are regulatory consolidated where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). This number should be net of short positions, ie deduct permitted offsetting short positions.
13	C	Holdings of Additional Tier 1 capital net of short positions	Enter the whole amount of holdings of Additional Tier 1 capital of banking, financial and insurance entities excluding entities that are regulatory consolidated and where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). This number should be net of short positions, ie deduct permitted offsetting short positions.
14	C	Holdings of Tier 2 capital net of short positions	Enter the whole amount of holdings of Tier 2 capital of banking, financial and insurance entities excluding entities that are regulatory consolidated and where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). This number should be net of short positions, ie deduct permitted offsetting short positions.

Row	Column	Heading	Description
18	C	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs in Case 1.	Enter the whole amount of unsecured liabilities issued by G-SIBs meeting the TLAC term sheet criteria, excluding regulatory capital, issued by G-SIBs/resolution entities where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). Please do not include any senior instruments that might qualify for TLAC by the issuing bank by way of the last two paragraphs of section 13 of the TLAC term sheet.
18	D	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs in Case 2.	Enter the whole amount of unsecured liabilities meeting the TLAC term sheet criteria except for Section 13 (subordination), excluding regulatory capital, issued by G-SIBs/resolution entities where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). Please note that case 2 also includes case 1 and hence the number entered in D18 will therefore, in the majority of cases, be larger than the number in C18.
18	E	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs in Case 3.	Enter the whole amount of unsecured liabilities, excluding regulatory capital, those arising from derivatives and those arising not through contract (section 12e), where the bank does not own more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). Please note that case 3 also includes case 1 and hence the number entered in E18 will therefore, in the majority of cases, be larger than the number in C18.
19	C-E	Permitted offsetting short positions in relation to the specific gross holdings included above	Enter the amount of permitted offsetting short position of TLAC eligible liabilities included in row 18 in each case. Please use the same criteria as for regulatory capital holdings.
32	C-E	Holdings of Common Equity Tier 1 net of short positions (ie risk weighted assets of exposures in row 28)	Enter risk weighted assets that are related to row 28 (ie amounts not deducted).
33	C-E	Holdings of Additional Tier 1 capital net of short positions (ie risk weighted assets of exposures in row 29)	Enter risk weighted assets that are related to row 29 (ie amounts not deducted).
34	C-E	Holdings of Tier 2 capital and TLAC eligible liabilities net of short positions (ie risk weighted assets of exposures in row 30)	Enter risk weighted assets that are related to row 30 (ie amounts not deducted).
38	C	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs in Case 1	Enter the whole amount of unsecured liabilities meeting the TLAC term sheet criteria, excluding regulatory capital, issued by G-SIBs/resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less). Please do not include any senior instruments that might qualify for TLAC by the issuing bank by way of the last two paragraphs of section 13 of the TLAC term sheet.

Row	Column	Heading	Description
38	D	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs in Case 2	Enter the whole amount of unsecured liabilities issued by G-SIBs meeting the TLAC term sheet criteria except for Section 13 (subordination), excluding regulatory capital, issued by G-SIBs/resolution entities where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
38	E	Gross holdings of unsecured liabilities excluding regulatory capital, issued by G-SIBs Case 3	Enter the whole amount of unsecured liabilities, excluding regulatory capital, those arising from derivatives and those arising not through contract (section 12e), where the bank owns more than 10% of the issued common share capital (excluding amount held for underwriting purposes only if held for five working days or less).
39	C-E	Permitted offsetting short positions in relation to the specific gross holdings included above	Enter the amount of permitted offsetting short position of TLAC eligible liabilities included in row 38 in each case. Please use the same criteria as for regulatory capital holdings.
45	C-E	Risk weighted assets related to the unsecured liabilities in each case, excluding regulatory capital issued by G-SIBs, included in row 44	Enter risk weighted assets in each case that are related to rows 20 and 40 and that are included in row 44.
50	C-E	The number of G-SIB groups represented in the exposure above	Enter the number of G-SIB groups that are represented in the sum of the TLAC exposures entered in row 49 in each case.

## 9.6 External TLAC (location)

The “External TLAC (location)” worksheet collects data on external TLAC of G-SIB’s resolution entities and its location of issuance. The worksheet is designed to analyse amounts and pricing of unsecured liabilities issued in different markets. **Please read the general instructions in panel B paragraph 9.3 carefully before filling out this part of the worksheet.**

Each resolution group will fill out this worksheet on a consolidated (or sub-consolidated) basis unless specified otherwise. **Please note that the term sheet allows for G-SIBs from jurisdictions with certain resolution regimes to permit liabilities that rank alongside excluded liabilities to contribute to TLAC. This is explained in the final two paragraphs of Section 13 of the term sheet. For the purposes of the TLAC QIS, G-SIBs should *not* take these into consideration when populating the template.**

For each item it is required to report with reference as of end-2014;

- (a) Total nominal amount outstanding;
- (b) Weighted average residual yield to maturity (as a percentage, using the nominal amount outstanding as weights).<sup>65</sup> The yield should be calculated to the contractual maturity date. If possible, the calculations should include the impact of hedges;
- (c) Only for the instruments that meet all of the criteria on the proposed TLAC term sheet (see case 1 below), the maximum residual yield to maturity. The yield should be calculated to the contractual maturity date. If possible, the calculations should include the impact of hedges;

<sup>65</sup> The residual yield to maturity is the return anticipated on a bond if held from the reference date (ie end-2014) until the end of its lifetime.

- (d) Weighted average z-spread in basis points, using the nominal amount outstanding as weights.<sup>66</sup> Please provide best estimates of the market level for instruments that do not have an observable market quote available. The relevant swap rates should be used as a benchmark curve for the calculation of the spreads. If possible, please provide the spreads in local terms, ie relative to each local swaps curve depending on the currency of denomination.

The following table provides a description of the data to be entered in each row. The references to Term Sheet criteria include the national specificities, when applicable.

The worksheet is designed to test similar "cases" to those described in Section 9.3 above. Please note that not all cases are identical due to the different nature of this part of the analysis to understand the cost impact of the TLAC proposals.

- **Case 1** includes all non-regulatory capital instruments that meet all of the criteria on the proposed TLAC term sheet. The definition is consistent with Case 1 in paragraph 9.3.
- **Case 2(i)** includes all non-regulatory capital subordinated instruments that meet all of the criteria on the proposed TLAC term sheet but are issued by subsidiaries different from the resolution entity. The purpose of gathering this data is to analyse the cost of migrating the issuance of debt securities from the subsidiaries to the resolution entity.
- **Case 2(ii)** includes all non-regulatory capital senior instruments that meet all of the criteria on the proposed TLAC term sheet but are issued by subsidiaries different from the resolution entity. The purpose of gathering this data is to analyse the cost of migrating the issuance of debt securities from the subsidiaries to the resolution entity.
- **Case 3** analyses the subordination requirement. It includes all senior unsecured liabilities that meet all the proposed TLAC term sheet criteria except for the subordination requirement. The purpose of Case 3 is to analyse the impact of requiring TLAC instruments to be subordinated (same as Case 3 in paragraph 9.3 minus subordinated liabilities).
- **Case 4(i)** includes all subordinated unsecured liabilities issued by the resolution entity not considered under Case 1, excluding instruments arising from derivatives (eg structured notes as in Case 5), not through contracts and deposits. The purpose of Case 4(i) is to calculate the total amount of subordinated liabilities and possible differences in pricing compared with Case 1 above. The definition is consistent with Case 4(i) minus Case 1 in paragraph 9.3, excluding issuance by entities different from the resolution entity.
- **Case 4(ii)** includes all non-subordinated senior unsecured liabilities issued by the resolution entity not considered under Case 3, excluding instruments arising from derivatives (eg structured notes as in Case 5), not through contract and deposits. Adding Cases 2 to 4(ii) would provide the total amount of subordinated non TLAC-eligible and senior unsecured liabilities with the respective pricing to calculate differences with TLAC-eligible instruments in Case 1 above, gaining insights into liabilities that could potentially be replaced by liabilities that do qualify for TLAC. The definition is consistent with Case 4(ii) minus structured notes minus Case 3 in paragraph 9.3, excluding issuance by entities different from the resolution entity.
- **Case 5** includes structured notes issued by the resolution entity, with the purpose of assessing the outstanding amount and pricing of those instruments. The definition is consistent with row 43 in Section 9.3 excluding issuance by entities different from the resolution entity.

<sup>66</sup> The z-spread is the basis point spread that would need to be added to the implied spot yield curve such that the discounted cash flows of a bond are equal to its present value (its current market price).

Case	Column	Heading	Description
1	G-R	Total subordinated liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria	Subordinated unsecured liabilities which would not be eligible to regulatory capital and would meet all of the criteria in the term sheet (except instruments qualifying by way of the final two paragraphs of section 13).
2(i)	G-R	Total subordinated liabilities excluding regulatory capital, issued by subsidiaries different from the resolution entity, meeting the Term Sheet criteria not taking into consideration the issuer criteria (Section 9)	Subordinated unsecured liabilities different from regulatory capital which would meet all the Term Sheet criteria excluding the issuance by resolution entity.
2(ii)	G-R	Total senior liabilities excluding regulatory capital, issued by subsidiaries different from the resolution entity, meeting the Term Sheet criteria not taking into consideration the issuer criteria (Section 9)	Senior unsecured liabilities (not subordinated) different from regulatory capital which would meet all the Term Sheet criteria excluding the issuance by resolution entity.
3	G-R	Total senior liabilities excluding regulatory capital, issued by the resolution entity, meeting the Term Sheet criteria not taking into consideration the subordination criteria (Section 13a, 13b and 13c)	Senior unsecured liabilities (not subordinated) excluding (i) regulatory capital (ii) liabilities arising from derivatives (iii) liabilities arising not through contract (Section 12e) and (iv) deposits.
4(i)	G-R	Other subordinated liabilities issued by the resolution entity, excluding (i) regulatory capital, (ii) liabilities arising not through contract (Section 12e), (iii) deposits and (iv) all liabilities reported in Case 1 and arising from derivatives	Subordinated unsecured liabilities excluding (i), regulatory capital, (ii) liabilities arising not through contract (Section 12e), (iii) deposits and (iv) TLAC-eligible liabilities (Case 1) or liabilities arising from derivatives (eg structured notes in Case 5). Liabilities in these cells do not meet the TLAC term sheet criteria, except that they have to be issued by the resolution entity (Section 9) and with a remaining maturity of at least one year (Section 11).
4(ii)	G-R	Other senior liabilities issued by the resolution entity, excluding (i) regulatory capital, (ii) liabilities arising not through contract (Section 12e), (iii) deposits and (iv) all liabilities reported in Case 3 and arising from derivatives	Senior unsecured liabilities excluding (i), regulatory capital, (ii) liabilities arising not through contract (Section 12e), (iii) deposits and (iv) liabilities included in Case 1 or liabilities arising from derivatives (eg structured notes in Case 5). Liabilities in these cells do not meet the TLAC term sheet criteria, except that they have to be issued by the resolution entity (Section 9) and with a remaining maturity of at least one year (Section 11).
5	G-R	Structured notes issued by the resolution entity	Structured notes should be defined as debt obligations that contain an embedded derivative component, with returns linked to an underlying security or index (public or bespoke, such as equities or bonds, fixed income rates or credit, FX, commodities etc). Structured notes does not include debt instruments that include call or put options only, ie the value of the instrument does not depend on any embedded derivative component.

Case	Column	Heading	Description
1b	G–R	Unsecured liabilities with remaining maturity less than 1 year	Unsecured liabilities meeting the criteria as in Case 1 except for the minimum remaining maturity.
2(i)b			Unsecured liabilities meeting the criteria as in Case 2(i) except for the minimum remaining maturity.
2(ii)b			Unsecured liabilities meeting the criteria as in Case 2(ii) except for the minimum remaining maturity.
3b			Unsecured liabilities meeting the criteria as in Case 3 except for the minimum remaining maturity.
4(i)b			Unsecured liabilities meeting the criteria as in Case 4(i) except for the minimum remaining maturity.
4(ii)b			Unsecured liabilities meeting the criteria as in Case 4(ii) except for the minimum remaining maturity.
5b			Unsecured liabilities meeting the criteria as in Case 5 except for the minimum remaining maturity.
1–5, 1b–5b			G–N
1–5, 1b–5b	I	of which EU home country	To be compiled only by G-SIBs whose home country is in a EU jurisdiction different from the UK; eg for a German G-SIB, the amount of liabilities issued in the EU countries (including Germany and excluding UK) should be reported in column H and the amount of liabilities issued in Germany in column I.
1–5, 1b–5b	M	Location of resolution entity, if different from US, EU, JP, or HK (please specify)	To be completed only by G-SIBs with resolution entities in a jurisdiction different from the US, EU (excluding UK), UK, JP and HK. Please specify the relevant jurisdiction.
1–5, 1b–5b	O	Average original maturity	Average based on the contractual maturity date. In case of step-up clause or explicit financial incentive to redeem, the date when the first step-up can be exercised should be considered. The average should be weighted by the outstanding amount of the liabilities as calculated for columns G to N. Perpetual maturities should be treated as 10 years.
2–5, 2b–5b	P	Of which not governed by home country law and with no equivalent binding statutory or contractual provision for cross-border recognition of resolution actions and $\geq$ 1yr (section 16)	All instruments issued under third country law and that <ul style="list-style-type: none"> <li>(i) do not contain contractual bail-in clauses</li> <li>(ii) do not contain contractual terms acknowledging that they are subject to resolution actions by the home authorities, and</li> <li>(iii) are not governed by a law that acknowledge resolution actions by the home authorities on a statutory basis.</li> </ul>
1, 2(i), 4(i) and (ii), 1b, 2(i)b, 4b(i) and (ii)	Q	Of which contractually subordinated and $\geq$ 1yr (Section 13a)	All instruments that meet the contractual subordination criterion (Section 13a) with a residual contractual maturity of more than or equal to one year.
1, 4(i) and (ii), 1b, 4b(i) and (ii)	R	Of which structurally subordinated and $\geq$ 1yr (Section 13c)	All instruments that meet the structural subordination criterion (Section 13c) with a residual contractual maturity of more than or equal to one year.

## Annex 1: Changes compared to versions 2.8.x of the reporting template

Compared to the versions 2.8.x of the reporting template which were used for reporting of data as of 30 June 2014, the following main changes have been implemented:

- The "General Info", "Requirements" and "DefCap" worksheets have been revised substantially to reflect the fact that banks now report many of these items in regulatory reporting.
- The worksheets for the QIS on the fundamental review of the trading book have been revised completely.
- The "OpRisk" worksheet has been removed.
- The "NSFR" and "Leverage" worksheets have been amended.
- The worksheets on floors, the review of the standardised approach to credit risk and TLAC have been added.

## Annex 2: Tentative schedule for upcoming Basel III monitoring exercises

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### Basel III monitoring as of end-December 2014<sup>1</sup>

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End-March 2015	Deadline for data submission to national supervisors.
September 2015	Publication of results

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<sup>1</sup> Or equivalent in countries with financial years which differ from the calendar year.

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### Basel III monitoring as of end-June 2015<sup>1</sup>

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early August 2015	Circulation of Basel III monitoring reporting templates to banks.
September 2015	Deadline for data submission to national supervisors.
March 2015	Publication of results

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<sup>1</sup> Or equivalent in countries with financial years which differ from the calendar year.

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## Annex 3: Correlation derivations in the SBA

### 1. GIRR

#### 1.1 Delta risk

##### Within buckets

Tenor	Curve	Sign	Rho	Example	QIS header	
Same	Same	Same	Netting	{Euribor3M, 0,25yr, +} and {Euribor3M, 0,25yr, +}		
Same	Same	Different	Netting	{Euribor3M, 0,25yr, +} and {Euribor3M, 0,25yr, -}		
Same	Different	Same	100,00%	{Euribor3M, 0,25yr, +} and Euribor6M, 0,25yr, +}	$\sum 1$	
Same	Different	Different	99,90%	{Euribor3M, 0,25yr, +} and Euribor6M, 0,25yr, -}	$\sum(1-x)$	
Different - '0,25yr-0,5yr'	Different	Same	95,10%	{Euribor3M, 0,25yr, +} and Euribor6M, 0,5yr, +}	0,25yr-0,5yr	$\sum rho+(1+x)$
Different - '0,25yr-0,5yr'	Same	Same	95,00%	{Euribor3M, 0,25yr, +} and {Euribor3M, 0,5yr, +}		$\sum rho+$
Different - '0,25yr-0,5yr'	Same	Different	90,00%	{Euribor3M, 0,25yr, +} and {Euribor3M, 0,5yr, -}		$\sum rho-$
Different - '0,25yr-0,5yr'	Different	Different	89,91%	{Euribor3M, 0,25yr, +} and Euribor6M, 0,5yr, -}		$\sum rho-(1-x)$
Different - '0,25yr-1yr'	Different	Same	85,09%	{Euribor3M, 0,25yr, +} and Euribor6M, 1yr, +}	0,25yr-1yr	$\sum rho+(1+x)$
Different - '0,25yr-1yr'	Same	Same	85,00%	{Euribor3M, 0,25yr, +} and {Euribor3M, 1yr, +}		$\sum rho+$
Different - '0,25yr-1yr'	Same	Different	70,00%	{Euribor3M, 0,25yr, +} and {Euribor3M, 1yr, -}		$\sum rho-$
Different - '0,25yr-1yr'	Different	Different	69,93%	{Euribor3M, 0,25yr, +} and Euribor6M, 1yr, -}		$\sum rho-(1-x)$
So on so forth...	...	...			So on so forth...	

##### Across buckets

Rho	Example
50,00%	S_EUR= {{Euribor3M, 0,25yr, +}, {Euribor6M, 1yr, -},...} and S_USD= {{Libor3M, 0,25yr, +}, {Libor6M, 1yr, -},...}

## 1.2 Curvature risk

### Within buckets

Sign	Rho	Example
Same	Netting	{Euribor3M_EUR, +} and {Libor6M_EUR, +}
Different	Netting	{Euribor3M_EUR, +} and {Libor6M_EUR, -}

### Across buckets

Rho	Example
25,00%	S_EUR= {CVR{Euribor3M_EUR}+CVR{Euribor6M_EUR}} and S_USD= {CVR{Libor3M_USD}+CVR{Libor6M_USD}}

## 2. Credit spread risk – non securitisations

### 2.1 Delta risk

#### Within buckets

Name	Tenor	Curve	Sign	Rho	Example	QIS header	
Same	Same	Same	Same	Netting	{Apple, 5Y, Bond, +} and {Apple, 5Y, Bond, +}		
Same	Same	Same	Different	Netting	{Apple, 5Y, Bond, +} and {Apple, 5Y, Bond, -}		
Same	Same	Different	Same	100,00%	{Apple, 5Y, Bond, +} and {Apple, 5Y, CDS, +}	$\sum 1$	
Same	Same	Different	Different	99,90%	{Apple, 5Y, Bond, +} and {Apple, 5Y, CDS, -}	$\sum(1-x)$	
Same	Different	Different	Same	90,09%	{Apple, 5Y, Bond, +} and {Apple, 10Y, CDS, +}	<i>Same names</i>	$\sum rho+(1+x)$
Same	Different	Same	Same	90,00%	{Apple, 5Y, Bond, +} and {Apple, 10Y, Bond, +}		$\sum rho+$
Same	Different	Same	Different	60,00%	{Apple, 5Y, Bond, +} and {Apple, 10Y, Bond, -}		$\sum rho-$
Same	Different	Different	Different	59,94%	{Apple, 5Y, Bond, +} and {Apple, 10Y, CDS, -}		$\sum rho-(1-x)$
Different	Same	Different	Same	40,04%	{Apple, 5Y, Bond, +} and {Google, 5Y, CDS, +}	<i>Different names</i>	$\sum rho+(1+x)$
Different	Different	Different	Same	40,04%	{Apple, 5Y, Bond, +} and {Google, 10Y, CDS, +}		
Different	Same	Same	Same	40,00%	{Apple, 5Y, Bond, +} and {Google, 5Y, Bond, +}		$\sum rho+$
Different	Different	Same	Same	40,00%	{Apple, 5Y, Bond, +} and {Google, 10Y, Bond, +}		
Different	Same	Same	Different	10,00%	{Apple, 5Y, Bond, +} and {Google, 5Y, Bond, -}		$\sum rho-$
Different	Different	Same	Different	10,00%	{Apple, 5Y, Bond, +} and {Google, 10Y, Bond, -}		
Different	Same	Different	Different	9,99%	{Apple, 5Y, Bond, +} and {Google, 5Y, CDS, -}		$\sum rho-(1-x)$
Different	Different	Different	Different	9,99%	{Apple, 5Y, Bond, +} and {Google, 10Y, CDS, -}		

#### Across buckets

The matrix is provided in the draft accord text in Annex 4.

## 2.2 Curvature risk

### Within buckets

Name	Sign	Rho	Example	QIS header	
Same	Same	Netting	{Apple, Bond, 1Y, +} and {Apple, CDS, 2Y, +}		
Same	Different	Netting	{Apple, Bond, 1Y, +} and {Apple, CDS, 2Y, -}		
Different	Same	16,00%	{Apple, Bond, +} and {Google, Bond, +}	<i>Different names</i>	$\sum(rho+)^2$
Different	Different	1,00%	{Apple, Bond, +} and {Google, Bond, -}		$\sum(rho-)^2$

### Across buckets

The matrix is the same as for delta risk, with each correlation squared.

## 3. Equity

### 3.1 Delta risk

#### *Within buckets*

	Assumption (consistent with bucket 6):
Same sign	30%
Different signs	15%

Name	Risk-factor type	Sign	Rho	Example	QIS header
Same	Same	Same	Netting	{Apple, Spot, +} and {Apple, Spot, +}	
Same	Same	Different	Netting	{Apple, Spot, +} and {Apple, Spot, -}	
Same	Different	Same	100,00%	{Apple, Spot, +} and {Apple, Repo, +}	$\sum 1$
Same	Different	Different	99,90%	{Apple, Spot, +} and {Apple, Repo, -}	$\sum(1-x)$
Different	Different	Same	30,03%	{Apple, Spot, +} and {Google, Repo, +}	$\sum rho+(1+x)$
Different	Same	Same	30,00%	{Apple, Spot, +} and {Google, Spot, +}	$\sum rho+$
Different	Same	Different	15,00%	{Apple, Spot, +} and {Google, Repo, -}	$\sum rho-$
Different	Different	Different	14,99%	{Apple, Spot, +} and {Google, Spot, -}	$\sum rho-(1-x)$

### Across buckets

The matrix is provided in the draft accord text in Annex 4.

## 3.2 Curvature risk

### Within buckets

	Assumption (consistent with bucket 6):
Same sign	30%
Different signs	15%

Name	Sign	Rho	Example	QIS header
Same	Same	Netting	{Apple, Spot, +} and {Apple, Repo, +}	
Same	Different	Netting	{Apple, Spot, +} and {Apple, Repo, -}	
Different	Different	2,25%	{Apple, Spot, +} and {Google, Repo, -}	$\sum(rho+)^2$
Different	Same	9,02%	{Apple, Spot, +} and {Google, Repo, +}	$\sum(rho-)^2$

## Across buckets

The matrix is the same as for delta risk, with each correlation squared..

## 4. Commodity

### 4.1 Delta risk

#### Within buckets

	Assumption (consistent with bucket "metals"):
Same sign	70%
Different signs	45%

Type	Grade, location and maturity	Sign	Rho	Example	QIS header
Same	Same	Same	Netting	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade X, Rotterdam, +}	
Same	Same	Different	Netting	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade X, Rotterdam, -}	
Same	Different	Same	100,00%	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade Y, Singapore, +}	$\sum 1$
Same	Different	Different	99,90%	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade Y, Singapore, -}	$\sum (1-x)$
Different	Different	Same	70,07%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade Y, Singapore, +}	$\sum rho+(1+x)$
Different	Same	Same	70,00%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade X, Rotterdam, +}	$\sum rho+$
Different	Same	Different	45,00%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade Y, Singapore, -}	$\sum rho-$
Different	Different	Different	44,96%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade X, Rotterdam, -}	$\sum rho-(1-x)$

## Across buckets

The matrix is provided in the draft accord text in Annex 4.

## 4.2 Curvature risk

### Within buckets

	Assumption (consistent with bucket "metals"):
Same sign	70%
Different signs	45%

Type	Sign	Rho	Example	QIS header
Same	Same	Netting	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade X, Singapore, +}	
Same	Different	Netting	{Aluminium, Grade X, Rotterdam, +} and {Aluminium, Grade X, Singapore, -}	
Different	Same	49,00%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade X, Rotterdam, +}	$\sum(rho+)^2$
Different	Different	20,25%	{Aluminium, Grade X, Rotterdam, +} and {Nickel, Grade Y, Singapore, -}	$\sum(rho-)^2$

### Across buckets

The matrix is the same as for delta risk, with each correlation squared.

## 5. Foreign exchange

### 5.1 Delta risk

#### Within buckets

Maturity bucket	Sign	Rho	Example	QIS header	
Same	Same	Netting	{EUR/USD, Less than 1 year, +} and {EUR/USD, Less than 1 year, +}		
Same	Different	Netting	{EUR/USD, Less than 1 year, +} and {EUR/USD, Less than 1 year, -}		
Different - 'Less than 1 year' to '1 year to 3 year'	Same	80,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, 1 year to 3 year, +}	<i>Less than 1 year' to '1 year to 3 year'</i>	$\sum rho+$
Different - 'Less than 1 year' to '1 year to 3 year'	Different	95,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, 1 year to 3 year, -}		$\sum rho-$
Different - 'Less than 1 year' to 'More than 3 year'	Same	90,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, More than 3 year, +}	<i>Less than 1 year' to 'More than 3 year'</i>	$\sum rho+$
Different - 'Less than 1 year' to 'More than 3 year'	Different	70,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, More than 3 year, -}		$\sum rho-$
Different - '1 year to 3 year' to 'More than 3 year'	Same	65,00%	{EUR/USD, 1 year to 3 year, +} and {EUR/USD, More than 3 year, +}	<i>Different - '1 year to 3 year' to 'More than 3 year'</i>	$\sum rho+$
Different - '1 year to 3 year' to 'More than 3 year'	Different	85,00%	{EUR/USD, 1 year to 3 year, +} and {EUR/USD, More than 3 year, -}		$\sum rho-$

#### Across buckets

Rho	Example
60,00%	S_USD and S_CAD

## 5.2 Curvature risk

Maturity bucket	Sign	Rho	Example	QIS header	
Same	Same	Netting	{EUR/USD, Less than 1 year, +} and {EUR/USD, Less than 1 year, +}		
Same	Different	Netting	{EUR/USD, Less than 1 year, +} and {EUR/USD, Less than 1 year, -}		
Different - 'Less than 1 year' to '1 year to 3 year'	Same	64,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, 1 year to 3 year, +}	<i>Less than 1 year' to '1 year to 3 year'</i>	$\sum(\rho_{+})^2$
Different - 'Less than 1 year' to '1 year to 3 year'	Different	90,25%	{EUR/USD, Less than 1 year, +} and {EUR/USD, 1 year to 3 year, -}		$\sum(\rho_{-})^2$
Different - 'Less than 1 year' to 'More than 3 year'	Same	81,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, More than 3 year, +}	<i>Less than 1 year' to 'More than 3 year'</i>	$\sum(\rho_{+})^2$
Different - 'Less than 1 year' to 'More than 3 year'	Different	49,00%	{EUR/USD, Less than 1 year, +} and {EUR/USD, More than 3 year, -}		$\sum(\rho_{-})^2$
Different - '1 year to 3 year' to 'More than 3 year'	Same	42,25%	{EUR/USD, 1 year to 3 year, +} and {EUR/USD, More than 3 year, +}	<i>Different - '1 year to 3 year' to 'More than 3 year'</i>	$\sum(\rho_{+})^2$
Different - '1 year to 3 year' to 'More than 3 year'	Different	72,25%	{EUR/USD, 1 year to 3 year, +} and {EUR/USD, More than 3 year, -}		$\sum(\rho_{-})^2$

### Within buckets

Rho	Example
36,00%	S_USD and S_CAD

## Annex 4

### Revised market risk framework – updated draft

This Annex sets out an updated draft of the revised Accord text for the Market Risk Framework. With the exception of the revised standardised approach (page 14-40), all changes to the draft Accord text in this Annex are set out in “tracked-change” format, for comparison with the version presented in the second consultative paper of the *Fundamental review of the trading book*, published in October 2013.<sup>1</sup> These changes include:

- Amendments to the draft Accord text as proposed in the December 2014 consultation paper of the *Fundamental review of the trading book*.<sup>2</sup>
- Technical refinements that have been addressed through answers provided on “Frequently Asked Questions” (FAQs) on the QIS conducted in the second half of 2014.<sup>3</sup>

The text herein is intended to replace the existing Basel II market risk framework, including amendments made after the June 2006 publication of *Basel II: International Convergence of Capital Measurement and Capital Standards - Comprehensive Version*.

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<sup>1</sup> Basel Committee on Banking Supervision, *Fundamental review of the trading book – second consultative document*, October 2013, [www.bis.org/publ/bcbs265.htm](http://www.bis.org/publ/bcbs265.htm).

<sup>2</sup> Basel Committee on Banking Supervision, *Fundamental review of the trading book – consultative document*, December 2014, [www.bis.org/bcbs/publ/d305.htm](http://www.bis.org/bcbs/publ/d305.htm).

<sup>3</sup> Basel Committee on Banking Supervision, *Frequently asked questions on Basel III monitoring*, September 2014, [www.bis.org/bcbs/qis/biiiimplmonifaq\\_sep14.pdf](http://www.bis.org/bcbs/qis/biiiimplmonifaq_sep14.pdf).

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## Minimum capital requirements for market risk

### A. The definition of the trading book and risk measurement framework

#### 15. Scope of application ~~and method~~ and methods of measuring market risk

1. Market risk is defined as the risk of losses arising from movements in market prices. The risks subject to the market risk measurement framework ~~are~~include but are not limited to:

- Default risk, interest rate risk, credit spread ~~and default~~ risk, equity risk, foreign exchange risk and commodities risk for covered instruments; and
- Foreign exchange risk and commodities risk for banking book instruments.

2. The market risk capital charges apply to all covered instruments and to foreign exchange and commodities risk positions in the banking book.

2.3. Banks must fair-value daily any covered instrument and recognise any valuation change in the profit and loss (P&L) account.

3.4. In measuring ~~their~~its market risks, a bank may choose choice between two broad methodologies: the standardised approach and internal models approach for market risk (described in [paragraphs 709 to 718(Lxix) and 718(Lxx) to 718(xcix), respectively]<sup>4</sup> ~~will be permitted~~, subject to the approval of the national authorities. ~~One alternative will be to measure the risks in a standardised manner, using the measurement frameworks described in [paragraphs 709 to 718(Lxix)]<sup>5</sup> below.~~

4.5. All transactions, including forward sales and purchases, shall be included in the calculation of capital requirements as from the date on which they were entered into. Although regular reporting will in principle take place only at intervals (in most countries quarterly), banks are expected to manage the market risk in their trading book in such a way that the capital requirements are being met on a continuous basis, including at the close of each business day. Supervisory authorities have at their disposal a number of effective measures to ensure that banks do not “window-dress” by showing significantly lower market risk positions on reporting dates. Banks will also be expected to maintain strict risk management systems to ensure that intraday exposures are not excessive. If a bank fails to meet the capital requirements at any time, the national authority shall ensure that the bank takes immediate measures to rectify the situation.

5.6. A matched currency risk position will protect a bank against loss from movements in exchange rates, but will not necessarily protect its capital adequacy ratio. If a bank has its capital denominated in its domestic currency and has a portfolio of foreign currency assets and liabilities that is completely matched, its capital/asset ratio will fall if the domestic currency depreciates. By running a short risk position in the domestic currency the bank can protect its capital adequacy ratio, although the risk position would lead to a loss if the domestic currency were to appreciate. Supervisory authorities are free to allow banks to protect their capital adequacy ratio in this way and exclude certain currency risk positions. ~~Thus, any risk positions which a bank has deliberately taken in order to hedge partially or totally against the adverse effect of the exchange rate on its capital ratio may be excluded~~ from the calculation of net open currency risk positions, subject to each of the following conditions being met:

<sup>4</sup> References to paragraphs in the existing Basel II Framework will be updated once the revised market risk framework is finalised by the Basel Committee.

- ~~The risk position is taken for the purpose of hedging partially or totally against the potential that changes in exchange rates could have an adverse effect on its capital ratio;~~
- ~~The maximum exclusion is limited to:~~
  - ~~investments in affiliated but not consolidated entities denominated in foreign currencies; or~~
  - ~~investments in consolidated subsidiaries denominated in foreign currencies.~~
- ~~The exclusion from the calculation is made for at least six months;~~
- ~~Any changes in the amount is pre-approved by the national supervisor; and~~
- ~~Any exclusion of the risk position needs to be applied consistently, with the exclusionary treatment of the hedge remaining in place the same for the life of the assets or other items.~~
- ~~Banks are required by national supervisors to document, and have available for supervisory review, the positions and amounts to be excluded from market risk capital requirements.~~
- ~~Such risk positions need to be of a "structural", ie of a non-dealing, nature (the precise definition to be set by national authorities according to national accounting standards and practices);~~
- ~~The national authority needs to be satisfied that the "structural" risk position excluded does no more than protect the bank's capital adequacy ratio;~~

~~6.7. Risk positions~~ Holdings in of the bank's own eligible regulatory capital instruments are deducted from capital. ~~Risk positions in~~ Holdings of other banks', securities firms', and other financial entities' eligible regulatory capital instruments, as well as intangible assets, will receive the same treatment as that set down by the national supervisor for such assets held in the banking book, which in many cases is deduction from capital. Where a bank demonstrates that it is an active market-maker, then a national supervisor may establish a dealer exception for holdings of other banks', securities firms', and other financial entities' capital instruments in the trading book. In order to qualify for the dealer exception, the bank must have adequate systems and controls surrounding the trading of financial institutions' eligible regulatory capital instruments. ~~Risk positions for~~ Holdings of capital instruments which are deducted or risk-weighted at 1250% are not allowed to be included in the market risk framework.

~~7.8.~~ Term trading-related repo-style transactions that a bank accounts for in its banking book may be included in the bank's trading book for regulatory capital purposes so long as all such repo-style transactions are included. For this purpose, trading-related repo-style transactions are defined as only those that meet the requirements ~~of as~~ mentioned in paragraphs ~~4 and 5~~ 14, and both legs are in the form of either cash or securities which are eligible for inclusion in the trading book. ~~Regardless of where they are booked, all other repo-style transactions are subject to a counterparty credit risk capital charge as required in other parts of the Capital Accord.~~

~~8.9.~~ In the same way as for credit risk and operational risk, the capital requirements for market risk are to apply on a worldwide consolidated basis. ~~Yet, for market risk national~~ Supervisory authorities may permit banking and financial entities in a group which is running a global consolidated trading book and whose capital is being assessed on a global basis to include just the net-of short and net long risk positions no matter where they are booked.<sup>6</sup> ~~National~~ Supervisory authorities may grant this treatment only when the revised standardised approach permits a full offset of the risk position, ie risk positions of opposite sign do not attract a capital charge. Nonetheless, there will be circumstances in which supervisory authorities demand that the individual risk positions be taken into the measurement system without any offsetting or netting against risk positions in the remainder of the group. This may be

<sup>6</sup> The positions of less than wholly owned subsidiaries would be subject to the generally accepted accounting principles in the country where the parent company is supervised.

needed, for example, where there are obstacles to the quick repatriation of profits from a foreign subsidiary or where there are legal and procedural difficulties in carrying out the timely management of risks on a consolidated basis. Moreover, all ~~national supervisory~~ authorities will retain the right to continue to monitor the market risks of individual entities on a non-consolidated basis to ensure that significant imbalances within a group do not escape supervision. Supervisory authorities will be especially vigilant in ensuring that banks do not conceal risk positions on reporting dates in such a way as to escape measurement.

~~9.10.~~ For the time being, the Committee does not believe that it is necessary to allow any de minimis exemptions from the capital requirements for market risk, except for those for foreign exchange risk set out in [paragraph 718(xlii)]<sup>7</sup> below, because this Framework applies only to internationally active banks, and then essentially on a consolidated basis; all of these banks are likely to be involved in trading to some extent.

## 21. Definition of the trading book

~~10.11.~~ A trading book consists of all instruments that meet the specifications below (“covered instruments”).

~~11.12.~~ Instruments comprise financial instruments and commodities. A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (or cash instruments) and derivative financial instruments. A financial asset is any asset that is cash, the right to receive cash or another financial asset or a commodity, or an equity instrument. A financial liability is the contractual obligation to deliver cash or another financial asset or a commodity. Commodities also include non-tangible (ie non-physical) goods such as electric power.

~~12.13.~~ Banks may only include an instrument or commodity in the trading book when there is no legal impediment against selling or fully hedging it.

~~13.14.~~ Any instrument a bank holds for one or more of the following intended purposes must be designated as a covered instrument:

- (a) ~~holds with the intention of~~ short-term resale;
- (b) ~~holds with the expectation of~~ profiting from ~~actual or expected~~ short-term price movements;
- (c) ~~holds with the intention of~~ locking in arbitrage profits; or
- (d) ~~holds for the purpose of~~ hedging risks resulting from instruments meeting criteria a, b, or c, above.
- (e) is a naked short credit or equity position, including any short position in cash instruments; or
- (f) gives rise to a net short credit or equity position in the banking book.<sup>8</sup>

~~14.15.~~ The general presumption is that any:<sup>9</sup>

- (a) instrument held as an accounting trading asset or liability, (so it would be fair-valued daily through the profit and loss (P&L) account);<sup>10</sup>

<sup>7</sup> References to paragraphs in the existing Basel II Framework will be updated once the revised market risk framework is finalised by the Basel Committee.

<sup>8</sup> A bank will have a net short risk position for equity risk or credit risk in the banking book if the present value of the banking book increases when an equity price decreases or when a credit spread on an issuer or group of issuers of debt increases.

<sup>9</sup> The presumptions for designation of an instrument to the trading book or banking book set out in this text will be used where a designation of an instrument to the trading book or banking book is not otherwise specified in this text.

- (b) instrument resulting from market-making activities (ie a bank that stands ready to buy and sell an instrument security on a regular and continuous basis at a publicly quoted price);
- (c) equity investment in a fund (excluding paragraph ~~21(e)~~<sup>13(d)</sup>);
- (d) listed equity;<sup>11</sup> or
- (e) option;<sup>12</sup>
- ~~(c) instrument resulting from underwriting activities;~~
- ~~(f) naked short position, including any short position in cash instruments; or~~

is being held for at least one of the purposes listed in paragraph 14 and therefore is a covered instrument.

~~16. Supervisors may provide specific guidance on these general presumptions. As it is possible there will be jurisdictional variance in terms of what should be presumed to be included in the trading or banking book, each supervisor could provide specific guidance on this subject.~~ Banks will be expected to assign instruments to the appropriate boundary designation based on this guidance. If a bank believes that they have to deviate from the presumption list for a certain set of instruments, the bank must submit a request to its supervisor and receive explicit approval. In cases where this approval is not given by the supervisor, the instrument must be switched to the trading book.

~~15-17.~~ Any instrument which is not held or presumed to be held for any of the intended purposes listed in paragraph 14 at inception, or otherwise specified to be held in the trading book, must be assigned to the banking book.

~~16-18.~~ There is a strict limit on banks moving instruments between the trading book and the banking book at the choice-discretion of the bank after initial designation (see paragraphs ~~25-28~~<sup>32 to 35</sup>).

~~17-19.~~ The supervisor may require the bank to designate an instrument to the banking book if the supervisor is of the view that a bank has not provided enough evidence to support the assignment of an instrument to the trading book, or if the supervisor believes such instruments would customarily belong in the banking book.

~~18-20.~~ The supervisor may require the bank to designate an instrument to the trading book if the supervisor is of the view that a bank has not provided enough evidence to support the assignment of an instrument to the banking book, or if the supervisor believes such instruments would customarily belong in the trading book.

~~19-21.~~ Any instrument in the correlation trading portfolio, and any instrument which is managed on a trading desk as defined by the criteria set out in paragraphs ~~21 to 23~~<sup>27 to 31</sup>, is seen as being held for at least one of the intended purposes listed in paragraph 14 and therefore must be included in the trading book.

~~20.~~

<sup>10</sup> Under IFRS and US GAAP, these instruments would be designated as "held for trading".

<sup>11</sup> Subject to supervisory review, certain listed equities may be excluded from the market risk framework. Examples of equities that may be excluded include, but are not limited to, equity positions arising from deferred compensation plans, convertible debt securities, loan products with interest paid in the form of "equity kickers", equities taken as a debt previously contracted, bank-owned life insurance products, and legislated programmes. The set of listed equities that the bank wishes to exclude from the market risk framework should be made available to, and discussed with, the national supervisor and should be managed by a different desk from proprietary or a short-term buy/sell instruments.

<sup>12</sup> An instrument which would normally be designated a banking book instrument, but which has an embedded option, eg a loan with an embedded prepayment option or interest cap, can be designated as a banking book instrument.

~~21. Any instrument which would lead to a net short risk position in an equity in the banking book is seen as being held for at least one of the purposes listed in paragraph 4 and therefore it must be included in the trading book.~~

22. ~~The Committee is of the view that~~ Any

(a) unlisted equity;

(b) instrument designated for securitisation warehousing;

~~(c)~~ real estate holding;

~~(d)~~ retail and SME credit;

~~(e)~~ equity investment in a fund (including a hedge fund) where the bank cannot look through the fund daily or where the bank cannot obtain daily real prices for its equity investment in the fund; ~~or~~

(f) derivative instrument with the above instrument types as underlying assets; or

~~(g)~~ instrument held for the purpose of hedging a particular risk of a position in the above instrument types

~~does not meet the definition of the trading book, owing to significant constraints on the ability of banks to liquidate these positions and value them reliably on a daily basis. Moreover, the capital charges for the trading book are not designated to capture the risk of the above-mentioned instruments. Therefore these instruments should be assigned to the banking book, unless specifically provided otherwise in this text.~~

~~23. Banks must fair value daily any covered instrument and recognise any valuation change in the profit and loss (P&L) account.~~

~~24.23.~~ Banks must have clearly defined policies, procedures and documented practices for determining which instruments to include in, and to exclude from, the trading book for purposes of calculating their regulatory capital, ensuring compliance with the criteria set forth in this section and taking into account the bank's risk management capabilities and practices.

~~25.24.~~ Banks' internal control functions must conduct ongoing evaluation of instruments both in and out of the trading book, to assess whether the bank's instruments are being properly initially designated as trading or non-trading instruments in the context of the bank's trading activities. Compliance with the policies and procedures must be fully documented and subject to periodic (at least yearly) internal audit, and available for supervisory review.

~~26.25.~~ The treatment of internal transfers with the purpose of transferring risk between the banking book and the trading book and their treatment under market risk capital requirements, is discussed in paragraphs ~~36~~<sup>38</sup> to 39.

## 32. Risk management policies for covered ~~positions~~ instruments

~~27.26.~~ Covered instruments must be subject to clearly defined policies and procedures, approved by senior management, that are aimed at ensuring active risk management. The application of the policies and procedures must be thoroughly documented. These policies and procedures should, at a minimum, address the subjects listed below:

(a) The activities the bank considers to be trading or hedging of covered instruments ~~and therefore constitutes elements of the trading book for regulatory capital purposes~~;

(b) Trading strategies (including expected holding horizon and possible reactions if this limit is breached) for every covered instrument or portfolio;

- (c) Standards regarding the extent to which a bank's portfolio of covered instruments must be marked-to-market daily by reference to an active, liquid two-way market;
- (d) For covered instruments that are marked-to-model, the standards for:
  - (i) Identifying the material risks of the covered instruments;
  - (ii) Hedging the material risks of the covered instruments and the extent to which hedging instruments would have an active, liquid two-way market; and
  - (iii) Reliably deriving estimates for the key assumptions and parameters used in the model.
- (e) The extent to which the bank is required to generate valuations for the covered instruments that can be validated externally in a consistent manner;
- (f) The extent to which instruments may have operational requirements that could impede the bank's ability to effect an immediate liquidation of the covered ~~position~~instrument;
- (g) The processes constituting active management of covered instruments, which must include:
  - (i) The setting of limits and ongoing monitoring for appropriateness;
  - (ii) The requirement that each trading desk ~~compile~~have a documented trading strategy and the process for monitoring covered instruments against the bank's trading strategy, including that:
    - for any given trading desk, bank senior management ~~assumes~~ the responsibility that a given covered instrument or portfolio is managed with trading intent and in accordance with the trading strategy document.
    - the monitoring process ~~includes~~ evaluation of turnover and "stale positions" in order to determine compliance with specified holding periods.
  - (iii) The degree of autonomy a trader has to enter into or manage covered instruments within agreed limits and according to the agreed strategy;
  - (iv) The process for reporting to senior management as an integral part of the institution's risk management process; and
  - (v) The active monitoring of instruments and risk positions with reference to market information sources, including:
    - Assessment of market liquidity and the ability to hedge instruments, risk positions or the portfolio risk profile;
    - Analysis of changes in the market values of instruments and sensitivities due to changes in market risk factors; and
    - Evaluation of the quality and availability of market inputs with respect to the valuation process, the level of market turnover, and the relative size of instruments traded in the market.

~~28.27.~~ With regard to instruments which are generally presumed to be included in the trading book (see paragraph ~~1511~~), the following requirements apply:

- (a) Banks need to have policies and procedures that specify potential deviations from the general presumptions. These must be regularly updated and satisfy the supervisor.
- (b) Any actual deviation from the general presumptions must be in line with the bank's policies and procedures.
- (c) Banks need to document any actual deviations from the general presumptions in detail, in a timely manner, and report the nature and extent of these deviations to their supervisor.

## 43. Definition of the trading desk

~~29.28. A key component of calculating market risk capital charges is the identification and classification of a bank's "trading desks".~~ For the purposes of market risk capital calculations, a trading desk is a group of traders or trading accounts that implements a well-defined business strategy operating within a clear risk management structure.

~~30.29.~~ Trading desks are defined by the bank, but subject to the regulatory approval of the supervisor for capital purposes. Within this supervisory-approved desk structure, banks may further define operational sub-desks without the need for supervisory approval. These sub-desks would be for internal operational purposes only and would not be used in the market risk capital framework.

~~31.30.~~ The key attributes of trading desks are as follows:

- (a) A trading desk for the purposes of the regulatory capital charge is an unambiguously defined group of traders or trading accounts. Each individual trader or trading account must be assigned to only one trading desk.
- (b) The desk must have a clear reporting line to senior management and must have a clear and formal compensation policy linked to its pre-established objectives.
- (c) A trading desk must have a well-defined and documented business strategy, including an annual budget and regular management information reports (including revenue, costs and risk-weighted assets).
- (d) A trading desk must have a clear risk management structure. This must include clearly defined trading limits based on the business strategy of the desk. The desk must also produce, at least weekly, appropriate risk management reports. This would include, at a minimum, profit and loss reports and internal and regulatory risk measurement reports.
- (e) Internal hedges between trading desks are recognised under the market risk capital rules. There must be no distinction between the prudential treatment of internal trades (ie trades entered between defined trading desks) and external trades.

~~(f)~~ Further detail around the definition of a trading desk for regulatory capital purposes is provided in Appendix A.

~~32.31. In addition to policies and procedures, the~~ bank must prepare, evaluate, and have available for supervisors the following for all trading desks:

- (a) Inventory ageing reports;
- (b) Daily limit reports including exposures, limit breaches and follow-up action;
- (c) Reports on intraday limits and respective utilisation and breaches for banks with active intraday trading; and

~~(d)~~ Reports on the assessment of market liquidity.

~~33.32.~~ Any FX or commodity positions held in the banking book will be included in the market risk capital charges. For regulatory capital calculation purposes, these positions will be treated as if they were held in notional trading desks within the trading book.

## 54. Restrictions on moving instruments between the regulatory books

~~34.33.~~ There is a strict limit on the ability of banks to move instruments between the trading book and the banking book ~~at~~by their own choice after initial designation. In practice, switching should be rare and is allowed only in extraordinary circumstances. Possible examples could be a major publicly announced event, such as a bank restructuring that results in permanent closure of trading desks or a

change in accounting standards that allow an item to be fair-valued through the P&L. In this regard switching always requires termination of the business activity applicable to the instrument or portfolio. Market events, changes in the liquidity of a financial instrument or a change of trading intent alone are not valid reasons for re-designating an instrument to a different book. When switching positions, banks must ensure that the conditions of paragraph ~~4 and 514~~ are met and must provide respective supporting documentation to their supervisor.

~~35-34.~~ Switching instruments for regulatory arbitrage is strictly prohibited, and capital benefit as a result of switching will not be allowed. This means that the bank must determine its total capital charge (across banking book and trading book) before and immediately after the switch. If this capital charge is reduced as a result of this switch, the difference as measured at the time of the switch is imposed on the bank as a disclosed Pillar 1 capital surcharge. This surcharge will be allowed to run off as the positions mature or expire, in a manner agreed with the supervisor. To maintain operational simplicity, it is not envisaged that this additional charge would be recalculated on an ongoing basis although the positions would continue to be subject to the ongoing capital requirements of the book into which they have been switched.

~~36-35.~~ Any re-designation between books must be approved by senior management, thoroughly documented, determined by internal review to be in compliance with the bank's policies, approved by the supervisor, and publicly disclosed. Any such re-designation is irrevocable. If an instrument is reclassified to now be an accounting trading asset or liability there is a presumption (paragraph 15(a)) that this instrument is in the trading book; therefore in this case an automatic switch without approval of the supervisor is acceptable.

~~37-36.~~ A bank must adopt relevant policies, which must be updated at least yearly. Updates should be based on an analysis of all extraordinary events identified during the previous year. Updated policies with changes highlighted must be sent to the appropriate supervisor. Policies must include the following:

- (a) The above transfer restriction requirements, especially that transfers may only be allowed in extraordinary circumstances, and a description of the circumstances or criteria where such a transfer may be considered.
- (b) The process for obtaining senior management and supervisory approval of such a transfer.
- (c) How a bank identifies an extraordinary event.
- (d) A requirement that transfers into or out of the trading book be publicly disclosed at the earliest reporting date.

## 6. Treatment of ~~hedged internal risk transfers between the banking book and the trading book~~<sup>13</sup>

~~38-37.~~ Inter-desk risk transfers among trading desks within the scope of application of the market risk capital charges (including foreign exchange risk and commodities risk in the banking book) will receive regulatory capital recognition.

~~38.~~ There will be no regulatory capital recognition for internal risk transfers from the trading book to the banking book. For IRTs from the banking book to the trading book:

- (a) When a bank hedges a banking book credit risk exposure using a credit derivative ~~booked in~~ purchased from its trading book (ie using an ~~internal hedge~~ IRT), the banking book exposure is not deemed to be hedged for capital purposes unless the bank purchases from an eligible

<sup>13</sup> References to paragraphs in the existing Basel II Framework contained in this section will be updated once the revised market risk framework is finalised by the Basel Committee.

third-party protection provider a credit derivative ~~meeting that exactly matches the IRT and meets~~ the requirements of [paragraphs 191 to 194] vis-à-vis the banking book exposure. Where such third-party protection is purchased and is recognised as a hedge of a banking book exposure for regulatory capital purposes, neither the internal nor ~~the~~ external credit derivative hedge would be included in the trading book for regulatory capital purposes. ~~Alternatively, the supervisory authority may require the entirety of each IRT recognised as a banking book hedge and exactly matched by the third-party external hedge, as well as the third-party external hedge, to be included in the market risk capital requirements. Where the requirements for eligible third-party protection and hedges of banking book exposures are not met, the third-party external hedge must be fully included in and the IRT must be fully excluded from the market risk capital requirements.~~

(b) ~~When a bank hedges a banking book equity risk exposure using a hedging instrument purchased from its trading book, the banking book exposure is not deemed to be hedged for capital purposes unless the bank purchases a hedging instrument from an eligible third-party protection provider that exactly matches the IRT and meets the requirements vis-à-vis the banking book exposure. Where such third-party protection is purchased and is recognised as a hedge of a banking book exposure for regulatory capital purposes, neither the internal nor the external hedge would be included in the trading book for regulatory capital purposes. Alternatively, the supervisory authority may require the entirety of each IRT recognised as a banking book hedge and exactly matched by the third-party external hedge, as well as the third-party external hedge, to be included in the market risk capital requirements. Where the requirements for eligible third-party protection and hedges of banking book exposures are not met, the third-party external hedge must be fully included in and the IRT must be fully excluded from the market risk capital requirements.~~

(e)(c) **[GIRR Option 1]:** ~~When a bank hedges banking book general interest rate risk (GIRR) exposure using an IRT with its trading book, the banking book exposure is not deemed to be hedged for capital purposes unless the bank purchases from an eligible third-party protection provider a hedging instrument that exactly matches the IRT and is deemed to be an eligible hedge for GIRR. Where such a third-party hedge is purchased and is recognised as a hedge of a banking book exposure for regulatory capital purposes, neither the internal nor the external hedge would be included in the trading book for regulatory capital purposes. Alternatively, the supervisory authority may require the entirety of each IRT recognised as a banking book hedge and exactly matched by the third-party external hedge, as well as the third-party external hedge, to be included in the market risk capital requirements. Where the requirements for eligible third-party protection and hedges of banking book exposures are not met, the third-party external hedge must be fully included in and the IRT must be fully excluded from the market risk capital requirements.~~

**[GIRR Option 2]:** ~~When a bank hedges banking book GIRR exposure using an IRT with its trading book, the banking book exposure is not deemed to be hedged for capital purposes unless:~~

- ~~the internal risk transfer is documented with respect to the banking book interest rate risk being hedged and the sources of such risk;~~
- ~~the internal risk transfer is conducted with trading desks which have been specifically approved by the supervisor for this purpose; and~~
- ~~it is a recognised type of hedge for a banking book interest rate risk exposure.~~
- ~~All GIRR internal risk transfers from the banking book to the trading book, and any hedging instruments purchased from a third party to hedge the GIRR which is being transferred, must be aggregated in a distinct trading book portfolio. These IRTs, together with any external hedges of these IRTs, must be capitalised under the trading~~

book market risk framework on a stand-alone basis, separate from any other interest rate risk generated by activities in the trading book.

Where these conditions are met, the GIRR in the banking book that is hedged by the IRTs will be recognised as hedged for regulatory capital purposes.

39. Instruments which are used for internal risk transfers have to fulfil the same trading book requirements as for instruments transacted with external counterparties.

40. Eligible hedges that are included in the CVA capital charge must be removed from the bank's market risk capital charge calculation.<sup>14</sup>

## 7. Treatment of counterparty credit risk in the trading book<sup>15</sup>

41. Banks will be required to calculate the counterparty credit risk charge for OTC derivatives, repo-style and other transactions booked in the trading book, separate from the capital charge for general market risk. The risk weights to be used in this calculation must be consistent with those used for calculating the capital requirements in the banking book. Thus, banks using the standardised approach for credit risk in the banking book will use the standardised approach risk weights in the trading book and banks using the IRB approach in the banking book will use the IRB risk weights in the trading book in a manner consistent with the IRB roll out situation in the banking book as described in [paragraphs 256 to 262]. For counterparties included in portfolios where the IRB approach is being used the IRB risk weights will have to be applied.

42. In the trading book, for repo-style transactions, all instruments, which are included in the trading book, may be used as eligible collateral. Those instruments which fall outside the banking book definition of eligible collateral shall be subject to a haircut at the level applicable to non-main index equities listed on recognised exchanges (as noted in [paragraph 151]). However, where banks are using the own estimates approach to haircutting they may also apply it in the trading book in accordance with [paragraphs 154 and 155]. Consequently, for instruments that count as eligible collateral in the trading book, but not in the banking book, the haircuts must be calculated for each individual security. Where banks are using a Value at Risk (VaR) approach to measuring exposure for repo-style transactions, they also may apply this approach in the trading book in accordance with [paragraphs 178 to 181 (i) and Annex 4].

43. The calculation of the counterparty credit risk charge for collateralised OTC derivative transactions is the same as the rules prescribed for such transactions booked in the banking book.

44. The calculation of the counterparty charge for repo-style transactions will be conducted using the rules in [paragraphs 147 to 181 (i) and Annex 4] spelt out for such transactions booked in the banking book. The firm-size adjustment for SMEs as set out in [paragraph 273] shall also be applicable in the trading book.

## 8. Transitional arrangements

*[To be determined by the Committee.]*

<sup>14</sup> The Basel Committee is considering further work on the treatment of CVA and CVA hedges, with a view to future consultation.

<sup>15</sup> References to paragraphs in the existing Basel II Framework contained in this section will be updated once the revised market risk framework is finalised by the Basel Committee.

## B. The capital requirement

### 1. Definition of capital<sup>16</sup>

45. The definition of capital to be used for market risk purposes is set out in paragraphs [49(xiii) and 49(xiv) of this Framework].

46. In calculating eligible capital, it will be necessary first to calculate the bank's minimum capital requirement for credit and operational risks, and only afterwards its market risk requirement, to establish how much Tier 1 and Tier 2 capital is available to support market risk. Eligible capital will be the sum of the whole of the bank's Tier 1 capital, plus all of its Tier 2 capital under the limits imposed in [paragraph 49(iii)] of this Framework.]

## C. Market Risk – The Standardised Approach

### Preamble (not part of the Accord text)

The following requirements are to be applied for the purpose of the QIS. When those requirements conflict with the ones contained in the following draft accord text, they should prevail for the purpose of the QIS.

I. In the **vega risk context, indices** should be treated as follows:

- *Vega risk positions* (ie weighted implied volatilities) arising from options where all underlying instruments have sensitivities for delta risk *of the same sign* (eg indices) should be decomposed into constituent vega risk positions, based on the ratio of weighted sensitivity for delta risk for the underlying divided by the sum of all the weighted sensitivities for delta risk for the underlying;
- All other options (eg spread options) should be treated in the residual bucket for vega risk. The vega risk positions are then multiplied by [200%] and the weighted vega risk positions are added up irrespective of sign.

II. For the purpose of computing the **curvature risk charge and the vega risk charge** (and for that purpose only, ie without making any change to the definition of the delta risk factors):

- *GIRR*: only one curve should be used per currency (ie when several curves exist within one currency, all risk factors, eg Euribor 3M and Libor 1Y, should be subject to identical shocks). In other terms, no second-order basis interest rate risk should be captured.

The two scenarios to compute curvature risk should be strictly parallel: all the tenors should be shifted by 160 basis points. Rates (both spot and forward) must be floored at zero for computational reasons. In order to preserve consistency, the weighted sensitivities to be subtracted should be computed using a unique risk weight of 160 basis points (despite the tenors those sensitivities are related to).

- *CSR non-securitisation*: only one curve should be specified per name (ie when two curves exist on one name, bond and CDS, those curves should be subject to identical shocks). In

<sup>16</sup> References to paragraphs in the existing Basel II Framework contained in this section will be updated once the revised market risk framework is finalised by the Basel Committee.

other terms, no second-order basis credit spread risk should be captured.

- *Equity*: the risk factors are just the equity spot prices. In other terms, no second-order basis equity risk should be captured.
- *Commodity*: the risk factors are just the commodity spot prices. In other terms, no second-order basis commodity risk should be captured.
- *Exchange rate*: the risk factors are just the currency pairs.

### III. Further clarification on vega risk computation:

Several vega risk positions are specified based on the term and moneyness structure of implicit volatilities.

Specifically, vega risk positions are computed along two (three for GIRR) dimensions:

- The maturity of the option: vega risk positions are then allocated to the buckets defined in Table a.

Risk weights per vertex (in basis points)										Table a
1	2	3	4	5	6	7	8	9	10	11
<0.25	0.25 to 0.5	0.5 to 1	1 to 2	2 to 3	3 to 5	5 to 10	10 to 15	15 to 20	20 to 30	>30

- For GIRR only, the maturity of the underlying: vega risk positions are then allocated to the buckets defined in Table a.
- Vega risk positions for smile risk should be computed based on a regulatory projection procedure, projecting ATM vega risk positions on to three new risk factors: 80% ATM, ATM, 120% ATM.

For the purpose of the QIS, the correlations should be computed as follows:  $\rho_{ij} = \rho_{T_i T_j} \cdot \rho_{K_i K_j}$ ,

with  $\rho_{T_i T_j} = e^{-\alpha(T_j - T_i)}$  and  $\rho_{K_i K_j} = e^{-\beta(K_j - K_i)}$  (with  $K$  expressed as a percentage of moneyness).

Several values of  $\alpha$  and  $\beta$  will be tested during the QIS. Those values will be communicated in due course.

### IV. Specific implications for the Accord text:

Again, when the requirements specified above conflict with the ones contained in the following draft accord text, they should prevail for the purpose of the QIS.

Specifically,

- The recently published Consultative Document (p 12) states that "the Committee is considering the merits of treating vega risk together with delta risk". As this is still under consideration, the calibration of correlations between delta and vega risk positions (-1/+1 depending on sign) is still the assumption for this QIS. That means that neither diversification nor hedging benefits will be recognised between delta and vega for this QIS. The risk measures computed for each of them are consequently gathered separately.
- The changes presented in I. above are intended to further specify and clarify which treatment applies to indices, in order to address potential variability of interpretations;
- The changes presented in II. above are intended to revise paragraphs 57 to 62, ie the definition of risk factors. In the Consultative Document, the granularity of the vega and curvature risk factors was similar to the granularity of the delta risk factors. For the sake of simplicity during the QIS process, it was considered more appropriate to decrease such

granularity.

- *The changes presented in III. above* are intended to further streamline paragraph 63, ie the definition of the risk factors specific to volatilities. In particular, the option maturity buckets are explicitly defined above. In addition, a simplification of the approach has been agreed for QIS purposes on smile risk: instead of defining six ranges, three risk factors have been defined. Though decreasing the risk-sensitivity of the approach, this change was done for the purpose of increasing its simplicity.
- *Calibration of vega:* Section 5 below prescribes “risk weights and correlations”.
  - Risk weights: the risk weights are not affected by the above requirements; namely, paragraphs 77, 86, 94, 100, 113, 121 and 129 are not modified.
  - Correlations: Paragraphs 81, 89, 103, 116 and 124 specify, for each asset class, that “[Between vega and delta exposures, the correlation is set at 1 for same sign risk positions and –1 for different signs risk positions; between vega exposures, the correlations are the same as between delta exposures.]” As required above, for the purpose of the QIS this should read “[Between vega and delta exposures, the correlation is set at 1 for same sign risk positions and –1 for different signs risk positions; between vega exposures, ~~the correlations are the same as between delta exposures~~ the correlations should be computed as follows:  $\rho_{ij} = \rho_{T_i T_j} \cdot \rho_{K_i K_j}$ , with  $\rho_{T_i T_j} = e^{-\alpha(T_j - T_i)}$  and  $\rho_{K_i K_j} = e^{-\beta(K_j - K_i)}$  (with  $K$  expressed as a percentage of moneyiness).]” Several values of  $\alpha$  and  $\beta$  will be tested during the QIS. Those values will be communicated in due course.
- As the Consultative Document has introduced further refinements of the calibration of the correlations, Annex 3 of the present QIS instructions further describes how correlations are to be derived.

## 1. General provisions

47. The standardised approach must be calculated by all banks and reported to supervisors [monthly]. In addition, all banks must calculate, and have the ability to produce to their supervisors, the standard rules calculations on demand.

48. If no explicit approach is set out for a particular instrument, a bank should apply the rules and principles in this section by analogy, and should do so in a way that results in a prudent capitalisation of risk.

49. The standardised approach uses sensitivities as inputs (apart from curvature and default risk). Risk factors and sensitivities must meet the definition provided in Section 3. Sensitivities must be computed by banks in accordance with the sensitivity validation standards described in [Section 4].

50. Sensitivities are used as inputs into aggregation formulae which are intended to recognise hedging and diversification benefits of positions in different risk factors within an asset class. Risk weights and correlations are prescribed by the Committee. Their values are provided in Section 5.

## 2. Structure of the standardised approach

51. The standardised approach capital requirement is the simple sum of the linear (delta and vega) and curvature requirements for GIRR, CSR (non-securitisations), CSR (securitisation non-correlation trading portfolio), CSR (correlation trading portfolio), equity, commodity and FX risks, plus the

requirements for default risk (non-securitisations), default risk (securitisation non-correlation trading portfolio) and default risk (correlation trading portfolio).

52. This section sets out the framework for calculating capital requirements for linear and curvature risks. The framework for calculating default risk capital requirements is set out in Section 6.

53. Prior to applying the calculations in this section, positions in the same risk factor should be fully offset.

54. The following step-by-step approach to capture delta [and vega] risk should be separately applied to each asset class (apart from default risk):

- (a) Find a net sensitivity across instruments to each risk factor  $k$ , as defined in Section 3 for each asset class.
- (b) Weight the net sensitivity to each risk factor  $k$  by the corresponding risk weight  $RW_k$  according to the bucketing structure for each asset class set out in Section 5.

$$WS_k = RW_k S_k$$

- (c) Weighted sensitivities should then be aggregated within each bucket. The buckets and correlation parameters applicable to each asset class are set out in Section 5.

$$K_b = \sqrt{\sum_k WS_k^2 + \sum_{k \neq l} \rho_{kl} WS_k WS_l}$$

[In instances where the number under the square root is negative, it should be floored at 0.]

- (d) Capital charges should then be aggregated across buckets within each asset class. The correlation parameters,  $\gamma_{bc}$ , applicable to each asset class are set out in Section 5.

$$\text{Linear risk capital charge} = \sqrt{\sum_b K_b^2 + \sum_{b \neq c} \gamma_{bc} S_b S_c} + K_{residual}$$

where  $S_b = \sum_{k=1}^K WS_k$  for all risk factors in bucket  $b$  and  $S_c = \sum_{k=1}^K WS_k$  for all risk factors in bucket  $c$ .

[In instances where the number under the square root is negative, it should be floored at 0.]

55. Instruments in the trading book that are options or possibly include an option (eg embedded options such as prepayment and convertibility) are subject to additional capital requirements for (i) curvature risk and (ii) vega risk. Instruments not subject to optionality are subject to neither curvature risk nor vega risk.

56. The following step-by-step approach to capture curvature risk should be separately applied to each asset class (apart from default risk):

- (a) For GIRR and CSR risk factors, the curvature risk exposure with respect to curvature risk factor  $k$  is computed at the portfolio level using the following formula:

$$CVR_k = -\min \left[ \begin{array}{l} \sum_i V(x_{it} + RW_{ik} \forall t \in k) - V(x_{it} \forall t \in k) - \sum_{t \in k} RW_{it} \cdot S_{it} \\ \sum_i V(x_{it} - RW_{ik} \forall t \in k) - V(x_{it} \forall t \in k) + \sum_{t \in k} RW_{it} \cdot S_{it} \end{array} \right]$$

where:

- $i$  is an instrument subject to optional risks associated with delta risk factor  $t$ ;
- $V(x_{it})$  is the price of instrument  $i$  depending on the relevant delta risk factor  $t$ ;

- $V(x_{it} + RW_{ik} \forall t \in k)$  is the price of instrument  $i$  after a parallel shift of the yields/spreads  $x_{it}$  at all the tenors  $t$  of curve  $k$ ;
- $X_{it}$  is the current level of risk factor  $t$  for instrument  $i$ ;
- $s_{it}$  is the delta of instrument  $i$  with respect to delta risk factor  $t$ , defined in Section 3 (b); and
- $RW_{ik}$  is the absolute shift applicable to curvature risk factor  $k$ , for instrument  $i$ , as set out in Section 5.

For equity, commodity and FX risk factors, the curvature risk exposure is computed with respect to the risk factor  $k$  using the following formula:

$$CVR_k = -\min \left[ \begin{array}{l} \sum_t V(x_{ik} + RW_{ik} x_{ik}) - V(x_{ik}) - RW_{ik} \cdot s_{ik} \\ \sum_t V(x_{ik} - RW_{ik} x_{ik}) - V(x_{ik}) + RW_{ik} \cdot s_{ik} \end{array} \right]$$

where:

- $i$  is an instrument subject to optional risks associated with risk factor  $k$ ;
  - $V(x_{ik})$  is the price of instrument  $i$  depending on risk factor  $k$ ;
  - $X_{ik}$  is the current level of risk factor  $k$  for instrument  $i$ ;
  - $s_{ik}$  is the delta of instrument  $i$  with respect to risk factor  $k$ , defined in Section 3 (b); and
  - $RW_{ik}$  is the relative shift applicable to risk factor  $k$  for instrument  $i$ , as set out in Section 5.
- (b) If the price of an option depends on several risk factors, the curvature risk is determined separately for each risk factor.
- (c) The curvature risk exposure should then be aggregated within each bucket using the following formula:

$$K_b = \sqrt{\max\left(0, \sum_k \max(CVR_k, 0)^2 + \sum_k \sum_{k \neq l} \rho_{kl} CVR_k CVR_l \psi(CVR_k, CVR_l)\right)}$$

where:

- $\psi(x,y)$  is a function that takes the value 0 if  $x$  and  $y$  both have negative signs. In all other cases,  $\psi(x,y)$  takes the value of 1; and
  - $\rho_{ij}$  is the assumed correlation determined according to Section 5.
- (d) Capital charges should then be aggregated across buckets within each asset class.

$$CurvatureRisk\ Charge = \sqrt{\max\left(0, \sum_b K_b^2 + \sum_b \sum_{c \neq b} \gamma_{bc} S_b S_c \psi(S_b S_c)\right)} + K_{residual}$$

where:

- $S_b = \sum_{k=1}^K CVR_k$  for all risk factors in bucket  $b$  and  $S_c = \sum_{k=1}^K CVR_k$  for all risk factors in bucket  $c$ ;
- $\psi(x,y)$  is a function that takes the value 0 if  $x$  and  $y$  both have negative signs. In all other cases,  $\psi(x,y)$  takes the value of 1; and
- the correlation parameters  $\gamma_{bc}$  applicable to each asset class are set out in Section 5.

### 3. Definition of the risk factors and the sensitivities

#### (a) Definition of the delta and curvature risk factors

##### 57. **GIRR risk factors**

- *Delta*: the GIRR delta risk factors are defined along two dimensions: the relevant risk free yield curves of the currency in which an instrument is denominated; and the following tenors/vertices: 0.25 years, 0.5 years, 1 year, 2 years, 3 years, 5 years, 10 years, 15 years, 20 years and 30 years.

The GIRR delta risk factor also includes a flat curve of risk-neutral inflation rates for each currency. This risk factor is only relevant for an instrument when a cash flow is functionally dependent on a measure of inflation, ie the notional amount or an interest payment depends eg on a consumer price index. GIRR risk factors other than for inflation risk will apply to such an instrument notwithstanding.

- *Curvature*: the GIRR curvature risk factors are defined along one dimension: the relevant yield curve.

##### 58. **CSR non-securitisation risk factors**

- *Delta*: the CSR non-securitisation delta risk factors are defined along two dimensions: the relevant issuer credit spread curves (bond and CDS); and the following tenors/vertices: 1 year, 2 years, 3 years, 5 years and 10 years.
- *Curvature*: the CSR non-securitisation curvature risk factors are defined along one dimension: the relevant issuer credit spread curves (bond and CDS).

##### 59. **CSR securitisation risk factors**

- *Delta*: the CSR securitisation delta risk factors are defined along two dimensions: the relevant issuer/tranche credit spread curves and the following tenors/vertices: 1 year, 2 years, 3 years, 5 years and 10 years.
- *Curvature*: the CSR securitisation curvature risk factors are defined along one dimension: the relevant issuer/tranche credit spread curves (bond and CDS).

For securitisation instruments in the non-correlation trading portfolio, sensitivities should be computed to the tranche.

For securitisation instruments in the correlation trading portfolio, sensitivities should be computed to the underlying names.

##### 60. **Equity risk factors**

- *Delta and curvature*: the equity delta risk factors are all the equity (i) spot prices, (ii) dividend forecasts and (iii) repurchase agreements (repos).

##### 61. **Commodity risk factors**

- *Delta and curvature*: the commodity delta risk factors are all the commodity spot prices depending on the grade (minimum delivery quality<sup>17</sup>) of the commodity and the delivery location (city).

<sup>17</sup> "Grade" refers to the contract grade of the instrument, sometimes known as the "basis grade" or "par grade". This is the minimum accepted standard that a deliverable commodity must meet to be accepted as deliverable against the contract. Where this is not specified for a position, a proxy contract should be used.

62. **Exchange rate risk factors**

- *Delta and curvature*: all the exchange rates between the currency in which an instrument is denominated and the reporting currency, depending on whether the position matures in less than a year, one to three years, or more than three years.

If, for a given instrument, all cash flows are in a single currency (no cross-currency basis risk), its maturity is to be regarded as zero for FX risk purposes.

(b) Definition of the vega risk factors

63. *[There are two categories of GIRR vega risk factors:*

**For GIRR, CSR and commodity:**

- *The term structure of implied volatility risk: one risk position is computed per instrument and per risk factor, as follows. An ATM volatility surface is defined. The matrix is defined along the following two dimensions:*
  - *the maturity of the option is allocated to ranges [delimited by the 10 delta vertices]; and*
  - *the residual maturity of the underlying of the option is allocated to ranges [delimited by the 10 delta vertices].*
- *Smile risk: one risk position is computed per instrument and per risk factor. As the sensitivity to smile, the moneyness (spot divided by strike) is allocated to [6] ranges.*
- *Vega risk positions VR are computed at each node of the cube.*
- *The VR positions are then aggregated based on prescribed correlations.*

**For equity and FX:**

- *The term structure of implied volatility risk: one risk position is computed per instrument and per risk factor, as follows. An ATM volatility curve is defined. The curve is defined along the dimension:*
  - *the maturity of the option is allocated to [10] ranges.*
- *Smile risk: one risk position is computed per instrument and per risk factor, as the sensitivity to smile. The moneyness (spot divided by strike) is allocated to [6] ranges.*
- *Vega risk positions VR are computed at each node of the matrix.*
- *The VR positions are then aggregated based on prescribed correlations.]*

(c) Definition of sensitivity for each asset class

64. Sensitivities for each asset class are expressed in the reporting currency of the bank.

65. **For GIRR risk factors, the sensitivity is defined as the PV01.**

The PV01 of an instrument  $i$  with respect to tenor  $t$  of the risk free curve  $r$  (ie the sensitivity of instrument  $i$  with respect to the risk factor  $r_t$ ) is defined as:

$$s_{i,r_t} = \frac{V_i(r_t + 1 \text{ bp}, cs_t) - V_i(r_t, cs_t)}{1 \text{ bp}}$$

where:

- $r_t$  is the risk-free interest rate curve at tenor  $t$ ;
- $cs_t$  is the credit spread curve at tenor  $t$ ;

- $V_i$  is the market value of an instrument  $i$  as a function of the risk-free interest rate curve and credit spread curve; and
- 1 bp is 1 basis point, ie 0.0001 or 0.01%.

For the interest rate risk factors, "market rates" (and not "zero coupon rates") should be used to construct the risk-free yield curve, consistent with the validation standards and the "use test" set out in Section 4.

**66. For CSR non-securitisation risk factors, the sensitivity is defined as the CS01.**

The CS01 of an instrument with respect to tenor  $t$  is defined as:

$$S_{i,cs_t} = \frac{V_i(r_t, cs_t + 1bp) - V_i(r_t, cs_t)}{1bp}$$

**67. For CSR securitisation and nth-to-default risk factors, the sensitivity is defined as the CS01.**

If all the following criteria are met, the position is deemed to be part of the "correlation trading portfolio" (CTP), and the CS01 (as defined for CSR (non-securitisations) above) should be computed with respect to the names underlying the securitisation or nth-to-default instrument:

- The positions are not resecuritisation positions, nor derivatives of securitisation exposures that do not provide a pro rata share in the proceeds of a securitisation tranche.
- All reference entities are single-name products, including single-name credit derivatives, for which a liquid two-way market exists,<sup>18</sup> including traded indices on these reference entities.
- The instrument does not reference an underlying that would be treated as a retail exposure, a residential mortgage exposure, or a commercial mortgage exposure under the standardised approach to credit risk.
- The instrument does not reference a claim on a special purpose entity.
- A position that is not a securitisation position and that hedges a position described above.

If any of these criteria are not met, the position is deemed to be non-CTP, and then the CS01 should be calculated with respect to the spread of the instrument rather than the spread of the underlying of the instruments.

**68. For equity risk factors, the sensitivity is defined as follows:**

The value change of an instrument with respect to a 1 percentage point relative change of the equity risk factor:

$$S_{ik} = \frac{V_i(1.01EQ_k) - V_i(EQ_k)}{0.01EQ_k}$$

where:

- $k$  is a given equity;
- $EQ_k$  is the market value of equity  $k$ ; and
- $V_i$  is the market value of instrument  $i$  as a function of the price of equity  $k$ .

<sup>18</sup> A two-way market is deemed to exist where there are independent bona fide offers to buy and sell so that a price reasonably related to the last sales price or current bona fide competitive bid and offer quotations can be determined within one day and the transaction settled at such price within a relatively short time frame in conformity with trade custom.

69. **For commodity risk factors, the sensitivity is defined as follows:**

The value change of an instrument with respect to a 1 percentage point relative change of the commodity price:

$$s_{ik} = \frac{V_i(1.01CTY_k) - V_i(CTY_k)}{0.01CTY_k}$$

where:

- $k$  is a given commodity;
- $CTY_k$  is the market value of commodity  $k$ ; and
- $V_i$  is the market value of instrument  $i$  as a function of the price of commodity  $k$ .

70. **For FX risk factors, the sensitivity is defined as follows:**

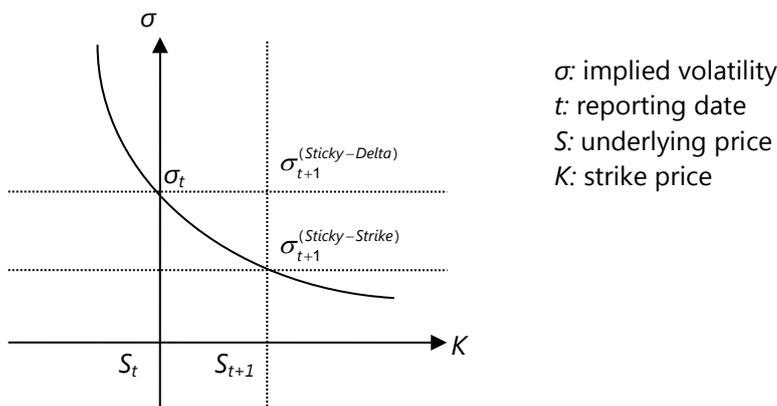
The value change of an instrument with respect to a 1 percentage point relative change of the FX rate:

$$s_{ik} = \frac{V_i(1.01FX_k) - V_i(FX_k)}{0.01FX_k}$$

where:

- $k$  is a given currency;
- $FX_k$  is the exchange rate between currency  $k$  and the reporting currency; and
- $V_i$  is the market value of instrument  $i$  as a function of the exchange rate  $k$ .

71. When computing a first-order sensitivity for instruments subject to optionality, banks should assume that the implied volatility remains constant, consistent with a "sticky delta" approach. This concept is illustrated in the following graph:



72. Where appropriate to comply with the validation standards and the "use test" set out in Section 4, banks may also make use of the central or backward difference methods:

**For GIRR and CSR:**

$$s = \frac{V(x + 0.5bp) - V(x - 0.5bp)}{1bp}$$

$$s = \frac{V(x) - V(x - 1\text{bp})}{1\text{bp}}$$

**For equity, commodity and FX risk:**

$$s = \frac{V(1.005x) - V(0.995x)}{0.01x}$$

$$s = \frac{V(x) - V(0.99x)}{0.01x}$$

#### 4. Sensitivity validation standards

73. [The Committee will determine some validation standards such as a "use test" to be incorporated.]

#### 5. Prescribed risk weights and correlations

(a) General interest rate risk (GIRR)

##### Risk weights

74. Each currency is considered to be a separate bucket.

75. The risk weights  $RW_k$  are set out in the following table:

Risk weights per vertex (in basis points)

0.25yr	0.5yr	1yr	2yr	3yr	5yr	10yr	15yr	20yr	30yr	Inflation
160	160	150	125	115	100	100	100	100	100	150

76. The sensitivity to the inflation rate, from the exposure to implied coupons in an inflation instrument, should be allocated in the specific inflation vertex. The inflation rate risk is considered in addition to the sensitivity to interest rates from the same instrument, which should be allocated, according to the GIRR framework, in the term structure of the other interest rate exposures in the same currency.

77. [The sensitivity to vega risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding currency bucket. A relative risk

weight is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{60}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right)$ .]

##### Correlations

78. The first correlation matrix below for risk exposures with the same sign should be used for  $\rho_{kl}$  under the following conditions:

- (a)  $k$  and  $l$  are vertices on the same risk-free yield curve; and
- (b) weighted sensitivities or risk exposures have the same sign.

Correlations for aggregated weighted sensitivities or risk exposures with the same sign

	0.25yr	0.5yr	1yr	2yr	3yr	5yr	10yr	15yr	20yr	30yr	Inflation
0.25yr	100%	95%	85%	75%	65%	55%	45%	40%	40%	35%	40%
0.5yr	95%	100%	90%	75%	70%	65%	50%	45%	45%	40%	40%
1yr	85%	90%	100%	90%	85%	75%	60%	50%	50%	50%	40%
2yr	75%	75%	90%	100%	95%	90%	75%	65%	60%	60%	40%
3yr	65%	70%	85%	95%	100%	95%	80%	75%	70%	65%	40%
5yr	55%	65%	75%	90%	95%	100%	90%	85%	75%	70%	40%
10yr	45%	50%	60%	75%	80%	90%	100%	95%	90%	85%	40%
15yr	40%	45%	50%	65%	75%	85%	95%	100%	100%	100%	40%
20yr	40%	45%	50%	60%	70%	75%	90%	100%	100%	100%	40%
30yr	35%	40%	50%	60%	65%	70%	85%	100%	100%	100%	40%
Inflation	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	100%

79. The second correlation matrix below for risk exposures with different signs should be used for  $\rho_{kl}$  under the following conditions:

- $k$  and  $l$  are vertices on the same risk-free yield curve; and
- weighted sensitivities or risk exposures have different signs.

Correlations for aggregated weighted sensitivities or risk exposures with different signs

	0.25yr	0.5yr	1yr	2yr	3yr	5yr	10yr	15yr	20yr	30yr	Inflation
0.25yr	100%	90%	70%	55%	50%	40%	25%	20%	15%	15%	20%
0.5yr	90%	100%	85%	70%	60%	45%	35%	25%	20%	15%	20%
1yr	70%	85%	100%	80%	75%	60%	45%	35%	30%	20%	20%
2yr	55%	70%	80%	100%	90%	75%	55%	40%	40%	40%	20%
3yr	50%	60%	75%	90%	100%	85%	60%	50%	50%	45%	20%
5yr	40%	45%	60%	75%	85%	100%	75%	60%	60%	50%	20%
10yr	25%	35%	45%	55%	60%	75%	100%	85%	75%	65%	20%
15yr	20%	25%	35%	40%	50%	60%	85%	100%	85%	70%	20%
20yr	15%	20%	30%	40%	50%	60%	75%	85%	100%	70%	20%
30yr	15%	15%	20%	40%	45%	50%	65%	70%	70%	100%	20%
Inflation	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	100%

80. Between two yield curves in the same bucket (eg OIS and BOR 3M), basis risk should be recognised. In such cases, the correlation matrices used for  $\rho_{kl}$  should then be scaled by multiplication by  $(1+x)$  if the two sensitivities have same sign and  $(1-x)$  if the two sensitivities have different signs, where  $x$  is set at [10] basis points. All correlations are capped at 1.

81. *[Between vega and delta exposures, the correlation is set at 1 for same-sign risk positions and -1 for different-sign risk positions; Between vega exposures, the correlations are the same as between delta exposures.]*

82. The parameter  $\gamma_{bc} = 0.5$  should be used for aggregating across different currencies.

83. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

(b) Credit spread risk (CSR): non-securitisations

*Risk weights*

84. Sensitivities or risk exposures should first be assigned to a bucket according to the following table:

Bucket number	Credit quality	Sector
1	Investment grade (IG)	Sovereigns including central banks, multilateral development banks
2		Financials including gov't-backed financials, real estate activities
3		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying
4		Consumer goods and services, transportation and storage, administrative and support service activities
5		Technology, telecommunications
6		Health care, utilities, local gov't, gov't-backed corporates (non-financial), education, public administration, professional and technical activities
7	High yield (HY) & non-rated (NR)	Sovereigns including central banks, multilateral development banks
8		Financials including gov't-backed financials, real estate activities
9		Basic materials, energy, industrials, agriculture, manufacturing, mining and quarrying
10		Consumer goods and services, transportation and storage, administrative and support service activities
11		Technology, telecommunications
12		Health care, utilities, local gov't, gov't-backed corporates (non-financial), education, public administration, and professional and technical activities
Residual		

85. The same risk weight should be used for all vertices (1yr, 2yr, 3yr, 5yr, 10yr), according to bucket, as set out in the following table:

Bucket number	Risk weight (in basis points)
1	250
2	500
3	350
4	300
5	250
6	200
7	1,000
8	1,200
9	900
10	1,000
11	900
12	600
Residual	1,200

86. [The sensitivity to volatility risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{250}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right) \cdot J$

### Correlations

87. The correlation parameters  $\rho_{kl}$  applying to sensitivity or risk exposure pairs within the same bucket are set out in the following table:

	Same name	Different name
Aggregate sensitivities have the same sign	90%	40%
Aggregate sensitivities have different signs	60%	10%
Residual bucket: aggregate sensitivities have the same sign	100%	
Residual bucket: aggregate sensitivities have different signs	0%	

88. Between two credit spread curves in the same bucket (eg bond, CDS, index constituent/single name), basis risk should be recognised. In such cases, the correlation parameters used for  $\rho_{kl}$  should then be scaled by multiplication by  $(1+x)$  if the two sensitivities have the same sign and  $(1-x)$  if the two sensitivities have different signs, where  $x$  is set at [10] basis points. All correlations are capped at 1.

89. [Between vega and delta exposures, the correlation is set at 1 for same-sign risk positions and -1 for different-sign risk positions; Between vega exposures, the correlations are the same as between delta exposures.]

90. The correlation parameters  $\gamma_{bc}$  applying to sensitivity or risk exposure pairs across different non-residual buckets are set out in the following table:

Bucket	1	2	3	4	5	6	7	8	9	10	11	12
1	100%	10%	20%	25%	20%	15%	20%	15%	20%	20%	20%	15%
2	10%	100%	5%	15%	20%	5%	10%	15%	5%	15%	0%	30%
3	20%	5%	100%	20%	25%	5%	10%	15%	0%	25%	0%	40%
4	25%	15%	20%	100%	25%	5%	10%	15%	0%	25%	5%	40%
5	20%	20%	25%	25%	100%	5%	15%	20%	10%	20%	20%	15%
6	15%	5%	5%	5%	5%	100%	10%	15%	5%	20%	10%	30%
7	20%	10%	10%	10%	15%	10%	100%	25%	15%	20%	15%	20%
8	15%	15%	15%	15%	20%	15%	25%	100%	20%	20%	20%	15%
9	20%	5%	0%	0%	10%	5%	15%	20%	100%	25%	15%	15%
10	20%	15%	25%	25%	20%	20%	20%	20%	25%	100%	15%	20%
11	20%	0%	0%	5%	20%	10%	15%	20%	15%	15%	100%	15%
12	15%	30%	40%	40%	15%	30%	20%	15%	15%	20%	15%	100%

91. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

(c) Credit spread risk (CSR): securitisations

(i) Correlation trading portfolio

92. Sensitivities to CSR arising from the correlation trading portfolio are treated as a separate asset class, for which the same bucket structure and correlation structure apply as those for the CSR non-

securitisation framework, but for which the risk weights of the CSR non-securitisations are modified to reflect the liquidity horizons and basis risk is captured more conservatively.

93. The same risk weight should be used for all vertices (1yr, 2yr, 3yr, 5yr, 10yr), according to bucket, as set out in the following table:

Bucket number	Risk weight (in basis points)
1	489
2	839
3	556
4	499
5	347
6	320
7	1,565
8	1,659
9	1,201
10	1,472
11	1,211
12	897
Residual	1,659

94. *[The sensitivity to volatility risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{250}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right) J$*

95. In order to capture correlation risk on top of basis risk in correlation trading portfolio securitisation positions, the x value in paragraph [10256](#) is set at [100] basis points.

(ii) *Other securitisation positions*

96. Sensitivities to credit spread risk arising from non-correlation trading portfolio securitisation positions are treated according to the risk weights and correlations specified in the next paragraphs.

*Risk weights*

97. Sensitivities or risk exposures should first be assigned to a bucket according to the following table:

Bucket number	Credit quality	Sector
1	Investment grade (IG)	RMBS/CMBS
2		Credit card ABS
3		Auto ABS
4	High yield (HY) & non-rated (NR)	RMBS/CMBS
5		Credit card ABS
6		Auto ABS
7	Residual	

98. The risk weights are set out in the following table:

Bucket number	Risk weight (in basis points)
1	800
2	1,300
3	900
4	3,000
5	5,000
6	3,600

99. If it is not possible to allocate a sensitivity or risk exposure to one of these buckets (for example, because data on categorical variables are not available), then the position must be allocated to a "residual bucket". The risk weights for the residual bucket are as follows:

Bucket number	Risk weight (in basis points)
7	5,000

100. *[The sensitivity to volatility risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{250}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right)$ .]*

### Correlations

101. For the other buckets, the correlation parameters  $\rho_{kl}$  applying to sensitivity or risk exposure pairs within the same bucket are set out in the following table:

	Same underlying names (more than 80% overlap in notional terms)	Different underlying names (less than 80% overlap in notional terms)
Aggregate sensitivities have the same sign	100%	80%
Aggregate sensitivities have different signs	40%	0%
Residual bucket: aggregate sensitivities have the same sign	100%	
Residual bucket: aggregate sensitivities have different signs	0%	

102. Between two curves in the same bucket (eg bond, CDS, index constituent/single name), basis risk should be recognised. In such cases, the correlation  $\rho_{kl}$  should then be scaled by multiplication by  $(1+x)$  if the two sensitivities have the same sign and  $(1-x)$  if the two sensitivities have different signs, where  $x$  is set at [10] basis points. All correlations are capped at 1.

103. *[Between vega and delta exposures, the correlation is set at 1 for same-sign risk positions and -1 for different-sign risk positions; Between vega exposures, the correlations are the same as between delta exposures.]*

104. The correlation parameters  $\gamma_{bc}$  applying to sensitivity or risk exposure pairs across different buckets are set out in the following table:

	Sensitivities or risk exposures with the same sign	Sensitivities or risk exposures with different signs
Non-residual bucket to non-residual bucket	0%	0%

105. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

(d) Equity risk

### Risk weights

106. Sensitivities should first be assigned to a bucket according to the buckets defined in the following table:

Bucket number	Size	Region	Sector
1	Large	Emerging market economies	Consumer goods and services, transportation and storage, administrative and support service activities, utilities
2			Telecommunications, industrials
3			Basic materials, energy, agriculture, manufacturing, mining and quarrying
4			Financials including gov't-backed financials, real estate activities, technology
5		Advanced economies	Consumer goods and services, transportation and storage, administrative and support service activities, utilities
6			Telecommunications, industrials
7			Basic materials, energy, agriculture, manufacturing, mining and quarrying
8			Financials including gov't-backed financials, real estate activities, technology
9	Small	Emerging market economies	All sectors
10		Advanced economies	All sectors

107. "Large" is defined as a market capitalisation equal to or greater than USD 2 billion and "small" is defined as a market capitalisation of less than USD 2 billion.

108. "Market capitalisation" is defined as the sum of the market capitalisations of the same legal entity or group of legal entities across all stock markets globally.

109. The advanced economies are Canada, the United States, Mexico, the euro area, the non-euro area western European countries (the United Kingdom, Norway, Sweden, Denmark and Switzerland), Japan, Oceania (Australia and New Zealand), Singapore and Hong Kong SAR.

110. The sector definition is the one generally used in the market. When allocating an equity position to a particular bucket, the bank must prove that the equity issuer's most material activity indeed corresponds to the bucket's definition. Acceptable proofs might be external providers' information, or internal analysis.

111. For multinational multi-sector equity issuers, the allocation to a particular bucket must be done according to the most material region and sector the issuer operates in.

112. If it is not possible to allocate a position to one of these buckets (for example, because data on categorical variables are not available), then the position must be allocated to a “residual bucket”. Risk weights should be assigned to each notional position as in the following table:

Bucket number	Risk weight (percentage of equity price)
1	55
2	60
3	45
4	55
5	30
6	35
7	40
8	50
9	70
10	50
Residual bucket	70

113. [The sensitivity to volatility risk takes into account the term structure (maturity of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{20}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right)$  for large caps and

$$VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{120}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right) \text{ for small caps.}]$$

### Correlations

114. The correlation parameters  $\rho_{kl}$  applying to sensitivity or risk exposure pairs within the same bucket are set out in the following table:

Bucket number	Same sign	Different sign
1	20%	10%
2	20%	15%
3	25%	15%
4	30%	20%
5	20%	10%
6	30%	15%
7	35%	20%
8	35%	20%
9	15%	5%
10	25%	10%
Residual bucket	100%	-100%

115. Between two risk factors related to the same name (eg equity spot, dividend forecasts, repos, index constituents/single name), basis risk should be recognised. In such cases, the correlation  $\rho_{kl}$  should then be scaled by multiplication by  $(1+x)$  if the two sensitivities have the same sign and  $(1-x)$  if the two sensitivities have different signs, where  $x$  is set at [10] basis points. All correlations are capped at 1.

116. [Between vega and delta exposures, the correlation is set at 1 for same sign risk positions and –1 for different signs risk positions; Between vega exposures, the correlations are the same as between delta exposures.]

117. The correlation parameters  $\gamma_{bc}$  applying to sensitivity or risk exposure pairs across different non-residual buckets are set out in the following table:

Buckets	1	2	3	4	5	6	7	8	9	10
1	–	15%	15%	15%	10%	10%	10%	10%	10%	10%
2	15%	–	15%	15%	10%	10%	10%	10%	10%	10%
3	15%	15%	–	15%	10%	10%	10%	10%	10%	10%
4	15%	15%	15%	–	10%	10%	10%	10%	10%	10%
5	10%	10%	10%	10%	–	20%	20%	20%	10%	15%
6	10%	10%	10%	10%	20%	–	20%	20%	10%	15%
7	10%	10%	10%	10%	20%	20%	–	20%	10%	15%
8	10%	10%	10%	10%	20%	20%	20%	–	10%	15%
9	10%	10%	10%	10%	10%	10%	10%	10%	–	10%
10	10%	10%	10%	10%	15%	15%	15%	15%	10%	–

118. The correlation parameters applying to sensitivity or risk exposure pairs across the non-residual buckets and the residual one are set out in the following table:

	Sensitivities with the same sign	Sensitivities with different signs
Non-residual bucket to residual bucket	100%	–100%

119. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

(e) Commodity risk

### Risk weights

120. The risk weights depend on the commodity type; they are set out in the following table:

Bucket	Commodity	Risk weight (percentage of commodity price)
1	Coal	30
2	Crude oil	35
3	Electricity	60
4	Freight	80
5	Metals	40
6	Natural gas	45
7	Precious metals (incl gold)	20
8	Other	50
9	Grains & oilseed	35
10	Livestock & dairy	25
11	Softs and other agriculturals	35

121. [The sensitivity to volatility risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight

is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{60}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right)$  for energy and precious metals and  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{120}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right)$  for other commodities.]

### Correlations

122. The correlation parameters  $\rho_{kl}$  applying to sensitivity or risk exposure pairs within the same commodity are set out in the following table:

Correlations		
	Different sign	Same sign
Coal	35%	75%
Crude oil	95%	95%
Electricity	20%	55%
Freight	65%	90%
Metals	45%	70%
Natural gas	30%	95%
Precious metals	35%	75%
Other	-10%	15%
Grains & oilseed	30%	60%
Livestock & dairy	0%	30%
Softs & other agriculturals	25%	50%

123. Between two risk factors related to the same commodity (eg commodity spot, same commodity but grade difference, same commodity but maturity difference over six months, same commodity but different delivery location, index constituents/single name), basis risk should be recognised. In such cases, the correlation  $\rho_{kl}$  should then be scaled by multiplication by  $(1+x)$  if the two sensitivities have the same sign and  $(1-x)$  if the two sensitivities have different signs, where  $x$  is set at [10] basis points. All correlations are capped at 1.

124. [Between vega and delta exposures, the correlation is set at 1 for same sign risk positions and -1 for different signs risk positions; between vega exposures, the correlations are the same as between delta exposures.]

125. The correlation parameters  $\gamma_{bc}$  applying to sensitivity or risk exposure pairs across different non-residual buckets are set out in the following table:

Buckets	1	2	3	4	5	6	7	8	9	10	11
1	–	35%	5%	20%	20%	25%	15%	0%	25%	10%	20%
2	35%	–	5%	45%	45%	15%	30%	0%	35%	5%	35%
3	5%	5%	–	0%	5%	0%	15%	0%	0%	5%	5%
4	20%	45%	0%	–	25%	0%	10%	0%	15%	0%	15%
5	20%	45%	5%	25%	–	5%	25%	0%	25%	10%	35%
6	25%	15%	0%	0%	5%	–	5%	0%	15%	0%	10%
7	15%	30%	15%	10%	25%	5%	–	0%	15%	0%	20%
8	0%	0%	0%	0%	0%	0%	0%	–	0%	0%	0%
9	25%	35%	0%	15%	25%	15%	15%	0%	–	5%	30%
10	10%	5%	5%	0%	10%	0%	0%	0%	5%	–	10%
11	20%	35%	5%	15%	35%	10%	20%	0%	30%	10%	–

126. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

(f) Foreign exchange risk

127. For each currency, sensitivities are separately allocated to one of the following term buckets:

Term bucket	Maturity
1	Less than 1 year
2	1 year to 3 years
3	More than 3 years

“Maturity” means the remaining contractual maturity.

### Risk weights

128. A unique relative risk weight equal to 15% of FX rate ( $FX_k$ ) applies to all the FX sensitivities or risk exposures.

129. [The sensitivity to volatility risk takes into account the term structure (maturity of the underlying and of the option) and moneyness; it should be allocated to the corresponding bucket. A relative risk weight

is applied in line with the risk factor liquidity horizon such that  $VR_{ik} = 0.55 \cdot \left( \frac{\sqrt{60}}{\sqrt{10}} \right) \cdot \left( \frac{dV_i}{d\sigma_i} \cdot \sigma_i \right) \cdot J$

### Correlations

130. The correlation parameters  $\rho_{kl}$  applying to sensitivity or risk exposure pairs within the same bucket are set out in the following table:

Net exposures with the same sign			
Term bucket	1	2	3
1			
2	95%		
3	70%	85%	

Net exposures with different signs			
Term bucket	1	2	3
1			
2	90%		
3	65%	80%	

131. A uniform correlation parameter  $\gamma_{bc}$  equal to 60% applies to sensitivity or risk exposure pairs across different non-residual buckets.

132. Between curvature exposures, the delta correlation parameters  $\rho_{kl}$  and  $\gamma_{bc}$  should be squared.

## 6. Capitalisation of default risk

133. The capital requirement for default risk is the sum of the requirements for default risk of non-securitisations and default risk of securitisations. The methodology for calculating these requirements is set out in the following sections.

134. For the correlation trading portfolio (CTP), default risk for securitisation includes non-securitisation hedges. These hedges are to be removed from the default risk non-securitisation calculations.

135. In line with criteria set out in other parts of the Capital Accord, at national discretion claims on sovereigns, public sector entities and multilateral development banks may be subject to a zero default risk weight. National authorities may apply a non-zero risk weight to securities issued by certain foreign governments, especially to securities denominated in a currency other than that of the issuing government.

### (ag) Default risk: non-securitisations

136. The following steps should be followed by a bank calculating a capital charge for default risk (non-securitisations). Within each asset class category, a capital charge is calculated as described in the following procedure. The categories for this purpose are corporates, sovereigns, local governments/municipalities, and securitisations including CTP (see also Section H). The procedure involves determining jump-to-default (JTD) loss amounts by applying loss-given-default (LGD) risk weights to positions, determining hedging and offsetting benefit, and applying default risk weights.

137. For the capitalisation of JTD risk, the representation of positions uses notional amounts and market values. This approach is different from the use of credit spread sensitivities in the capitalisation of credit spread risk. The default risk capital charge is intended to capture stress events in the tail of the default distribution which are not captured by credit spread shocks in mark-to-market risk. The use of credit spread sensitivities would underestimate the loss from jump-to-default, because credit spreads are a measure of the expected loss from default, which by definition is less severe than the default loss in the tail of the default distribution, and it is the default severity in the tail of the default distribution that is covered by the default risk capital charge (see CP2 on page 11). Similarly, for credit options, using the delta equivalent to represent positions for default risk would underestimate the loss at default, because the definition of an option's delta employs an expected value calculation with respect to the entire default distribution which by its nature is an underestimate of the risk of default loss in the tail of the default distribution.

138. The starting point in the calculation of the capital charge described below is the notional amount and mark-to-market loss already taken on a credit position. The notional amount is used to determine the loss of principal at default, and the mark-to-market loss is used to determine the net loss so as to not double-count the mark-to-market loss already recorded in the P&L. For all instruments, the notional amount in the JTD equation below is the notional amount of the instrument relative to which the loss of principal is determined. For instance, the notional amount of a bond would be the face value, while for credit derivatives the notional amount of a CDS contract or a put option on a bond would be the notional amount of the derivative contract. In the case of a call option on a bond, however, the notional amount to be used in the JTD equation would be zero (since, in the event of default, the call option would not be exercised). In this case, a jump-to-default would extinguish the call option's value and this loss would be captured through the mark-to-market (MtM) gain/loss term in the JTD equation.

The table below provides an illustration of the use of notional amounts and market values in the JTD equation:

Examples of components in the JTD equation			
Instrument	Notional	Bond-equivalent market value	MtM loss
Bond	Face value of bond	Market value of bond	Face value – market value
CDS	Notional of CDS	Notional of CDS – MtM value of CDS	MtM value of CDS
Sold put option on a bond	Notional of option	Strike amount – MtM value of option	Notional – (strike – MtM value of option)
Bought call option on a bond	0	MtM value of option	-MtM value of option

The bond-equivalent market value is an intermediate step in determining the MtM loss for derivative instruments.

MtM loss = notional – bond-equivalent market value.

JTD = max [LGD x notional – MtM loss, 0], in the case of a long position (see definition below for the case of a short position).

In the expressions above, the MtM values of CDS and options are absolute values.

Strike amount of bond option in terms of bond price (not the yield).

With this representation of the MtM loss for a sold put option, a lower strike results in a lower JTD loss.

139. The determination of the long/short direction of positions should be on the basis of long or short with respect to the underlying credit exposure. Specifically, a long position is one in which the default of the underlying obligor results in a loss. In the case of derivative contracts, the long/short direction is determined by whether the contract has long or short exposure to the underlying credit exposure as defined in the previous sentence (ie not bought/sold option, and not bought/sold CDS). Thus, a sold put option on a bond is a long credit exposure, since a default would result in a loss to the seller of the option.

140. The approach for the standardised default risk capital charge comprises a multi-step procedure. In the first step, JTD loss amounts are determined; second, offsetting of JTD amounts of long and short positions, where permissible, produces net long and net short amounts in distinct obligors; third, a hedging benefit discount is applied to the net short positions; and finally, default risk weights are applied to positions to arrive at the capital charge. The procedure is specified in the following steps. In the procedure, offsetting refers to the netting of exposures (where a short position may be subtracted in full from a long position), while hedging refers to the application of a partial hedge benefit (where the long and short positions do not fully offset due to basis or correlation risks).

(1) *Determine risk weight exposures based on LGD of asset class*

141. LGD risk weights are assigned to positions to determine the JTD loss amount. The JTD amount is determined by the LGD, notional amount (or face value) and MtM loss (or gain) already taken on the position:

$$\text{JTD (long)} = \max [\text{LGD} \times \text{notional} - \text{MtM loss}, 0]$$

$$\text{JTD (short)} = \min [\text{LGD} \times \text{notional} - \text{MtM gain}, 0]$$

where MtM loss (or gain) is the mark-to-market loss (or gain) already taken on the exposure, and *notional* is the bond-equivalent notional (or face value) of the position. In the equations, the notional of a long (short) position is recorded as a positive (negative) value, while the MtM loss (gain) is recorded as a positive (negative) value (ie the negative of the cumulative P&L of the position).

142. Equity instruments and non-senior debt instruments are assigned an LGD of 100%. Senior debt instruments are assigned an LGD of 75%.

(2) *Offset exposures to the same obligor*

143. The JTD amount of long positions and that of short positions to the same obligor may be offset where the short position has the same or lower seniority relative to the long (for example, a short position in an equity may offset a long position in a bond, but a short position in a bond cannot offset a long position in the equity). Exposures of different maturities that meet this offsetting criterion may be offset as follows. Exposures longer than the capital horizon (one year) may be fully offset, but in the case of a longer-than-one-year vs less-than-one-year exposures the offset benefit of the less than one year exposure must be reduced as follows. An exposure to an obligor comprising a mix of long and short positions with a maturity less than the capital horizon (equal to one year) should be weighted by the ratio of the positions' maturity relative to the capital horizon. For example, with the one-year capital horizon, a three-month short position would be weighted so that its benefit against long positions of longer-than-one-year maturity would be reduced to one quarter of the position size.<sup>19</sup> In the case of long and short offsetting positions where both have a maturity under one year, the scaling can be applied to both the long and short positions. Finally, the offsetting may result in net long JTD amounts and net short JTD amounts. The net long and net short JTD amounts are aggregated separately as described below.

(3) *Discount the net short positions by the ratio of long to gross long and short JTD amounts*

*Sum the net long JTD amounts*

144. A simple sum of the net long JTD amounts must be calculated, where the summation is across the credit quality categories (ie rating bands). The aggregated amount is used in the numerator and denominator of the expression of the *WtS* below.

*Sum the net short JTD amounts*

145. A simple sum of the net short JTD amounts must be calculated, where the summation is across the credit quality categories (ie rating bands). The aggregated amount is used in the denominator of the expression of the *WtS* below.

*Derive the WtS ratio*

146. The weighting term *WtS*, which is the ratio of long to gross long and short JTD amounts, is applied to short positions to discount their hedge benefit (see the capital equation in step (5) below), where *WtS* is defined as:

$$WtS = \frac{\sum JTD_{long}}{\sum JTD_{long} + \sum |JTD_{short}|}$$

where the summation is across the credit quality categories (ie rating bands), and the JTD amount is as specified above.

(4) *Assign default risk weights according to the credit quality of the underlying name*

147. Default risk weights are assigned to JTD amounts by credit quality categories (ie rating bands), as in the following table:

<sup>19</sup> Since the capital horizon is one year, the default loss within the one-year horizon from long vs short exposures longer than one year will fully offset regardless of the maturity difference of the products. For longer-than-one-year vs less-than-one-year exposures, however, the default loss only partially offsets.

Credit quality category	Default risk weight
AAA	0.5%
AA	2%
A	3%
BBB	6%
BB	15%
B	30%
CCC	50%
Unrated	15%
Defaulted	100%

(5) Calculate the capital requirement for each asset class category

148. The overall capital charge for each asset class category (eg corporate debt) should then be calculated as the sum of the risk-weighted long positions less the discounted risk-weighted short positions, which recognises a hedging benefit:

$$\text{Capital charge for each asset class category} = \max(\sum RW \text{ long} - WtS \times \sum RW \text{ short}, 0)$$

where the summation is across the credit quality subcategories (ie rating bands) and the weighting term  $WtS$  is as defined in step 3, while  $RW \text{ long}$  represents the risk-weighted long positions and  $RW \text{ short}$  the risk-weighted short positions:

$$RW \text{ long} = \text{default risk weight} \times JTD_{\text{long}}$$

$$RW \text{ short} = \text{default risk weight} \times |JTD_{\text{short}}|$$

where default risk weight is as in the table above,  $JTD_{\text{long}}$  and  $JTD_{\text{short}}$  are as specified in step 1, and the multiplication is within each credit quality category (ie rating band).

(6) Calculate the overall capital requirement for default risk

149. No hedging is recognised across different asset class categories. Therefore, the total capital charge for default risk must be calculated as a simple sum of the asset class category-level capital charges. For example, no hedging or diversification is recognised across corporate and sovereign debt, and the total capital charge is the sum of the corporate capital charge and the sovereign capital charge. The categories are corporates, sovereigns, local governments/municipalities, and securitisations.

(b) Default risk: securitisations

150. For default risk (securitisations), the same approach should be followed as for default risk (non-securitisations). However, the default risk weights are defined by tranche (instead of by credit quality category), and additional constraints apply to the recognition of offsetting and hedging. For the correlation trading portfolio, further specific treatment of offsetting and hedging is specified in the CTP subsection below. As is the case for default risk (non-securitisations), offsetting refers to the netting of exposures (where a short position may be subtracted in full from a long position), while hedging refers to the application of a partial hedge benefit (where the long and short positions do not fully offset).

151. For the purposes of offsetting and hedging in this section, positions in underlying names or a non-tranched index position may be decomposed proportionately into the equivalent replicating tranches that span the entire tranche structure. When underlying names are used in this way, they must be removed from the non-securitisation default risk treatment.

### *Constraints on offsetting for securitisations*

152. For default risk (securitisations), the definition of the same “obligor” for the purposes of offsetting is limited to a specific tranche and underlying asset pool. This means that:

- no offsetting is permitted across securitisations of different asset pools, even if the tranche is the same; and
- no offsetting is permitted across tranches of the same asset pool.

153. Exposures that are otherwise identical except for maturity may be offset, subject to the same restriction as for positions of less than one year described above for non-securitisations. Exposures that are perfect replications through decomposition may be offset. Specifically, if a collection of long positions can be replicated by a collection of short positions, then the positions may be offset. For securitisations of mixed-category pools, the security may be allocated into the relevant categories in proportions determined by the proportionate composition of the underlying mixed pool. After the decomposition, the offsetting rules would apply as in any other case. As in the case of default risk (non-securitisations), long and short exposures should be determined from the perspective of long or short the underlying credit.

### *Constraints on hedging for securitisations*

154. For default risk (securitisations), the hedging benefit recognised under step (3) of the default risk framework is constrained as follows:

- A hedging benefit is allowed within regions. No hedging benefit between long and short exposures across regions is allowed, except for corporates. For example, in the case of ABS, no hedging of North America vs Europe or Europe vs Asia is allowed.
- No hedging is permitted across asset classes (such as ABS vs RMBS).
- Hedging is allowed among corporate securitised exposures, within tranche groups across regions.
- Hedging is allowed among tranche groups (subject to the restrictions above).

See the section below for offsetting and hedging treatment in the correlation trading portfolio.

### *Default risk weights for securitisations*

155. The default risk weights for securitisations applied to tranches are based on the risk weights in the corresponding treatment for the banking book, which has been released in a separate Basel Committee publication.<sup>20</sup> To avoid double-counting of risks in the maturity adjustment (of the banking book approach) since migration risk in the trading book will be captured in the credit spread charge, the maturity component in the banking book securitisation framework is set to one year.

### *Capital requirement for each securitisation asset class category*

156. The capital charge for default risk (securitisations) is determined in a similar approach to that for non-securitisations. First, offsetting of long and short positions with respect to like “obligors” determines net long and net short exposures by tranche, subject to the restrictions specified above. (In this step, the determination of the JTD from LGD does not apply since the LGD and JTD amounts are included in the default risk weights of the banking book treatment.) Next, within an asset category in which hedging is allowed (see above), the hedge benefit discount (*WtS* as defined in the section on default risk non-securitisations) is applied to net short positions in that asset category. The approach is

<sup>20</sup> Basel Committee on Banking Supervision, *Revisions to the securitisation framework*, December 2014, [www.bis.org/bcbs/publ/d303.htm](http://www.bis.org/bcbs/publ/d303.htm).

similar to that of default risk non-securitisations except that the calculation is applied to tranches instead of credit quality categories. Next, the default risk weights by tranche are applied, and the capital charge for the asset category is determined as specified in step (5) in default risk non-securitisations.

*[The final specification of the hedge benefit discount (WtS) may be different from the specification in this draft depending on the outcome of a calibration exercise.]*

157. As specified above, the procedure is applied only within asset categories in which offsetting and hedging are allowed. The capital charges for each asset category are then summed without any diversification or hedging benefit across categories.

### *Correlation trading portfolio*

158. The approach for the capital charge for CTP follows the same procedure as default risk (non-securitisations) by first determining the net long and net short exposures after permissible offsetting, and then applying risk weights and a hedging benefit discount to arrive at the capital charge. The risk weights for CTP are based on the proposed risk weights in the corresponding treatment for the banking book, which will be released in a separate Basel Committee publication.

### Allocation of exposures by index and tranche

159. As in the case of default risk (non-securitisations), long and short exposures should be determined from the perspective of long or short the underlying credit. Notional amounts should correspond to the remaining principal amount in the underlying asset pools.

160. Nth-to-default products should be treated as tranching products with attachment and detachment points defined as:

- attachment point =  $(N - 1) / \text{Total Names}$
- detachment point =  $N / \text{Total Names}$

where Total Names is the total number of names in the underlying basket or pool.

### Offsetting and determination of net long and net short amounts for CTP

161. Exposures that are otherwise identical except for maturity may be offset but with the same restriction for positions of less than one year as described in the section on default risk (non-securitisations). Specifically, exposures longer than the capital horizon (one year) may be fully offset, but in the case of longer-than-one-year vs less-than-one-year exposures, the offset benefit of the less-than-one-year exposure must be reduced as described above.

162. For index products, for the exact same index family (eg CDX NA IG), series (eg series 18) and tranche (eg 0–3%), positions should be offset (netted) across maturities (subject to the offsetting allowance as described above).

163. Long/short exposures that are perfect replications through decomposition may be offset as follows. For long/short positions in index tranches, and indices (non-tranched), if the exposures are to the exact same series of the index, then offsetting is allowed by replication and decomposition. For instance, a long position in a 10–15% tranche vs combined short positions in 10–12% and 12–15% tranches on the same index/series can be offset against each other. Similarly, long positions in the various tranches that, when combined perfectly, replicate a position in the index series (non-tranched) can be offset against a short position in the index series if all the positions are to the exact same index and series (eg CDX NA IG series 18). Long/short positions in indices and single-name constituents in the index may also be offset by decomposition. For instance, single-name long positions that perfectly replicate an index may be offset against a short position in the index. When a perfect replication is not possible, then offsetting is not allowed. Where the long/short positions are otherwise equivalent except for a residual component, the net amount must show the residual exposure. For instance, a long position

in an index of 125 names, and short positions of the appropriate replicating amounts in 124 of the names, would result in a net long position in the missing 125th name of the index.

164. Different tranches of the same index or series may not be offset (netted), different series of the same index may not be offset, and different index families may not be offset.

Hedging benefit and calculation of capital charge for CTP

165. For the CTP capital charge, after the determination of net long and net short exposures as specified above, the same approach for application of a hedge benefit and default risk weights should be followed as for default risk (non-securitisations) but with risk weights as specified for securitisations in the banking book as described above in the section *Capital requirement for each securitisation asset class category*.

*[The final specification of the hedge benefit discount (WtS) may be different from the specification here depending on the outcome of a calibration exercise.]*

## D. Market risk – The Internal Models Approach

### 1. General criteria

166. The use of an internal model for the purposes of regulatory capital determination will be conditional upon the explicit approval of the bank's supervisory authority. Home and host country supervisory authorities of banks that carry out material trading activities in multiple jurisdictions intend to work cooperatively to ensure an efficient approval process.

167. The supervisory authority will only give its approval if at a minimum:

- It is satisfied that the bank's risk management system is conceptually sound and is implemented with integrity;
- The bank has, in the supervisory authority's view, sufficient numbers of staff skilled in the use of sophisticated models not only in the trading area but also in the risk control, audit and, if necessary, back office areas;
- The bank's models have, in the supervisory authority's judgement, a proven track record of reasonable accuracy in measuring risk;
- The bank regularly conducts stress tests along the lines discussed in paragraphs 1895 to 19202 below; and
- The positions included in the internal model for regulatory capital determination are held in approved trading desks that have passed the required tests described in paragraph 1782 below.

168. Supervisory authorities will be able to insist on a period of initial monitoring and live testing of a bank's internal model before it is used for supervisory capital purposes.

169. In addition to these general criteria, banks using internal models for capital purposes will be subject to the additional requirements detailed below.

### 2. Qualitative standards

170. Supervisory authorities must be able to assure themselves that banks using internal models have market risk management systems that are conceptually sound and implemented with integrity. Accordingly, the bank must meet the following *qualitative criteria* on an ongoing basis. Supervisors must

assess that banks have met the criteria before they are permitted to use a models-based approach. These qualitative criteria include:

- (a) The bank must have an independent risk control unit that is responsible for the design and implementation of the bank's risk management system. The unit should produce and analyse daily reports on the output of the bank's risk measurement model, including an evaluation of the relationship between measures of risk exposure and trading limits. This unit must be independent from business trading units and should report directly to senior management of the bank.
- (b) The unit must conduct regular backtesting and profit and loss (P&L) attribution programmes, ie an ex-post comparison of the risk measure and P&L values generated by the model against actual daily changes in portfolio values over longer periods of time, as well as hypothetical changes based on static positions. Both of these exercises should be conducted at a trading desk level, while regular backtesting should also be conducted on the firm-wide internal model for regulatory capital determination level.
- (c) A distinct unit must conduct the initial and ongoing validation of all internal models. Internal models must be validated on at least an annual basis.
- (d) Board of directors and senior management must be actively involved in the risk control process and need to regard risk control as an essential aspect of the business to which significant resources are devoted. In this regard, the daily reports prepared by the independent risk control unit must be reviewed by a level of management with sufficient seniority and authority to enforce both reductions of positions taken by individual traders and reductions in the bank's overall risk exposure.
- (e) Internal models used to calculate market risk capital charges are likely to differ from those used by banks in their day-to-day internal management functions. Nevertheless, the starting point for the design of both the regulatory and the internal risk models should be the same. In particular, the valuation models that are embedded in both should be similar. These valuation models should be an integral part of the internal identification, measurement, management and internal reporting of price risks within the firm. As well, internal risk models should, at a minimum, cover the positions covered by the regulatory models, although they may cover more. In the construction of their regulatory capital models, banks should start from the methodologies used in their internal models with regard to risk factor identification, parameter estimation and proxy concept and deviate only if this is appropriate due to regulatory constraints. It is expected that the same risk factors are covered in the regulatory models as in the internal models.
- (f) A routine and rigorous programme of stress testing is required as a supplement to the risk analysis based on the output of the bank's risk measurement model. The results of stress testing must be reviewed at least monthly by senior management, used in the internal assessment of capital adequacy, and reflected in the policies and limits set by management and the board of directors. Where stress tests reveal particular vulnerability to a given set of circumstances, prompt steps must be taken to mitigate those risks appropriately (eg by hedging against that outcome or reducing the size of the bank's exposures, or increasing capital).
- (g) Banks need to have a routine in place for ensuring compliance with a documented set of internal policies, controls and procedures concerning the operation of the risk measurement system. The bank's risk measurement system must be well documented, for example, through a comprehensive risk management manual that describes the basic principles of the risk management system and that provides a detailed explanation of the empirical techniques used to measure market risk.

- (h) Any significant changes to an approved model must be approved by the supervisor prior to being implemented.
- (i) Risk measures must be calculated on the full set of positions which are in the scope of application of the model. The risk measures must be based on a sound theoretical basis, calculated correctly, and reported accurately.
- (j) An independent review of the risk measurement system should be carried out regularly by either the bank's own internal auditing process or an external auditor. This review should include both the activities of the business trading units and of the independent risk control unit. The review must be sufficiently detailed to determine for any failings which desks are impacted. A review of the overall risk management process should take place at regular intervals (not less than once a year) and should specifically address, at a minimum:
- The organisation of the risk control unit;
  - The adequacy of the documentation of the risk management system and process;
  - The accuracy and appropriateness of the risk measurement system (including any significant changes);
  - The verification of the consistency, timeliness and reliability of data sources used to run internal models, including the independence of such data sources;
  - The approval process for risk pricing models and valuation systems used by front and back-office personnel;
  - The scope of market risks captured by the risk measurement model;
  - The integrity of the management information system;
  - The accuracy and completeness of position data;
  - The accuracy and appropriateness of volatility and correlation assumptions;
  - The accuracy of valuation and risk transformation calculations; and
  - The verification of the model's accuracy through frequent backtesting and P&L attribution as described in Appendix B: *Supervisory framework for the use of backtesting in conjunction with the internal models approach to market risk capital requirements*.

### 3. Quantitative standards

171. Banks will have flexibility in devising the precise nature of their models, but the following minimum standards will apply for the purpose of calculating their capital charge. Individual banks or their supervisory authorities will have discretion to apply stricter standards.

- (a) "*Expected shortfall*" must be computed on a daily basis for the bank-wide internal model for regulatory capital purposes. Expected shortfall must also be computed on a daily basis for each trading desk that a bank wishes to include within the scope for the internal model for regulatory capital purposes.
- (b) In calculating the expected shortfall, a 97.5th percentile, one-tailed confidence interval is to be used.
- (c) In calculating the expected shortfall, the liquidity horizons described in point (k) should be reflected by scaling an expected shortfall calculated on a base horizon. For the scaling of expected shortfall to the liquidity horizon of the relevant risk factors, expected shortfall should be calculated at a base liquidity horizon of 10 days with full revaluation (for full-revaluation ES.

approaches that capture curvature risk such as grid-based methods would be appropriate), and the scaling to the liquidity horizon of a risk factor should be applied to this base horizon result as follows:

$$ES = \sqrt{\left(ES_T(P)\right)^2 + \sum_{j \geq 2} \left(ES_T(P, j) \sqrt{\frac{(LH_j - LH_{j-1})}{T}}\right)^2}$$

where:

- ES is the regulatory liquidity-adjusted expected shortfall;
- T is the length of the base horizon, ie 10 days;
- ES<sub>T</sub>(P) is the expected shortfall at horizon T of a portfolio with positions P = (p<sub>i</sub>) with respect to shocks to all risk factors that the positions P are exposed to;
- ES<sub>T</sub>(P, j) is the expected shortfall at horizon T of a portfolio with positions P = (p<sub>i</sub>) with respect to shocks for each position p<sub>i</sub> in the subset of risk factors Q(p<sub>i</sub>, j), with all other risk factors held constant;
- the ES at horizon T, ES<sub>T</sub>(P) and ES<sub>T</sub>(P, j) must be calculated for changes in risk factors over the time interval T with full revaluation (ie without approximation; specifically, neither ES<sub>T</sub>(P) nor ES<sub>T</sub>(P, j) should be scaled from a shorter horizon). For full-revaluation ES, approaches that capture curvature risk such as grid-based methods would be appropriate;
- Q(p<sub>i</sub>, j)<sub>i</sub> is the subset of risk factors whose liquidity horizons, as specified in point (k), for the desk where p<sub>i</sub> is booked are at least as long as LH<sub>j</sub> according to the table below. For example, Q(p<sub>i</sub>, 4)<sub>i</sub> is the set of risk factors with a 120-day horizon and a 250-day liquidity horizon. Note that, Q(p<sub>i</sub>, j) is a subset of Q(p<sub>i</sub>, j-1);
- the time series of changes in risk factors over the base time interval T may be determined by overlapping intervals; and
- LH<sub>j</sub> is the liquidity horizon j, with lengths in the following table:

<u>j</u>	<u>LH<sub>j</sub></u>
<u>1</u>	<u>10</u>
<u>2</u>	<u>20</u>
<u>3</u>	<u>60</u>
<u>4</u>	<u>120</u>
<u>5</u>	<u>250</u>

- In calculating the expected shortfall, instantaneous shocks equivalent to an n-business day movement in risk factors are to be used. n is defined based on the liquidity characteristics of the risk factor being modelled, as described in point (k) below. These shocks must be calculated based on a sample of n-business day horizon overlapping observations over the relevant sample period (see point (d)).<sup>21</sup>

<sup>21</sup> For historical simulation, this implies that two years of historical data are needed, because of a 12-month observation period and liquidity horizons up to one year. To calculate the different overlapping periods, a common starting point (t-x) must be defined. Starting from this data point, the P&L changes have to be estimated using the different liquidity horizons. Assume one instrument with a 10-day liquidity horizon and one with a 250-day liquidity horizon. Within the historical simulation, P&L<sub>t-x; t-x+10</sub> is added to P&L<sub>t-x; t-x+250</sub>; P&L<sub>t-x+1; t-x+11</sub> is added to P&L<sub>t-x+2; t-x+252</sub>; and so on. Finally, the ES is estimated based on

~~(e)~~(d) The expected shortfall measure must be calibrated to a period of stress. Specifically, the measure should replicate an expected shortfall charge that would be generated on the bank's current portfolio if the relevant risk factors were experiencing a period of stress. This is a joint assessment across all relevant risk factors, which will capture stressed correlation measures. This calibration is to be based on an "indirect" approach using a reduced set of risk factors. Banks are to specify a reduced set of risk factors that are relevant for their portfolio and for which there is a sufficiently long history of observations. This reduced set of risk factors is subject to supervisory approval and must meet the data quality requirements for a modellable risk factor as outlined in paragraph 1783(c) and have a minimum observation history of [10] years. The identified reduced set of risk factors must be able to explain a minimum of [75%] of the variation in the full ES model (ie the ES of the reduced set of risk factors should be at least equal to 75% of the fully specified ES model on average measured over the preceding 12 week period).

The expected shortfall for the portfolio using this set of risk factors, calibrated to the most severe 12-month period of stress available over the observation horizon, is calculated. That value is then scaled up by the ratio of the current expected shortfall using the full set of risk factors to the current expected shortfall measure using the reduced set of factors. The expected shortfall for risk capital purposes is therefore:

$$ES = ES_{R,S} \cdot \frac{ES_{F,C}}{ES_{R,C}}$$

where the expected shortfall for capital purposes (ES) is equal to the expected shortfall based on a stressed observation period using a reduced set of risk factors ( $ES_{R,S}$ ) multiplied by the ratio of the expected shortfall measure based on the current (most recent) 12-month observation period with a full set of risk factors ( $ES_{F,C}$ ) and the expected shortfall measure based on the current period with a reduced set of risk factors ( $ES_{R,C}$ ). For the purpose of this calculation, the ratio is floored at 1.

~~(e)~~(e) For measures based on current observations ( $ES_{F,C}$ ), banks must update their *data sets* no less frequently than once every month and should also reassess them whenever market prices are subject to material changes. This updating process must be flexible enough to allow for more frequent updates. The supervisory authority may also require a bank to calculate its Expected Shortfall using a shorter observation period if, in the supervisor's judgement; this is justified by a significant upsurge in price volatility. In this case, however, the period should be no shorter than [6] months.

~~(e)~~(f) For measures based on stressed observations ( $ES_{R,S}$ ), banks must identify the 12-month period of stress over the observation horizon in which the portfolio experiences the largest loss. The observation horizon for determining the most stressful 12 months must, at a minimum, span back to 2005. Observations within this period must be equally weighted. Banks must update their 12-month stressed periods no less than monthly, or whenever there are material changes in the risk factors in the portfolio.

~~(f)~~(g) No particular type of expected shortfall model is prescribed. So long as each model used captures all the material risks run by the bank, as confirmed through P&L attribution and backtesting, and conforms to each of the requirements set out above and below, supervisors

these aggregated scenarios. This implies that, for the 10-day liquidity horizon, the most recent data point used is 240 days before the data point used for the 250-day liquidity horizon.

may permit banks to use models based on either historical ~~simulation~~, or Monte Carlo simulation, s or other appropriate analytical methods.

~~(g)~~(h) Banks will have discretion to recognise empirical *correlations* within broad regulatory risk factor classes (interest rate risk, equity risk, foreign exchange risk, commodity risk and credit risk, including related options volatilities in each risk factor category). Empirical correlations across broad risk factor categories will be constrained by the supervisory aggregation scheme (see paragraph 1789), and must be calculated and used in a manner consistent with the applicable liquidity horizons, clearly documented and able to be explained to supervisors on request.

~~(h)~~(i) Banks' models must accurately capture the unique risks associated with *options* within each of the broad risk categories. The following criteria apply to the measurement of options risk:

- Banks' models must capture the *non-linear price characteristics* of options positions;
- Each bank's risk measurement system must have a set of risk factors that captures the *volatilities of the rates and prices* underlying option positions, ie vega risk. Banks with relatively large and/or complex options portfolios must have detailed specifications of the relevant volatilities. This means that banks should model the volatility surface across both strike price and tenor.

~~(i)~~(j) Each bank must meet, on a daily basis, a *capital requirement* expressed as the sum of the higher of (1) its previous day's aggregate capital charge for market risk according to the parameters specified in ~~paragraphs 177 to 184~~this section ( $ACC_{t-1}$ ); and (2) an average of the daily capital measures in the preceding 60 business days ( $ACC_{avg}$ ).

Therefore, the capital requirement  $c$  is calculated according to the following formula:

$$c = \max \{ ACC_{t-1}; ACC_{avg} \}$$

~~(j)~~(k) As set out in point (c), a scaled expected shortfall should be calculated based on the liquidity horizon  $n$  defined below.  ~~$n$  instantaneous shock equivalent to an  $n$ -business-day movement in risk factors is to be used.~~  $n$  is calculated using the following conditions:

- ~~b~~Banks must map each risk factor on to one of the risk factor categories shown ~~in (c)~~ below using consistent and clearly documented procedures;
- ~~t~~The mapping must be (i) set out in writing; (ii) validated by the Bank's risk management; (iii) made available to supervisors; and (iv) subject to internal audit; and
- $n$  is determined for each broad category of risk factor as set out in the following table. However, on a desk-by-desk basis  $n$  can be increased relative to the values in the table below (ie the liquidity horizon specified below can be treated as a floor). Where  $n$  is increased, the rationale must be documented and be subject to supervisory approval.;

Risk factor category	<i>n</i>	Risk factor category	<i>n</i>
Interest rate – <u>domestic currency of a bank: EUR, USD, GBP, AUD, JPY, SEK, and CAD</u>	<u>1020</u>	Equity price (small cap) volatility	120
Interest rate <u>ATM volatility</u> – <u>other currencies</u>	<u>2060</u>	Equity (other)	120
<u>Interest rate ATM volatility</u> <u>Interest rate (other)</u>	60	FX rate – <u>liquid currency pairs</u>	<u>2010</u>
<u>Interest rate (other than yields and ATM volatility)</u>	<u>60</u>	<u>FX rate (other currency pairs)</u> <sup>22</sup>	<u>20</u>
Credit spread – sovereign (IG)	20	FX volatility	60
Credit spread – sovereign (HY)	60	FX (other)	60
Credit spread – corporate (IG)	60	Energy price	20
Credit spread – corporate (HY)	120	Precious metal price	20
Credit spread – structured (cash and CDS)	250	Other commodities price	60
Credit (other)	250	Energy price volatility	60
Equity price (large cap)	10	Precious metal price volatility	60
Equity price (small cap)	20	Other commodities price volatility	120
Equity price (large cap) volatility	20	Commodity (other)	120

#### 4. Model validation standards

172. Banks must have processes in place to ensure that their internal models have been adequately validated by suitably qualified parties independent of the development process to ensure that they are conceptually sound and adequately capture all material risks. This validation must be conducted when the model is initially developed and when any significant changes are made to the model. Models must be periodically revalidated, particularly when there have been significant structural changes in the market or changes to the composition of the portfolio which might lead to the model no longer being adequate. Model validation should not be limited to P&L attribution and backtesting, but should, at a minimum, also include the following:

- (a) Tests to demonstrate that any assumptions made within the internal model are appropriate and do not underestimate risk. This may include the assumption of the normal distribution and any pricing models.
- (b) Further to the regulatory backtesting programmes, testing for model validation must use hypothetical changes in portfolio value that would occur were end-of-day positions to remain unchanged. It therefore excludes fees, commissions, bid-ask spreads, ~~net interest income~~ and intraday trading. Moreover, additional tests are required which may include, for instance:
  - Testing carried out for longer periods than required for the regular backtesting programme (eg three years);
  - Testing carried out using confidence intervals other than the 97.5% and 99% interval required under the quantitative standards;

<sup>22</sup> USD/EUR, USD/JPY, USD/GBP, USD/AUD, USD/CAD, USD/CHF, USD/MXN, USD/CNY, USD/NZD, USD/RUB, USD/HKD, USD/SGD, USD/TRY, USD/KRW, USD/SEK, USD/ZAR, USD/INR, USD/NOK, USD/BRL, EUR/JPY, EUR/GBP, EUR/CHF and JPY/AUD.

- Testing carried out using liquidity horizons other than those applicable to the risk factors or not using overlapping periods;
  - Testing of portfolios should be done at both the trading desk and bank-wide level; and
  - Testing of the necessary inputs for an IDR VaR measure at the 99.9% interval.
- (c) The use of hypothetical portfolios to ensure that the model is able to account for particular structural features that may arise, for example:

Where data histories for a particular instrument do not meet the quantitative standards in paragraph 17&1 and where the bank has to map these positions to proxies, then the bank must ensure that the proxies produce conservative results under relevant market scenarios;

- Ensuring that material basis risks are adequately captured. This may include mismatches between long and short positions by maturity or by issuer;
- Ensuring that the model captures concentration risk that may arise in an undiversified portfolio.

## 5. Determining the eligibility of trading activities

173. The process for determining the eligibility of trading activities for the internal models-based approach is based on a four-stage approach.

- (a) The first step is the overall assessment of both the bank's organisational infrastructure (including the definition and structure of trading desks) and its firm-wide internal risk capital model. These evaluations are based on both qualitative and quantitative factors. The quantitative factors are based on backtesting and are detailed further in the *Supervisory framework for the use of backtesting and profit and loss attribution in conjunction with the internal models approach to market risk capital measurement*.
- (b) The second step breaks the model approval process into smaller, more discrete, elements – the regulatory trading desks (as defined in paragraphs 27 to 31~~21 to 23~~). At this stage, banks must nominate which trading desks are in-scope for model approval and which trading desks are out-of-scope. Banks must specify in writing the basis for the nomination. Banks must not nominate desks to be out-of-scope due to standardised approach capital charges being less than the modelled requirements. Desks that are out-of-scope will be capitalised according to the standardised approach on a portfolio basis. Desks that opt out of the internal models approach at this stage must remain ineligible for model inclusion for a period of at least one year.

For those desks that the bank has deemed to be in-scope for the internal models approach, model approval is required at the trading desk level. Each trading desk must satisfy P&L attribution, backtesting requirements and a model-independent risk assessment tool on an ongoing basis.

Backtesting requirements are based on comparing each desk's 1-day static value-at-risk measure at both the 97.5th percentile and the 99th percentile, using at least one year of current observations of the desk's one-day P&L<sup>23</sup>. If any given desk experiences either more than [12] exceptions at the 99th percentile or [30] exceptions at the 97.5th percentile in the most recent

<sup>23</sup> Risk factors that are captured in the CVA capital framework, can be excluded from the P&L for the purpose of the backtesting requirements in the market risk framework.

12-month period, all of its positions must be capitalised using the standardised approach.<sup>24</sup> Positions must continue to be capitalised using the standardised method until the desk no longer exceeds the above thresholds over the prior 12 months.

P&L attribution requirements are based on two metrics: mean unexplained daily P&L (ie risk-theoretical P&L minus actualhypothetical P&L) over the standard deviation of actualhypothetical daily P&L ~~(excluding the impact of new transactions)~~ and the ratio of variances of unexplained daily P&L and actualhypothetical daily P&L ~~(excluding the impact of new transactions)~~. These ratios are calculated monthly and reported prior to [the end of the following month]. If the first ratio is outside of the range of [-10% to +10%] or if the second ratio were in excess of [20%] then the desk experiences a breach. If the desk experiences four or more breaches within the prior 12 months then it must be capitalised under the standardised approach. The desk must remain on the standardised approach until it can pass the monthly P&L attribution requirement and provided it has satisfied its backtesting exceptions requirements. Trading desks that do not satisfy the minimum backtesting, P&L attribution and model-independent risk assessment tool requirements are ineligible for capitalisation using the internal models approach. Risk exposures within these ineligible desks must be included with the out-of-scope desks and capitalised according to the standardised methodology on a portfolio basis.

For an institution to remain eligible for capitalisation under the internal models approach, a minimum of [10%] of the bank's aggregated market risk capital charges must be based on positions held in desks that qualify for inclusion in the bank's internal model for regulatory capital.

(c) Step three is a risk factor analysis. Following the identification of eligible trading desks, this step will determine which risk factors within the identified desks are eligible to be included in the bank's internal models for regulatory capital. For a risk factor to be classified as modellable by a bank, there must be continuously available "real" prices for a sufficient set of representative transactions. A price will be considered "real" if:

- It is a price at which the institutions has conducted a transaction;
- It is a verifiable price for an actual transaction between other arms-length parties; or
- The price is obtained from a committed quote.

To be considered modellable, a risk factor should have at least 24 observations per year (measured over the most period used to calibrate the current expected shortfall model) with a maximum period of one month between two consecutive observations.<sup>25</sup> Where a risk factor deemed modellable is not available during the historical period used for stressed calibration, proxy data may be used provided the general approach for generating old missing data must be documented and part of the independent review of the internal model by the bank's supervisory authority.

Some risk factors that would be considered modellable under the above criteria may be temporarily excluded from a bank's firm-wide regulatory capital model. In these circumstances,

<sup>24</sup> Desks with exposure to issuer default risk credit-risk exposure must pass a two-stage approval process. First, the market risk model must pass backtesting and P&L attribution. Conditional on approval of the market risk model, the desk than may apply for approval to model incremental default risk (paragraph 176186). Desks that fail either test must be capitalised under the standardised approach.

<sup>25</sup> In particular, a bank may add modellable risk factors, and replace non-modellable risk factors by a basis between these additional modellable risk factors and these non-modellable risk factors. This basis will then be considered as a non-modellable risk factor. A combination between modellable and non-modellable risk factors will be a non-modellable risk factor.

the bank will be given [12 months] to include the relevant risk factors in the regulatory capital model.

(d) Step four is a model-independent risk assessment tool for desks. Each desk must calculate these three items:

(i) *Capital*: the desk-level Expected Shortfall (ES) plus the sum of capital requirements emerging from the stress scenario add-ons under the non-modellable risk factors framework. The ES calculated for the desk should factor in varying liquidity horizons in risk factors, but be defined before any regulatory multipliers (eg those imposed as a result of poor backtesting performance).

(ii) *Exposure measure*: The exposure measure for the desk calculated as set out in the consultative paper "Revised Basel III leverage ratio framework and disclosure requirements" published by the Committee in June 2013.<sup>26</sup>

(iii) *Threshold*: as set out in the following table:

Desk description	Threshold (%)
[to be determined following the QIS]	[to be determined following the QIS]

The bank must test each desk against the threshold as follows. If the following inequality is breached then the model-based method may not be used and the desk must use the standardised approach.

$$\frac{Capital}{Exposure\ Measure} < Threshold$$

## 6. Interaction with the standardised approach methodology

174. Banks must calculate the standardised capital charge for each trading desk as if it were a standalone regulatory portfolio. This calculation must be performed at least monthly and will:

- (a) Serve as an indication of the fallback capital charge for those desks that fail the eligibility criteria for inclusion in the bank's internal model (as outlined in paragraphs 1780 and 1781).
- (b) Generate information on the capital outcomes of the internal models relative to a consistent benchmark and facilitate comparison in implementation between banks and/or across jurisdictions.
- (c) Monitor over time the relative calibration of standardised and modelled approaches, facilitating adjustments as needed.
- (d) Provide macroprudential insight in an ex ante consistent format.

## 7. Specification of market risk factors

175. An important part of a bank's internal market risk measurement system is the specification of an appropriate set of market risk factors, ie the market rates and prices that affect the value of the bank's trading positions. The risk factors contained in a market risk measurement system should be sufficient to capture the risks inherent in the bank's portfolio of on- and off-balance sheet trading positions. Although banks will have some discretion in specifying the risk factors for their internal models, the following requirements should be fulfilled.

<sup>26</sup> [www.bis.org/publ/bcbs251.pdf](http://www.bis.org/publ/bcbs251.pdf).

- (a) Factors that are deemed relevant for pricing should be included as risk factors in the bank's internal models. Where a risk factor is incorporated in a pricing model but not in the risk capital model, the bank must justify this omission to the satisfaction of its supervisor. In addition, the ES model and any stress scenarios calculated for non-modellable risk factors must capture non-linearities for options and other relevant products (eg mortgage-backed securities), as well as correlation risk and relevant basis risks (eg between credit default swaps and bonds). Moreover, the supervisor has to be satisfied that proxies are used which show a good track record for the actual position held (ie an equity index for a position in an individual stock).
- (b) For *interest rates*, there must be a set of risk factors corresponding to interest rates in each currency in which the bank has interest rate-sensitive on- or off-balance sheet positions. The risk measurement system should model the yield curve using one of a number of generally accepted approaches, for example, by estimating forward rates of zero coupon yields. The yield curve should be divided into various maturity segments in order to capture variation in the volatility of rates along the yield curve; there will typically be one risk factor corresponding to each maturity segment. For material exposures to interest rate movements in the major currencies and markets, banks must model the yield curve using a minimum of [six] risk factors. However, the number of risk factors used should ultimately be driven by the nature of the bank's trading strategies. For instance, a bank with a portfolio of various types of securities across many points of the yield curve and that engages in complex arbitrage strategies would require a greater number of risk factors to capture interest rate risk accurately. For *credit* the risk measurement system must incorporate separate risk factors to capture spread risk (eg between bonds and swaps). A variety of approaches may be used to capture the spread risk arising from less than perfectly correlated movements between government and other fixed-income interest rates, such as specifying a completely separate yield curve for non-government fixed-income instruments (for instance, swaps or municipal securities) or estimating the spread over government rates at various points along the yield curve.
- (c) For *exchange rates* (which may include gold), the risk measurement system should incorporate risk factors corresponding to the individual foreign currencies in which the bank's positions are denominated. Since the expected shortfall figure calculated by the risk measurement system will be expressed in the bank's domestic currency, any net position denominated in a foreign currency will introduce a foreign exchange risk. Thus, there must be risk factors corresponding to the exchange rate between the domestic currency and each foreign currency in which the bank has a significant exposure.
- (d) For *equity prices*, there should be risk factors corresponding to each of the equity markets in which the bank holds significant positions:
- At a minimum, there should be a risk factor that is designed to capture market-wide movements in equity prices (eg a market index). Positions in individual securities or in sector indices could be expressed in "beta-equivalents" relative to this market-wide index;
  - A somewhat more detailed approach would be to have risk factors corresponding to various sectors of the overall equity market (for instance, industry sectors or cyclical and non-cyclical sectors). As above, positions in individual stocks within each sector could be expressed in beta-equivalents relative to the sector index;
  - The most extensive approach would be to have risk factors corresponding to the volatility of individual equity issues.
  - The sophistication and nature of the modelling technique for a given market should correspond to the bank's exposure to the overall market as well as its concentration in individual equity issues in that market.

- (e) For *commodity prices*, there should be risk factors corresponding to each of the commodity markets in which the bank holds significant positions.
- For banks with relatively limited positions in commodity-based instruments, a straightforward specification of risk factors would be acceptable. Such a specification would likely entail one risk factor for each commodity price to which the bank is exposed (including different risk factors for different geographies where relevant). In cases where the aggregate positions are quite small, it might be acceptable to use a single risk factor for a relatively broad sub-category of commodities (for instance, a single risk factor for all types of oil);
  - For more active trading, the model must also take account of variation in the “convenience yield”<sup>27</sup> between derivatives positions such as forwards and swaps and cash positions in the commodity.
- (f) All securitised products are ineligible for inclusion in the models-based capital charge and must be capitalised using the standardised approach.

## 8. Default risk

176. Banks must have a separate internal model to measure the default risk of trading book positions. The general criteria in paragraphs 1676 to 16978 and the qualitative standards in paragraph 1780 also apply to the default risk model.

- (a) Default risk is the risk of direct loss due to an obligor’s default as well as the potential for indirect losses that may arise from a default event.
- (b) Default risk must be measured using a VaR model. Banks must use a ~~two-factor~~ default simulation model with two systemic risk factors. Default correlations must be based on credit spreads or on listed equity prices. Banks must have clear policies and procedures that describe the correlation calibration process, documenting in particular in which cases credit spreads or equity prices are used. Correlations must be based on a period of stress (as defined in paragraph 1781(d)), estimated over a 10-year time horizon and be based on a [one]-year liquidity horizon. The VaR calculation must be done weekly and be based on a one-year time horizon at a one-tail, 99.9th percentile confidence level.
- (c) All positions subject to the market risk framework, with the exception of those positions subject to standardised charges or whose valuations depend solely on commodity prices or foreign exchange rates are subject to the default risk model. Therefore, sovereign exposures (including those denominated in the sovereign’s domestic currency), equity positions and defaulted debt positions must be included in the model. For equity positions, the default of an issuer must be modelled as resulting in the equity price dropping to zero.
- (d) The default risk model capital requirement is the greater of: (1) the average of the default risk model measures over the previous 12 weeks; or (2) the most recent default risk model measure.
- (e) A bank must assume constant positions over the one-year horizon.
- (f) Default risk must be measured for each obligor.
- PDs implied from market prices are not acceptable unless they are corrected to obtain an objective probability of default.<sup>28</sup>

<sup>27</sup> The convenience yield reflects the benefits from direct ownership of the physical commodity (for example, the ability to profit from temporary market shortages), and is affected both by market conditions and by factors such as physical storage costs.

- PDs are subject to a floor of 0.03%.
- (g) The model may reflect netting of long and short exposures to the same obligor, and if such exposures span different instruments with exposure to the same obligor, the effect of the netting must account for different losses in the different instruments (eg differences in seniority).
- (h) The basis risk between long and short exposures of different obligors must be modelled explicitly. The potential for offsetting default risk among long and short exposures across different obligors must be included through the modelling of defaults. The pre-netting of positions before input into the model other than as described in (g) is not allowed.
- (i) The default risk model must recognise the impact of correlations between defaults among obligors, including the effect on correlations of periods of stress as described in (b).
- These correlations should be based on objective data and not chosen in an opportunistic way where a higher correlation is used for portfolios with a mix of long and short positions and a low correlation used for portfolios with long only exposures.
  - A bank must validate that its modelling approach for these correlations is appropriate for its portfolio, including the choice and weights of its systematic risk factors. A bank must document its modelling approach and the period of time used to calibrate the model.
  - These correlations must be measured over a liquidity horizon of one year.
  - These correlations should be calibrated over a period of at least 10 years.
  - Firms need to reflect all significant basis risks in recognising these correlations, including, for example, maturity mismatches, internal or external ratings, vintage etc.
- (j) The model must capture any material mismatch between a position and its hedge.
- (k) The model must reflect the effect of issuer and market concentrations, as well as concentrations that can arise within and across product classes during stressed conditions.
- (l) As part of this default risk model, the bank must calculate, for each and every position subjected to the model, an incremental loss amount that the bank would incur in the event that the obligor of the position defaults.
- (m) These loss estimates must reflect the economic cycle; for example, the model must incorporate the dependence of the recovery on the systemic risk factors.
- (n) The model must reflect the non-linear impact of options and other positions with material non-linear behaviour with respect to default.
- (o) To avoid double counting of the risk from mark-to-market loss and the risk of loss from default, the model may assess default risk from the perspective of the incremental loss from default in excess of the mark-to-market losses already taken at the time of default.
- (p) Owing to the high confidence standard and long capital horizon of the IDR, robust direct validation of the IDR model through standard backtesting methods at the 99.9%/one-year soundness standard will not be possible. Accordingly, validation of an IRC model necessarily must rely more heavily on indirect methods including but not limited to stress tests, sensitivity analyses and scenario analyses, to assess its qualitative and quantitative reasonableness,

<sup>28</sup> In other words, market implied PDs are not acceptable.

particularly with regard to the model's treatment of concentrations. Given the nature of the IDR soundness standard such tests must not be limited to the range of events experienced historically. The validation of an IDR model represents an ongoing process in which supervisors and firms jointly determine the exact set of validation procedures to be employed.

(q) Firms should strive to develop relevant internal modelling benchmarks to assess the overall accuracy of their IDR models.

(r) Due to the unique relationship between credit spread and default risk, banks must seek approval for each desk with exposure to these risks, both for credit spread risk and default risk. Desks which do not receive approval will be deemed ineligible for internal modelling standards and be subject to the standardised capital framework.

(s) PD estimates should adhere to the following standards:

- Where an institution has approved PD estimates as part of the internal ratings-based (IRB) approach, this data must be used. Where such estimates do not exist, PDs should be computed using a methodology consistent with the IRB methodology unless otherwise specified below.
- Risk neutral PDs should not be used as estimates of observed (historical) PDs.
- PDs should be measured based on historical default data including both formal default events and price declines equivalent to default losses. Where possible, this data should be based on publicly traded securities over a complete economic cycle. The minimum historical observation period for calibration purposes is 5 years.
- PDs should be estimated based on historical data of default frequency over a one year period. The PD may also be calculated on a theoretical basis (eg geometric scaling) provided that the bank is able to demonstrate that such theoretical derivations are in line with historical default experience.
- PDs provided by external sources may also be used by institutions, provided they can be shown to be relevant for the bank's portfolio.

(t) LGD estimates should adhere to the following standards:

- Where an institution has approved LGD estimates as part of the internal ratings based (IRB) approach, this data must be used. Where such estimates do not exist, LGDs should be computed using a methodology consistent with the IRB methodology unless otherwise specified below.
- LGDs should be determined from a market perspective, based on a position's current market value less the position's expected market value subsequent to default. The LGD should reflect the type and seniority of the position and may not be less than zero.
- LGDs should be based on an amount of historical data that is sufficient to derive robust, accurate estimates.
- LGDs provided by external sources may also be used by institutions, provided they can be shown to be relevant for the bank's portfolio.

(u) Banks should establish a hierarchy ranking their preferred sources for PDs and LGDs, in order to avoid the cherry-picking of parameters.

## 9. Capitalisation of risk factors

177. For those desks that are permitted to be on the internal models approach, all risk factors that are deemed to be "modellable" must be included in the bank's internal, firm-wide, expected shortfall

model. The bank must calculate its internally modelled capital charge at the bank-wide level using this model, with no supervisory constraints on cross risk factor correlations ( $IMCC(C)$ ).

178. The bank must calculate a series of partial expected shortfall charges (ie all other risk factors should be held constant) for the range of broad regulatory risk factor classes (interest rate risk, equity risk, foreign exchange risk, commodity risk and credit risk). These partial expected shortfall values ( $IMCC(C_i)$ ) will then be summed to provide an aggregated risk-factor expected shortfall charge.

179. The aggregate capital charge for modellable risk factors ( $IMCC$ ) is based on the weighted average of the constrained and unconstrained expected shortfall charges.

$$IMCC = \rho(IMCC(C)) + (1 - \rho) \left( \sum_{i=1}^R IMCC(C_i) \right)$$

$$\text{where } IMCC(C) = ES_{R,S} \times \frac{ES_{F,C}}{ES_{R,C}} \text{ and } IMCC(C_i) = ES_{R,S,i} \times \frac{ES_{F,C,i}}{ES_{R,C,i}}$$

The stress period used in the ~~desk~~risk class-level  $ES_{R,S,i}$  should be the same as that used to calculate the portfolio-wide  $ES_{R,S}$ .

$\rho$  is the relative weight assigned to the firm's internal model. The value of  $\rho$  is [X] [to be determined by the Committee following the QIS. [X] will be consistent across jurisdictions and institutions.]

For regulatory capital purposes, the aggregated charge associated with approved desks ( $C_A$ ) is equal the maximum of the most recent observation and a weighted average of the previous ~~12~~60 ~~weeks~~days scaled by a multiplier ( $m_c$ ).

$$C_A = \max \left\{ IMCC_{t-1} + SES_{t-1} \cdot m_c \cdot (IMCC_{avg} + SES_{avg}) \right\}$$

where  $SES$  is the aggregate regulatory capital measure for  $K$  risk factors in model-eligible desks that are deemed unmodellable.

The multiplication factor  $m_c$  will be [3] or set by individual supervisory authorities on the basis of their assessment of the quality of the bank's risk management system, subject to an absolute minimum of [3]. Banks must add to this factor a "plus" directly related to the ex-post performance of the model, thereby introducing a built-in positive incentive to maintain the predictive quality of the model. The plus will range from 0 to 1 based on the outcome of the backtesting of the bank's *daily VaR at the 99<sup>th</sup> percentile* based on current observations on the full set of risk factors ( $VaR_{FC}$ ). If the backtesting results are satisfactory and the bank meets all of the qualitative standards set out in paragraph ~~170~~180, the plus factor could be zero. Appendix B presents in detail the approach to be applied for backtesting and the plus factor. Banks must develop the capability to perform backtests using both hypothetical (ie using changes in portfolio value that would occur were end-of-day positions to remain unchanged) and actual trading (~~ie excluding fees, and commissions, and net interest income~~) outcomes<sup>29</sup>. The multiplication factor will, ~~however,~~ be based upon ~~hypothetical~~the maximum of the exceptions generated by the two backtesting results.

180. Each non-modellable risk factor is to be capitalised using a stress scenario that is calibrated to be at least as prudent as the expected shortfall calibration used for modelled risks (ie a loss calibrated to a 97.5% confidence threshold over a period of extreme stress for the given risk factor). For each non-modellable risk factor, the liquidity horizon of the stress scenario should be the greater of the largest time interval between two consecutive price observations over the prior year and the liquidity horizon

<sup>29</sup> To the extent that risk factors are captured in the CVA capital framework, their impact on the CVA component of the fair value of financial instruments has to be excluded from the P&L for the purpose of the market risk framework; In addition, the impact on the DVA component of the fair value of financial instruments also have to be excluded from the P&L. Any other fair value adjustments need to be included in the P&L.

assigned to the risk factor in paragraph ~~171~~181. No correlation or diversification effect between non-modellable risk factors should be assumed. In the event that a bank cannot provide a stress scenario which is acceptable for the supervisor, the bank will have to use the maximum possible loss as the stress scenario.

The aggregate regulatory capital measure for  $K$  risk factors in model-eligible desks that are deemed unmodellable ( $SES$ ) is:

$$SES = \sum_{j=1}^K SES_{NM,j}$$

~~W~~where  $SES_{NM,j}$  is the stress scenario capital charge for non-modellable risk  $j$ .

181. The additional regulatory capital charge for modellable risk positions subject to default risk is  $IDR$  (as described in paragraph ~~176~~186 above).

182. The aggregate capital charge for those desks eligible for the internal models approach is equal to the aggregate capital charge for modellable risk factors ( $C_{A,M}$ ) plus the sum of the individual capital requirements for non-modellable risk factors ( $C_{A,U}$ ) plus the charge for incremental default risk ( $IDR$ ).

183. The regulatory capital charge associated with risks from unapproved desks ( $C_U$ ) is to be calculated by aggregating all such risks and applying the standardised charge.

~~$$C_U = \sum_{l=1}^N SM_l$$~~

~~where  $SM_l$  is the standardised charge for desk  $l$  of  $N$  unapproved desks.~~

184. The aggregate capital charge for market risk ( $ACC$ ) ~~under the internal models approach~~ is equal to the aggregate capital requirement for eligible trading desks plus the standardised capital charge for risks from ineligible-unapproved trading desks.

$$ACC = C_A + IDR + C_U$$

## 10. Stress testing

185. Banks that use the internal models approach for meeting market risk capital requirements must have in place a rigorous and comprehensive stress testing program. Stress testing to identify events or influences that could greatly impact banks is a key component of a bank's assessment of its capital position.

186. Banks' stress scenarios need to cover a range of factors that can create extraordinary losses or gains in trading portfolios, or make the control of risk in those portfolios very difficult. These factors include low-probability events in all major types of risk, including the various components of market, credit, and operational risks. Stress scenarios need to shed light on the impact of such events on positions that display both linear and non-linear price characteristics (ie options and instruments that have option-like characteristics).

187. Banks' stress tests should be both of a quantitative and qualitative nature, incorporating both market risk and liquidity aspects of market disturbances. Quantitative criteria should identify plausible stress scenarios to which banks could be exposed. Qualitative criteria should emphasise that two major goals of stress testing are to evaluate the capacity of the bank's capital to absorb potential large losses and to identify steps the bank can take to reduce its risk and conserve capital. This assessment is integral to setting and evaluating the bank's management strategy and the results of stress testing should be routinely communicated to senior management and, periodically, to the bank's board of directors.

188. Banks should combine the use of supervisory stress scenarios with stress tests developed by banks themselves to reflect their specific risk characteristics. Specifically, supervisory authorities may ask banks to provide information on stress testing in three broad areas, which are discussed in turn below.

#### Supervisory scenarios requiring no simulations by the bank

189. Banks should have information on the largest losses experienced during the reporting period and should make this available for supervisory review. This loss information could be compared to the level of capital that results from a bank's internal measurement system. For example, it could provide supervisory authorities with a picture of how many days of peak day losses would have been covered by a given expected shortfall estimate.

#### Scenarios requiring a simulation by the bank

190. Banks should subject their portfolios to a series of simulated stress scenarios and provide supervisory authorities with the results. These scenarios could include testing the current portfolio against past periods of significant disturbance, for example, the 1987 equity crash, the Exchange Rate Mechanism crises of 1992 and 1993, the increase in interest rates in the first quarter of 1994, the 1998 Russian financial crisis, the 2000 bursting of the technology stock bubble, the 2007–08 sub-prime crisis, or the 2011–12 euro zone crisis, incorporating both the large price movements and the sharp reduction in liquidity associated with these events. A second type of scenario would evaluate the sensitivity of the bank's market risk exposure to changes in the assumptions about volatilities and correlations. Applying this test would require an evaluation of the historical range of variation for volatilities and correlations and evaluation of the bank's current positions against the extreme values of the historical range. Due consideration should be given to the sharp variation that at times has occurred in a matter of days in periods of significant market disturbance. For example, the above-mentioned situations involved correlations within risk factors approaching the extreme values of 1 or –1 for several days at the height of the disturbance.

#### Scenarios developed by the bank itself to capture the specific characteristics of its portfolio.

191. In addition to the scenarios prescribed by supervisory authorities under paragraphs ~~199 and 200~~[189 and 190](#), a bank should also develop its own stress tests which it identifies as most adverse based on the characteristics of its portfolio (eg problems in a key region of the world combined with a sharp move in oil prices). Banks should provide supervisory authorities with a description of the methodology used to identify and carry out the scenarios as well as with a description of the results derived from these scenarios.

192. The results should be reviewed periodically by senior management and should be reflected in the policies and limits set by management and the board of directors. Moreover, if the testing reveals particular vulnerability to a given set of circumstances, the national authorities would expect the bank to take prompt steps to manage those risks appropriately (eg by hedging against that outcome or reducing the size of its exposures).

## 11. External validation

193. The validation of models' accuracy by external auditors and/or supervisory authorities should at a minimum include the following steps:

- (a) Verifying that the *internal validation processes* described in paragraph ~~182 and 183~~[172 and 173](#) are operating in a satisfactory manner;
- (b) Ensuring that the *formulae* used in the calculation process as well as for the pricing of options and other complex instruments are validated by a qualified unit, which in all cases should be independent from the trading area;

- (c) Checking that the *structure* of internal models is adequate with respect to the bank's activities and geographical coverage;
- (d) Checking the results of both the banks' *backtesting* of its internal measurement system (ie comparing expected shortfall estimates with actual profits and losses) and its *P&L attribution* process to ensure that the models provide a reliable measure of potential losses over time. This means that banks should make the results as well as the underlying inputs to their expected shortfall calculations and details of the P&L attribution exercise available to their supervisory authorities and/or external auditors on request; and
- (e) Making sure that data flows and processes associated with the risk measurement system are *transparent and accessible*. In particular, it is necessary that auditors and supervisory authorities are in a position to have easy access, whenever they judge it necessary and under appropriate procedures, to the models' specifications and parameters.

# Appendix A

## Trading desk definitions

For the purpose of regulatory capital calculations, a “trading desk” is defined as a group of traders or trading accounts (key element #1 below) that implements a well-defined business strategy (key element #2 below), operating within a clear risk management structure (key element #3 below), defined by the bank but with the definition approved by supervisors for capital purposes (key element #4 below).

Key element #1: a “trading desk” for the purposes of the regulatory capital framework is an unambiguously defined **group of traders or trading accounts**.

- An individual trader or trading account is an **indisputable and unambiguous unit of observation** in accounting for trading activity.
- The desk must have a **Head Trader**.
  - The head trader must have direct oversight of the group of traders or trading accounts.
  - Each trader or each trading account in the desk must have a clearly defined specialty(ies).
- **Each trader or each trading account must be assigned to only one trading desk.** For the Head Trader, his role may cut across several businesses. Nonetheless, a given trader can only be the Head Trader at one desk and not multiple desks.
- The desk must have a clear reporting line to bank senior management, and should have a clear and formal compensation policy clearly linked to the pre-established objectives of the desk.

Key element #2: a “trading desk” must have a **well-defined business strategy**.

- There must be a clear description of the **economics** of the business strategy for the desk, its **primary activities** and **trading/hedging strategies**:
  - Economics: what is the economics behind the strategy (eg trading on shape of the yield curve)? How much of the activities are customer-driven? Does it entail trade origination and structuring, or execution services, or both?
  - Primary activities: what is the list of **permissible instruments** and, out of this list, which are the instruments most frequently traded?
  - Trading/hedging strategies: how would these instruments be hedged, what are the expected slippages and mismatches of hedges, and what is the expected holding period for positions?
- The management team at the desk (starting from the Head Trader) must have a clear annual plan for the budgeting and staffing of the desk.
- Regular Management Information reports, covering revenue, costs and risk-weighted assets for the desk.

Key element #3: a “trading desk” must have a **clear risk management structure**.

- Risk management responsibilities: the bank must identify key groups and personnel responsible for overseeing the risk-taking activities at the desk.
- Limits setting: the desk must have

- Well defined trading limits or directional exposures at the desk level that are based on the appropriate market risk metric (eg CS01 and/or JTD for a credit desk), or just overall notional limit.
- Well defined trader mandates.
- These limits must be reviewed at least annually by senior management at the firm.
- Risk reporting: the desk must produce, at least once a week
  - **P&L reports**, which would be periodically reviewed, validated and modified (if necessary) by Product Control.
  - **Internal and regulatory risk measure reports**, including desk VaR/ES, desk VaR/ES sensitivities to risk factors, backtesting and p-value.

Key element #4: a "trading desk" must be **proposed by the bank** but **approved by supervisors**.

- The bank should be allowed to propose the trading desk structure per their organisational structure, consistent with the requirements in key elements #1 to #3 above.
- The bank must prepare a policy document for each desk it defines, documenting how the desk satisfies key elements #1 to #3 above.
- Supervisors will treat the definition of the trading desk as part of the initial model approval for the desk, as well as ongoing approval:
  - Supervisors may determine, based on the size of the bank's overall trading operations, whether the proposed desk definitions are sufficiently granular.
  - Supervisors should check that the bank's proposed definition of trading desk meets the criteria listed in Key elements #1, #2 and #3.

## Appendix B

# Supervisory framework for the use of backtesting and profit and loss attribution in conjunction with the internal models approach to market risk capital requirements

## I. Introduction

This document presents the framework developed by the Basel Committee on Banking Supervision ("the Committee") for incorporating backtesting and profit and loss (P&L) attribution into the internal models approach to market risk capital requirements. It represents an elaboration of paragraph ~~183-173~~ of the internal models ~~rules-Accord~~ text.

P&L attribution and backtesting are critical components of the revised internal models approach for capitalising trading activities. In order for a bank to obtain approval to use internal models to capitalise its trading exposures, it must meet several qualitative and quantitative criteria (outlined in paragraphs ~~180 and 181~~170 and 171). A key component of these requirements is that the bank demonstrates that its internal models, both at the firm-wide level and for individual trading desks, can model P&L behaviour with an appropriate degree of accuracy.

The essence of both P&L attribution and backtesting efforts is the comparison of actual trading results with model-generated risk measures. If this comparison is close enough, the tests raise no issues regarding the quality of the risk measurement models. In some cases, however, the comparison uncovers sufficient differences that problems almost certainly must exist, either with the model or with the assumptions of the backtest. In between these two cases is a grey area where the test results are, on their own, inconclusive.

The Committee believes that the framework outlined in this document strikes an appropriate balance between recognition of the potential limitations of P&L attribution and backtesting and the need to put in place appropriate constraints on the use of internal models (as well as incentives for model improvement).

The remainder of this document describes the P&L attribution/backtesting framework that accompanies the internal models capital requirement. The next section deals with the nature of the tests themselves, while the section that follows concerns the supervisory interpretation of the results and sets out the agreed standards of the Committee in this regard.

## II. Description of the P&L attribution and backtesting frameworks at the trading desk level

The P&L attribution and backtesting frameworks developed by the Committee consist of a periodic comparison of the bank's daily risk measures (expected shortfall or value at risk) with the subsequent daily profit or loss ("trading outcome"). The risk measures are intended to be larger than all but a certain fraction of the trading outcomes, where that fraction is determined by the confidence level of the risk measure. Comparing the risk measures with the trading outcomes simply means that the bank counts the number of times that the risk measures were larger than the trading outcome. The fraction actually

covered can then be compared with the intended level of coverage to gauge the performance of the bank's risk model.

## P&L attribution

For the P&L attribution assessment, all of the instruments held within a particular trading desk would be identified and considered as a distinct portfolio. All of the risk factors for that portfolio that enter into the desk's risk management model and that contribute to the regulatory capital calculation would be used to calculate a "risk-theoretical" P&L. This "risk-theoretical" P&L is defined as the daily P&L explained by the observed daily variations of the risk factors included in the internal model capital charge computation or in the stress scenarios used to define the aggregate capital charge for market risk, and by the pricing functions (or approximations) used to determine these quantities. Observed movements in all risk factors contained in the firm's internal capital model on a given day should be used to calculate a risk-theoretical P&L for that day. The calculation of the risk-theoretical P&L should be based on the pricing models embedded in the firm's ES model and not front office pricing systems.

This risk-theoretical P&L would be compared to the actual daily desk-level P&L (excluding the impact of new trades), based on the mark-to-market value of the trading desk's instruments used for the books and records of the bank. The P&L attribution should not take into account any risk factors that the bank does not include in its desk's risk management model.

The desk's risk management model, for the above purpose, includes all risk factors which the bank includes in its internal ES model. These may include any risk factors that the supervisor subsequently deems to be unmodellable and for which capital requirements are calculated based on individual stress scenarios.

This comparison between the risk-theoretical and actual P&L is performed to determine whether the risk factors included in the desk's risk management model capture the material drivers of the bank's actual P&L. A significant degree of association between the two P&L measures, observed over a suitable time period, would be required for the trading desk to be deemed eligible for internal modelling. The Committee accepts that the risk-theoretical P&L can vary from the actual daily P&L for a number of reasons. However, the rationale for this assessment is that a desk's risk management model should provide a reasonably accurate assessment of the risks of a trading desk to be deemed eligible for the internal models-based approach.

The P&L attribution requirements are based on two metrics:

- The mean of the difference between the risk-theoretical and actual/hypothetical P&L (unexplained P&L) divided by the standard deviation of the actual/hypothetical P&L; and
- The variance of the unexplained P&L divided by the variance of the actual/hypothetical P&L.

Banks are required to estimate and report these ratios for each trading desk on a monthly basis. The decision to include or exclude a specific desk in the perimeter of the internal model would be taken if the averages of the proposed measures are inside supervisory-specified thresholds (as defined in paragraph ~~173183~~) over a given period.

## Backtesting assessment

In addition to P&L attribution, the performance of a trading desk's risk management models will be tested through daily backtesting. The backtesting assessment is considered to be complementary to the P&L attribution assessment when determining the eligibility of a trading desk for the internal models-based approach. The backtests to be applied compare whether the observed percentage of outcomes covered by the risk measure is consistent with both a 97.5% and 99% level of confidence. The number of permitted exceptions is detailed in paragraph ~~183173~~.

Together, P&L attribution and backtesting thresholds would be used to determine which trading desks are eligible for internal model treatment for regulatory capital purposes. The designation of being ineligible for internal modelling is not, however, envisaged as being permanent. If P&L attribution and backtesting performance sufficiently improved for a sufficient period of time, the designation for the relevant internal models-based approach could be changed from ineligible to eligible.

An additional consideration in specifying the appropriate risk measures and trading outcomes for P&L attribution and backtesting arises because the internally modelled risk measurement is generally based on the sensitivity of a static portfolio to instantaneous price shocks. That is, end-of-day trading positions are input into the risk measurement model, which assesses the possible change in the value of this static portfolio due to price and rate movements over the assumed holding period.

While this is straightforward in theory, in practice it complicates the issue of backtesting. For instance, it is often argued that neither expected shortfall nor value-at-risk measures can be compared against actual trading outcomes, since the actual outcomes will reflect changes in portfolio composition during the holding period. According to this view, the inclusion of fee income together with trading gains and losses resulting from changes in the composition of the portfolio should not be included in the definition of the trading outcome because they do not relate to the risk inherent in the static portfolio that was assumed in constructing the value-at-risk measure.

This argument is persuasive with regard to the use of risk measures based on price shocks calibrated to longer holding periods. That is, comparing the liquidity-adjusted time horizon 99th percentile risk measures from the internal models capital requirement with actual liquidity-adjusted time horizon trading outcomes would probably not be a meaningful exercise. In particular, in any given multi-day period, significant changes in portfolio composition relative to the initial positions are common at major trading institutions. For this reason, *the backtesting framework described here involves the use of risk measures calibrated to a one-day holding period*. Other than the restrictions mentioned in this paper, the test would be based on how banks model risk internally.

Given the use of one-day risk measures, it is appropriate to employ one-day trading outcomes as the benchmark to use in the backtesting program. The same concerns about "contamination" of the trading outcomes discussed above continue to be relevant, however, even for one-day trading outcomes. That is, there is a concern that the overall one-day trading outcome is not a suitable point of comparison, because it reflects the effects of intraday trading, possibly including fee income that is booked in connection with the sale of new products.

On the one hand, intraday trading will tend to increase the volatility of trading outcomes, and may result in cases where the overall trading outcome exceeds the risk measure. This event clearly does not imply a problem with the methods used to calculate the risk measure; rather, it is simply outside the scope of what the measure is intended to capture. On the other hand, including fee income may similarly distort the backtest, but in the other direction, since fee income often has annuity-like characteristics. Since this fee income is not typically included in the calculation of the risk measure, problems with the risk measurement model could be masked by including fee income in the definition of the trading outcome used for backtesting purposes.

To the extent that the P&L attribution and backtesting programs are viewed purely as a statistical test of the integrity of the calculation of the risk measures, it is appropriate to employ a definition of daily trading outcome that allows for an "uncontaminated" test. To meet this standard, banks must have the capability to perform the tests based on the hypothetical changes in portfolio value that would occur were end-of-day positions to remain unchanged.

Backtesting and P&L attribution using actual daily profits and losses are also useful exercises since they can uncover cases where the risk measures are not accurately capturing trading volatility in spite of being calculated with integrity.

For these reasons, *the Committee requires banks to develop the capability to perform these tests using both hypothetical and actual trading outcomes.* In combination, the two approaches are likely to provide a strong understanding of the relation between calculated risk measures and trading outcomes. The total number of backtesting exceptions for the purpose of the thresholds in paragraph 173 should be calculated as the maximum of the exceptions generate under hypothetical or actual trading outcomes.

The implementation of the P&L attribution and backtesting program<sup>me</sup> should formally begin on the date that the internal models capital requirement becomes effective. However, the model should be under observation until a one-year backtesting report can confirm the quality of the model submitted for approval. During this period, a multiplier of [X] should be applied in the calculation of capital requirements for that specific trading desk. *This does not preclude national supervisors from requesting backtesting results prior to that date, and in particular does not preclude their usage, at national discretion, as part of the internal model approval process. Using the most recent 12 months of data yields approximately 250 daily observations for the purposes of backtesting. The national supervisor will use the number of exceptions (out of 250) generated by the bank's model as the basis for a supervisory response.* In many cases, there will be no response. In other cases, the supervisor may initiate a dialogue with the bank to determine if there is a problem with a bank's model. In the most serious cases, the supervisor may impose an increase in a bank's capital requirement or disallow use of the model.

### III. Supervisory framework for the interpretation of backtesting results for the firm-wide risk model

#### (a) Definition of a backtesting exception / outlier

Backtesting the firm-wide risk model will be based on a VaR measure calibrated at a 99<sup>th</sup> percentile confidence level. An exception or an outlier occurs when either the actual or theoretical loss of a trading desk or of the firm-wide trading book registered in a day of the backtesting period is higher than the corresponding daily risk measure given by the model<sup>30</sup>. In the case when either the P&L or the risk measure is not available or impossible to compute, it will count as an outlier.

In the case where an outlier can be shown by the firm to relate to a non-modellable risk factor, and the capital requirement for that non-modellable risk factor exceeds the actual or theoretical loss for that day, it may be disregarded for the purpose of the overall backtesting process if the national supervisor is notified accordingly and does not object to this treatment. In these cases firms must document the history of the movement of the value of the relevant non-modellable risk factor, and have supporting evidence that the non-modellable risk factor has caused the relevant loss.

#### (b) Description of three-zone approach

The framework for the supervisory interpretation of backtesting results for the firm-wide capital model encompasses a range of possible responses, depending on the strength of the signal generated from the backtest. These responses are classified into three zones, distinguished by colours into a hierarchy of responses. The green zone corresponds to backtesting results that do not themselves suggest a problem with the quality or accuracy of a bank's model. The yellow zone encompasses results that do raise

<sup>30</sup> To the extent that risk factors are captured in the CVA capital framework, these can be excluded from the P&L for the purpose of the backtesting framework.

questions in this regard, but where such a conclusion is not definitive. The red zone indicates a backtesting result that almost certainly indicates a problem with a bank's risk model.

The Committee has agreed to standards regarding the definitions of these zones in respect of the number of exceptions generated in the backtesting program, and these are set forth below. To place these definitions in proper perspective, however, it is useful to examine the probabilities of obtaining various numbers of exceptions under different assumptions about the accuracy of a bank's risk measurement model.

### (c) Statistical considerations in defining the zones

Three zones have been delineated and their boundaries chosen in order to balance two types of statistical error: (1) the possibility that an accurate risk model would be classified as inaccurate on the basis of its backtesting result, and (2) the possibility that an inaccurate model would not be classified that way based on its backtesting result.

Table 1 below reports the probabilities of obtaining a particular number of exceptions from a sample of 250 independent observations under several assumptions about the actual percentage of outcomes that the model captures (that is, these are binomial probabilities). For example, the left-hand portion of the Table 1 reports probabilities associated with an accurate model (that is, a true coverage level of 99%). Under these assumptions, the column labelled "exact" reports that exactly five exceptions can be expected in 6.7% of the samples.

Table 2

Model is accurate			Model is inaccurate: Possible alternative levels of coverage							
	Coverage = 99%		Coverage = 98%		Coverage = 97%		Coverage = 96%		Coverage = 95%	
	exact	type 1	exact	type 2	exact	type 2	exact	type 2	exact	type 2
0	8.1%	100.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
1	20.5%	91.9%	3.3%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
2	25.7%	71.4%	8.3%	3.9%	1.5%	0.4%	0.2%	0.0%	0.0%	0.0%
3	21.5%	45.7%	14.0%	12.2%	3.8%	1.9%	0.7%	0.2%	0.1%	0.0%
4	13.4%	24.2%	17.7%	26.2%	7.2%	5.7%	1.8%	0.9%	0.3%	0.1%
5	6.7%	10.8%	17.7%	43.9%	10.9%	12.8%	3.6%	2.7%	0.9%	0.5%
6	2.7%	4.1%	14.8%	61.6%	13.8%	23.7%	6.2%	6.3%	1.8%	1.3%
7	1.0%	1.4%	10.5%	76.4%	14.9%	37.5%	9.0%	12.5%	3.4%	3.1%
8	0.3%	0.4%	6.5%	86.9%	14.0%	52.4%	11.3%	21.5%	5.4%	6.5%
9	0.1%	0.1%	3.6%	93.4%	11.6%	66.3%	12.7%	32.8%	7.6%	11.9%
10	0.0%	0.0%	1.8%	97.0%	8.6%	77.9%	12.8%	45.5%	9.6%	19.5%
11	0.0%	0.0%	0.8%	98.7%	5.8%	86.6%	11.6%	58.3%	11.1%	29.1%
12	0.0%	0.0%	0.3%	99.5%	3.6%	92.4%	9.6%	69.9%	11.6%	40.2%
13	0.0%	0.0%	0.1%	99.8%	2.0%	96.0%	7.3%	79.5%	11.2%	51.8%
14	0.0%	0.0%	0.0%	99.9%	1.1%	98.0%	5.2%	86.9%	10.0%	62.9%
15	0.0%	0.0%	0.0%	100.0%	0.5%	99.1%	3.4%	92.1%	8.2%	72.9%

**Notes to Table 1:** The table reports both exact probabilities of obtaining a certain number of exceptions from a sample of 250 independent observations under several assumptions about the true level of coverage, as well as type 1 or type 2 error probabilities derived from these exact probabilities.

The left-hand portion of the table pertains to the case where the model is accurate and its true level of coverage is 99%. Thus, the probability of any given observation being an exception is 1% (100% – 99% = 1%). The column labelled "exact" reports the probability of obtaining exactly the number of exceptions shown under this assumption in a sample of 250 independent observations. The column labelled "type 1" reports the probability that using a given number of exceptions as the cut-off for rejecting a model will imply erroneous rejection of an accurate model using a sample of 250 independent observations. For example, if the cut-off level is set at five or more exceptions, the type 1 column reports the probability of falsely rejecting an accurate model with 250 independent observations is 10.8%.

The right-hand portion of the table pertains to models that are inaccurate. In particular, the table concentrates on four specific inaccurate models, namely models whose true levels of coverage are 98%, 97%, 96% and 95% respectively. For each inaccurate model, the "exact" column reports the probability of obtaining exactly the number of exceptions shown under this assumption in a sample of 250 independent observations. The columns labelled "type 2" report the probability that using a given number of exceptions as the cut-off for rejecting a model will imply erroneous acceptance of an inaccurate model with the assumed level of coverage using a sample of 250 independent observations. For example, if the cut-off level is set at five or more exceptions, the type 2 column for an assumed coverage level of 97% reports the probability of falsely accepting a model with only 97% coverage with 250 independent observations is 12.8%.

The right-hand portion of the table reports probabilities associated with several possible inaccurate models, namely models whose true levels of coverage are 98%, 97%, 96%, and 95%, respectively. Thus, the column labelled "exact" under an assumed coverage level of 97% shows that five exceptions would then be expected in 10.9% of the samples.

Table 1 also reports several important error probabilities. For the assumption that the model covers 99% of outcomes (the desired level of coverage), the table reports the probability that selecting a given number of exceptions as a threshold for rejecting the accuracy of the model will result in an erroneous rejection of an accurate model ("type 1" error). For example, if the threshold is set as low as one exception, then accurate models will be rejected fully 91.9% of the time, because they will escape rejection only in the 8.1% of cases where they generate zero exceptions. As the threshold number of exceptions is increased, the probability of making this type of error declines.

Under the assumptions that the model's true level of coverage is not 99%, the table reports the probability that selecting a given number of exceptions as a threshold for rejecting the accuracy of the model will result in an erroneous acceptance of a model with the assumed (inaccurate) level of coverage ("type 2" error). For example, if the model's actual level of coverage is 97%, and the threshold for rejection is set at seven or more exceptions, the table indicates that this model would be erroneously accepted 37.5% of the time.

#### (d) Definition of the green, yellow, and red zones

The results in the table in (c) also demonstrate some of the statistical limitations of backtesting. In particular, there is no threshold number of exceptions that yields both a low probability of erroneously rejecting an accurate model and a low probability of erroneously accepting all of the relevant inaccurate models. It is for this reason that the Committee has rejected an approach that contains only a single threshold.

Given these limitations, the Committee has classified outcomes for the backtesting of the firm-wide model into three categories. In the first category, the test results are consistent with an accurate model, and the possibility of erroneously accepting an inaccurate model is low (green zone). At the other extreme, the test results are extremely unlikely to have resulted from an accurate model, and the probability of erroneously rejecting an accurate model on this basis is remote (red zone). In between these two cases, however, is a zone where the backtesting results could be consistent with either accurate or inaccurate models, and the supervisor should encourage a bank to present additional information about its model before taking action (yellow zone).

Table 2 sets out the Committee's agreed boundaries for these zones and the presumptive supervisory response for each backtesting outcome, based on a sample of 250 observations. For other sample sizes, the boundaries should be deduced by calculating the binomial probabilities associated with true coverage of 99%, as in Table 1. The yellow zone begins at the point such that the probability of obtaining that number or fewer exceptions equals or exceeds 95%. Table 2 reports these cumulative probabilities for each number of exceptions. For 250 observations, it can be seen that five or fewer exceptions will be obtained 95.88% of the time when the true level of coverage is 99%. Thus, the yellow zone begins at five exceptions.

Similarly, the beginning of the red zone is defined as the point such that the probability of obtaining that number or fewer exceptions equals or exceeds 99.99%. Table 2 shows that for a sample of 250 observations and a true coverage level of 99%, this occurs with 10 exceptions.

Table 2

Zone	Number of exceptions	Increase in scaling factor	Cumulative probability
Green zone	0	0.00	8.11%
	1	0.00	28.58%
	2	0.00	54.32%
	3	0.00	75.81%
	4	0.00	89.22%
Yellow zone	5	0.40	95.88%
	6	0.50	98.63%
	7	0.65	99.60%
	8	0.75	99.89%
	9	0.85	99.97%
Red zone	10 or more	1.00	99.99%

**Notes to Table 2:** The table defines the green, yellow and red zones that supervisors will use to assess backtesting results in conjunction with the internal models approach to market risk capital requirements. The boundaries shown in the table are based on a sample of 250 observations. For other sample sizes, the yellow zone begins at the point where the cumulative probability equals or exceeds 95%, and the red zone begins at the point where the cumulative probability equals or exceeds 99.99%.

The cumulative probability is simply the probability of obtaining a given number or fewer exceptions in a sample of 250 observations when the true coverage level is 99%. For example, the cumulative probability shown for four exceptions is the probability of obtaining between zero and four exceptions.

Note that these cumulative probabilities and the type 1 error probabilities reported in Table 1 do not sum to one because the cumulative probability for a given number of exceptions includes the possibility of obtaining exactly that number of exceptions, as does the type 1 error probability. Thus, the sum of these two probabilities exceeds one by the amount of the probability of obtaining exactly that number of exceptions.

### (e) The green zone

The green zone needs little explanation. Since a model that truly provides 99% coverage would be quite likely to produce as many as four exceptions in a sample of 250 outcomes, there is little reason for concern raised by backtesting results that fall in this range. This is reinforced by the results in Table 1, which indicate that accepting outcomes in this range leads to only a small chance of erroneously accepting an inaccurate model.

### (f) The yellow zone

The range from five to nine exceptions constitutes the yellow zone. Outcomes in this range are plausible for both accurate and inaccurate models, although Table 1 suggests that they are generally more likely for inaccurate models than for accurate models. Moreover, the results in Table 1 indicate that the presumption that the model is inaccurate should grow as the number of exceptions increases in the range from five to nine.

The Committee has agreed that, within the yellow zone, the number of exceptions should generally guide the size of potential supervisory increases in a firm's capital requirement. Table 2 sets out the Committee's agreed guidelines for increases in the multiplication factor applicable to the internal models capital requirement, resulting from backtesting results in the yellow zone.

These particular values reflect the general idea that the increase in the multiplication factor should be sufficient to return the model to a 99th percentile standard. For example, five exceptions in a sample of 250 imply only 98% coverage. Thus, the increase in the multiplication factor should be sufficient to transform a model with 98% coverage into one with 99% coverage. Needless to say, precise calculations of this sort require additional statistical assumptions that are not likely to hold in all cases.

For example, if the distribution of trading outcomes is assumed to be normal, then the ratio of the 99th percentile to the 98th percentile is approximately 1.14, and the increase needed in the multiplication factor is therefore approximately 0.40 for a scaling factor of 3. If the actual distribution is not normal, but instead has "fat tails", then larger increases may be required to reach the 99th percentile standard. The concern about fat tails was also an important factor in the choice of the specific increments set out in Table 2.

Banks should also document all of the exceptions generated from their ongoing backtesting program, including an explanation for the exception. Banks may also implement backtesting for confidence intervals other than the 99th percentile, or may perform other statistical tests not considered here. Naturally, this information could also prove very helpful in assessing their model.

In practice, there are several possible explanations for a backtesting exception, some of which go to the basic integrity of the model, some of which suggest an under-specified or low-quality model, and some of which suggest either bad luck or poor intraday trading results. Classifying the exceptions generated by a bank's model into these categories can be a very useful exercise.

#### Basic integrity of the model

- 1) The bank's systems simply are not capturing the risk of the positions themselves (eg the positions of an overseas office are being reported incorrectly).
- 2) Model volatilities and/or correlations were calculated incorrectly.

#### Model's accuracy could be improved

- 3) The risk measurement model is not assessing the risk of some instruments with sufficient precision (eg too few maturity buckets or an omitted spread).

#### "Bad luck" or markets moved in fashion unanticipated by the model

- 4) Random chance (a very low probability event).
- 5) Markets moved by more than the model predicted was likely (ie volatility was significantly higher than expected).
- 6) Markets did not move together as expected (ie correlations were significantly different than what was assumed by the model).

#### Intraday trading

- 7) There was a large (and money-losing) change in the bank's positions or some other income event between the end of the first day (when the risk estimate was calculated) and the end of the second day (when trading results were tabulated).

The supervisor will impose a higher capital requirement for any outcomes that place the bank in the yellow zone. In the case of severe problems with the basic integrity of the model, however, the supervisor should consider whether to disallow the use of the model for capital purposes altogether.

### (g) The red zone

Finally, outcomes in the red zone (10 or more exceptions) should generally lead to an automatic presumption that a problem exists with a bank's model. This is because it is extremely unlikely that an accurate model would independently generate 10 or more exceptions from a sample of 250 trading outcomes.

In general, therefore, if a bank's model falls into the red zone, the supervisor should automatically increase the multiplication factor applicable to a firm's model by one (from three to four).

Needless to say, the supervisor should also begin investigating the reasons why the bank's model produced such a large number of misses, and should require the bank to begin work on improving its model immediately.

## IV. Conclusion

The above framework is intended to set out a consistent approach for incorporating P&L attribution and backtesting into the internal models approach to market risk capital requirements. The goals of this effort have been to build appropriate and necessary incentives into a framework that relies heavily on the efforts of banks themselves to calculate the risks they face, to do so in a way that respects the inherent limitations of the available tools, and to keep the burdens and costs of the imposed procedures to a minimum.

The Basel Committee believes that the framework described above strikes the right balance in this regard. Perhaps more importantly, however, the Committee believes that this approach represents the first, and therefore critical, step toward a tighter integration of supervisory guidelines with verifiable measures of bank performance.

## E. Treatment for illiquid positions<sup>31</sup>

### 1. Prudent valuation guidance

718(c). This section provides banks with guidance on prudent valuation for positions that are accounted for at fair value, whether they are in the trading book or in the banking book. This guidance is especially important for positions without actual market prices or observable inputs to valuation, as well as less liquid positions which raise supervisory concerns about prudent valuation. The valuation guidance set forth below is not intended to require banks to change valuation procedures for financial reporting purposes. Supervisors should assess a bank's valuation procedures for consistency with this guidance. One factor in a supervisor's assessment of whether a bank must take a valuation adjustment for regulatory purposes under [paragraphs 718(cx) to 718(cxii)] should be the degree of consistency between the bank's valuation procedures and these guidelines.

718(ci). A framework for prudent valuation practices should at a minimum include the following:

#### [1.] Systems and controls

718(cii). Banks must establish and maintain adequate systems and controls sufficient to give management and supervisors the confidence that their valuation estimates are prudent and reliable. These systems must be integrated with other risk management systems within the organisation (such as credit analysis). Such systems must include:

- Documented policies and procedures for the process of valuation. This includes clearly defined responsibilities of the various areas involved in the determination of the valuation, sources of market information and review of their appropriateness, guidelines for the use of unobservable inputs reflecting the bank's assumptions of what market participants would use in pricing the position, frequency of independent valuation, timing of closing prices, procedures for adjusting valuations, end of the month and ad-hoc verification procedures; and
- Clear and independent (ie independent of front office) reporting lines for the department accountable for the valuation process. The reporting line should ultimately be to a main board executive director.

#### [2.] Valuation methodologies

##### *Marking to market*

718(ciii). Marking to market is at least the daily valuation of positions at readily available close out prices that are sourced independently. Examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers.

718(civ). Banks must mark to market as much as possible. The more prudent side of bid/offer should be used unless the institution is a significant market-maker in a particular position type and it can close out at mid-market. Banks should maximise the use of relevant observable inputs and minimise the use of unobservable inputs when estimating fair value using a valuation technique. However, observable inputs or transactions may not be relevant, such as in a forced liquidation or distressed sale, or transactions may not be observable, such as when markets are inactive. In such cases, the observable data should be considered, but may not be determinative.

<sup>31</sup> This section retains the paragraph numbering and references used in the existing Basel II Framework. These will be updated once the revised market risk framework is finalised by the Basel Committee.

### *Marking to model*

[695.] Only where marking to market is not possible should banks mark to model, but this must be demonstrated to be prudent. Marking to model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input. When marking to model, an extra degree of conservatism is appropriate. Supervisory authorities will consider the following in assessing whether a mark-to-model valuation is prudent:

- Senior management should be aware of the elements of the trading book or of other fair-valued positions which are subject to mark to model and should understand the materiality of the uncertainty this creates in the reporting of the risk/performance of the business.
- Market inputs should be sourced, to the extent possible, in line with market prices (as discussed above). The appropriateness of the market inputs for the particular position being valued should be reviewed regularly.
- Where available, generally accepted valuation methodologies for particular products should be used as far as possible.
- Where the model is developed by the institution itself, it should be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process. The model should be developed or approved independently of the front office. It should be independently tested. This includes validating the mathematics, the assumptions and the software implementation.
- There should be formal change control procedures in place and a secure copy of the model should be held and periodically used to check valuations.
- Risk management should be aware of the weaknesses of the models used and how best to reflect those in the valuation output.
- The model should be subject to periodic review to determine the accuracy of its performance (eg assessing continued appropriateness of the assumptions, analysis of P&L versus risk factors, comparison of actual close out values to model outputs).
- Valuation adjustments should be made as appropriate, for example, to cover the uncertainty of the model valuation (see also valuation adjustments in paragraphs 718(cviii) to 718(cxii)).

### *Independent price verification*

718(cvi). Independent price verification is distinct from daily mark to market. It is the process by which market prices or model inputs are regularly verified for accuracy. While daily marking to market may be performed by dealers, verification of market prices or model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). It need not be performed as frequently as daily mark to market, since the objective, ie independent, marking of positions, should reveal any error or bias in pricing, which should result in the elimination of inaccurate daily marks.

718(cvii). Independent price verification entails a higher standard of accuracy in that the market prices or model inputs are used to determine profit and loss figures, whereas daily marks are used primarily for management reporting in between reporting dates. For independent price verification, where pricing sources are more subjective, eg only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

### [3.] Valuation adjustments

718(cviii). As part of their procedures for marking to market, banks must establish and maintain procedures for considering valuation adjustments. Supervisory authorities expect banks using third-party

valuations to consider whether valuation adjustments are necessary. Such considerations are also necessary when marking to model.

718(cix). Supervisory authorities expect the following valuation adjustments to be formally considered at a minimum: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, and future administrative costs and, where appropriate, model risk.

## 2. Adjustment to the current valuation of less liquid positions for regulatory capital purposes

718(cx). Banks must establish and maintain procedures for judging the necessity of and calculating an adjustment to the current valuation of less liquid positions for regulatory capital purposes. This adjustment may be in addition to any changes to the value of the position required for financial reporting purposes and should be designed to reflect the illiquidity of the position. Supervisory authorities expect banks to consider the need for an adjustment to a position's valuation to reflect current illiquidity whether the position is marked to market using market prices or observable inputs, third-party valuations or marked to model.

718(cxi). Bearing in mind that the assumptions made about liquidity in the market risk capital charge may not be consistent with the bank's ability to sell or hedge out less liquid positions, where appropriate, banks must take an adjustment to the current valuation of these positions, and review their continued appropriateness on an ongoing basis. Reduced liquidity may have arisen from market events. Additionally, close-out prices for concentrated positions and/or stale positions should be considered in establishing the adjustment. Banks must consider all relevant factors when determining the appropriateness of the adjustment for less liquid positions. These factors may include, but are not limited to, the amount of time it would take to hedge out the position/risks within the position, the average volatility of bid/offer spreads, the availability of independent market quotes (number and identity of market-makers), the average and volatility of trading volumes (including trading volumes during periods of market stress), market concentrations, the ageing of positions, the extent to which valuation relies on marking to model, and the impact of other model risks not included in paragraph 718(cx).

718(cxi-1-) For complex products including, but not limited to, securitisation exposures and n-th-to-default credit derivatives, banks must explicitly assess the need for valuation adjustments to reflect two forms of model risk: the model risk associated with using a possibly incorrect valuation methodology; and the risk associated with using unobservable (and possibly incorrect) calibration parameters in the valuation model.

718(cxii). The adjustment to the current valuation of less liquid positions made under paragraph 718(cxi) must impact Tier 1 regulatory capital and may exceed those valuation adjustments made under financial reporting standards and paragraphs 718(cviii) and 718(cix).

## F. Supervisory Review Process – The Second Pillar<sup>32</sup>

### Market risk

#### 1. Policies and procedures for trading book eligibility

778(i). Clear policies and procedures used to determine the exposures that may be included in, and those that should be excluded from, the trading book for purposes of calculating regulatory capital are critical to ensure the consistency and integrity of a firm's trading book. Such policies must conform to paragraph 687(i) of this Framework. Supervisors should be satisfied that the policies and procedures clearly delineate the boundaries of the firm's trading book, in compliance with the general principles set forth in paragraphs 684 to 689(iii) of this Framework, and consistent with the bank's risk management capabilities and practices. Supervisors should also be satisfied that transfers of positions between banking and trading books can only occur in a very limited set of circumstances. A supervisor will require a firm to modify its policies and procedures when they prove insufficient for preventing the booking in the trading book of positions that are not compliant with the general principles set forth in paragraphs 684 to 689(iii) of this Framework, or not consistent with the bank's risk management capabilities and practices.

#### 2. Valuation

778(ii). Prudent valuation policies and procedures form the foundation on which any robust assessment of market risk capital adequacy should be built. For a well diversified portfolio consisting of highly liquid cash instruments, and without market concentration, the valuation of the portfolio, combined with the minimum quantitative standards set out in paragraph 718(Lxxvi), as revised in this section, may deliver sufficient capital to enable a bank, in adverse market conditions, to close out or hedge its positions within 10 days in an orderly fashion. However, for less well diversified portfolios, for portfolios containing less liquid instruments, for portfolios with concentrations in relation to market turnover, and/or for portfolios which contain large numbers of positions that are marked to model this is less likely to be the case. In such circumstances, supervisors will consider whether a bank has sufficient capital. To the extent there is a shortfall the supervisor will react appropriately. This will usually require the bank to reduce its risks and/or hold an additional amount of capital.

#### 3. Stress testing under the internal models approach

778(iii). A bank must ensure that it has sufficient capital to meet the minimum capital requirements set out in paragraphs 718(Lxx) to 718(xciv) and to cover the results of its stress testing required by paragraph 718(Lxxiv) (g), taking into account the principles set forth in paragraphs 738(ii) and 738(iv). Supervisors will consider whether a bank has sufficient capital for these purposes, taking into account the nature and scale of the bank's trading activities and any other relevant factors such as valuation adjustments made by the bank. To the extent that there is a shortfall, or if supervisors are not satisfied with the premise upon which the bank's assessment of internal market risk capital adequacy is based, supervisors will take the appropriate measures. This will usually involve requiring the bank to reduce its risk exposures and/or to hold an additional amount of capital, so that its overall capital resources at least cover the Pillar 1 requirements plus the result of a stress test acceptable to the supervisor.

<sup>32</sup> This section retains the paragraph numbering and references used in the existing Basel II Framework. These will be updated once the revised market risk framework is finalised by the Basel Committee.

#### 4. ~~Specific risk modelling under the internal models approach~~

778(iv). ~~For banks wishing to model the specific risk arising from their trading activities, additional criteria have been set out, including conservatively assessing the risk arising from less liquid positions and/or positions with limited price transparency under realistic market scenarios.~~ Where supervisors consider that limited liquidity or price transparency undermine the effectiveness of a bank's model to capture ~~the specific~~ risk, they will take appropriate measures, including requiring the exclusion of positions from the bank's ~~specific risk~~ model. Supervisors should review the adequacy of the bank's measure of the incremental default risk capital charge; where the bank's approach is inadequate, the use of the standardised ~~specific risk~~ charges will be required.

## G. Market Discipline – The Third Pillar<sup>33</sup>

### Market risk<sup>34</sup>

Market risk: disclosures for all banks		[Table 10]
<b>Qualitative disclosures</b>	(a)	<p>The general qualitative disclosure requirement [paragraph 824] for market risk including:</p> <ul style="list-style-type: none"> <li>• the desk structure of the firm;</li> <li>• types instruments included in each desk;</li> <li>• policies for determining whether a position is designated as trading, including the definition of stale positions, the market value of stale positions, and the nominal value of stale positions;</li> <li>• any positions assigned to the trading or banking book in contradiction of the general presumptions of their instrument category, and the market and nominal values of such positions;</li> <li>• differences in risk management practices and policies for any portfolios of covered positions that are split between the banking book and the trading book;</li> <li>• any positions that have been moved from one book to the other since the last reporting period, including the market and nominal values of such positions and the reason for the move; and</li> </ul> <p>the desks for which capital requirements are calculated using the standardised approach.</p>
<b>Quantitative disclosures</b>	(b)	<p>At the desk-level:</p> <ul style="list-style-type: none"> <li>• the total standardised capital charge for the desk;</li> <li>• the total standardised default risk charge for the desk;</li> <li>• the credit spread risk and incremental default risk (IDR) capital charge for securitisation positions on the desk; and</li> <li>• the numerator and denominator of the model-independent risk assessment tool</li> </ul> <p>At the top-level:</p> <ul style="list-style-type: none"> <li>• the total standardised capital charge for all positions, and including a breakdown by primary asset class (ie interest rates, FX, commodities, credit spread and equity);</li> <li>• the total standardised default risk charge; and</li> <li>• the credit spread risk and IDR capital charge for securitisation positions;</li> </ul>

<sup>33</sup> The paragraph and table numbering in this section are based on the existing Basel II Framework. These will be updated once the revised market risk framework is finalised by the Basel Committee.

<sup>34</sup> The proposed revisions to [Table 10] and [Table 11] will also be a component of a wider review by the Committee of Pillar 3 disclosure requirements.

Market risk: disclosures for banks using the internal models-based approach (IMA) for trading portfolios

[Table 11]

<b>Qualitative disclosures</b>	(a)	The general qualitative disclosure requirement [paragraph 824] for market risk including the portfolios covered by the IMA. In addition, a discussion of the extent of and methodologies for compliance with the "Prudent valuation guidance" for positions held in the trading book [paragraphs 690 to 701].
	(b)	The discussion should include an articulation of the soundness standards on which the bank's internal capital adequacy assessment is based. It should also include a description of the methodologies used to achieve a capital adequacy assessment that is consistent with the soundness standards.
	(c)	For each portfolio covered by the IMA: <ul style="list-style-type: none"> <li>• the characteristics of the models used;</li> <li>• a description of stress testing applied to the portfolio; and</li> <li>• a description of the approach used for backtesting and P&amp;L attribution, as well as any other means of validating the accuracy and consistency of the internal models and modelling processes.</li> </ul>
	(d)	The scope of acceptance by the supervisor.
	(e)	For the incremental default risk (IDR) capital charge the methodologies used and the risks measured through the use of internal models, including details of the estimation of the parameters for the default model. It should also include the approaches used in the validation of the models.
	(f)	For each desk, the stress period used and a description of the process used to determine the stress period.
<b>Quantitative disclosures</b>	(g)	At each desk under the IMA: <ul style="list-style-type: none"> <li>• The high, mean and low ES values over the reporting period and period-end;</li> <li>• The high, mean and low IDR capital charges over the reporting period and period-end;</li> <li>• The number of backtesting exceptions during the period, and the resulting multiplier;</li> <li>• The number of P&amp;L attribution exceptions during the period;</li> <li>• The desk-level ES calculation, including a breakdown by individual risk factor; and</li> <li>• The capital charges for any risks not amenable to modelling.</li> </ul> At the top-level: <ul style="list-style-type: none"> <li>• The total expected shortfall calculation;</li> <li>• The difference between the bank-wide expected shortfall calculation and the simple sum of risk factor expected shortfall;</li> <li>• The total modelled IDR charge; and</li> <li>• The total capital charge.</li> </ul>

## Glossary

**Actual daily ~~desk-level~~ P&L:** The daily ~~desk-level~~ economic P&L based on the marking to market of the books and records of the bank excluding fees and commissions.

**Backtesting:** The process of comparing daily profits and losses with model-generated risk measures to gauge the quality and accuracy of risk measurement systems.

**Basis risk:** The risk that prices of financial instruments in a hedging strategy will move in a way that reduces the effectiveness of the hedging strategy.

**Benchmark (in the context of the SMM/internal models-based approach relationship):**

The use of SMM capital charges as a consistent metric of comparison of capital charges calculated using internal models-based approaches both across banks and through time.

**Component risk factor:** An instrument is decomposed into individual component risk factors that are then mapped to a risk factor class

**“Cross-cutting” risk factor:** A risk factor that affects the valuation of a large number of instruments across the trading book. Examples include exchange rates and interest rates from money market or swap curves.

**Credit Valuation Adjustment (CVA):** An adjustment to the valuation of a derivative transaction to account for the credit risk of contracting parties.

**Current expected shortfall:** ES based on current data history of the risk factors (in contrast to the stressed data history).

**CVA risk:** The risk of changes to CVA arising from changes in credit spreads of the contracting parties, perhaps compounded by changes to the value of the underlying of the derivative transaction.

**Desk’s risk management model:** The desk’s risk management model includes all risk factors that are included in the bank’s internal ES with supervisory parameters. Risk factors deemed not modellable by the supervisor in Step 3, and which are therefore not included in the ES for calculating the respective regulatory capital charge, might be still included in the bank’s internal ES.

**Diversification:** The process of constructing a portfolio of long or short positions in different instruments that are relatively uncorrelated with one another, in order to minimise exposure to individual risks, such as issuers or risk classes.

**Expected holding period:** The time period banks expect to hold risk positions as part of their documented trading strategies.

**Endogenous liquidity:** The relative effect on the sale price from the act of liquidating exposures or portfolios within a certain amount of time.

**Fallback (in the context of the SMM /internal models-based approach relationship):**

The process of requiring banks to switch to the SMM when internal models are not performing to adequate standards.

**Financial instrument:** Any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (or cash instruments) and derivative financial instruments.

**Floor (in the context of the SMM /internal models-based approach relationship):** A level of capital charges (calculated as a percentage of the SMM capital charges) acting as a minimum to the Pillar 1 internal models-based capital charges.

**Hedge:** The process of counterbalancing risks from exposure to long and short positions in correlated instruments.

**Hypothetical P&L:** The P&L produced by revaluing the positions held at the end of the previous day using the market data at the end of the current day

**Instrument:** The term used to describe financial instruments and commodities (including electric power).

**Liquidity horizon:** The time required to exit or hedge a risk position without materially affecting market prices in stressed market conditions.

**Liquidity premium:** The additional premium demanded by investors to hold financial instruments that cannot be readily liquidated in the market.

**Market risk:** The risk of losses in on- and off-balance sheet risk positions arising from movements in market prices.

**Notional position:** The result of decomposing real-world financial instruments into simpler positions that can be capitalised under the standardised approach. In most cases notional positions will be equal to either the market value, "notional value", or the discounted cash flows of the instrument.

**Notional value:** The notional value of a derivative instrument is equal to the number of units underlying the instrument, multiplied by the current market value of each unit of the underlying.

**Offset:** The process of counterbalancing risks from exposure to long and short positions in the same instrument.

**Pricing model:** A model that is used to determine the value of an instrument (mark-to-market or mark-to-model) as a function of pricing parameters or to determine the change in the value of an instrument as a function of risk factors. The latter kind of pricing model may be simpler than the former. A pricing model may be the combination of several calculations; for example a first valuation technique to compute a price, followed by valuation adjustments for risks that are not incorporated in the first step.

**Primary risk class:** A set of trading desks that are exposed to largely similar primary risk factors.

**Primary risk factor:** The risk factor which is most important for a specific instrument.

**Profit and loss (P&L) attribution:** A backtesting method for assessing the robustness of banks' risk management models by comparing the hypothetical P&L predicted by risk management models with the actual P&L.

**"Real" prices:** A criterion for assessing whether risk factors will be amendable to modelling. A price will be considered "real" if: it is a price from an actual transaction conducted by the bank; it is a price from an actual transaction between other parties (eg at an exchange); or it is a price taken from a firm quote (ie a price at which the bank could transact).

**Risk class:** Either a primary risk class or a risk factor class depending on the method used to aggregate risk positions in the internal models-based approach. Across risk classes supervisory determined/restricted correlations have to be used to determine regulatory capital.

**Risk factor:** A principal determinant of the change in value of a transaction that is used for the quantification of risk. Risk positions are modelled by risk factors.

**Risk factor class:** (Component) Risk factors are mapped to the risk factor classes equity, credit, interest rate, commodities and FX.

**Risk position:** A risk position is a conceptual construct that represents a particular aspect of risk associated with a transaction within a market risk model or a standardised approach for market risk. Example: A bond denominated in a currency different to a bank's reporting currency may be mapped to a risk position for FX risk, a number of risk positions for interest rate risk (in the foreign currency) and one or more risk positions for credit risk.

**“Risk-theoretical” P&L:** The daily desk-level (hypothetical) P&L that is predicted by the risk management model conditional on a realisation of all relevant risk factors that enter the model.

**Trading desk:** A separately managed business line within a bank that follows defined trading strategies with certain instruments, with the goal of generating revenues or maintaining market presence while from assuming and managing risk.

**Surcharge (in the context of the SMM/internal models-based approach relationship):** A

Pillar 1 capital charge (calculated as a percentage of the SMM capital charges) required in addition to the capital charge under the internal models-based approach.

**Interest rate risk in the banking book:** The exposure of a bank’s financial condition to adverse movements in interest rates stemming from banking book assets and liabilities.