Basel Committee on Banking Supervision

Basel III Monitoring Report

September 2016

BANK FOR INTERNATIONAL SETTLEMENTS

Queries regarding this document should be addressed to the Secretariat of the Basel Committee on Banking Supervision (e-mail: qis@bis.org).

This publication is available on the BIS website (www.bis.org/bcbs/qis/).

Grey underlined text in this publication shows where hyperlinks are available in the electronic version.

ISBN 978-92-9197-634-8 (online)

Basel III Monitoring Report

September 2016

Special feature

Annexes

Conventions used in this report

billion thousand million
trillion thousand billion

Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks.

Components may not sum to totals because of rounding.

The term "country" as used in this publication also covers territorial entities that are not states as understood by international law and practice but for which data are separately and independently maintained.

All data, including for previous reporting dates, reflect revisions received up to 20 August 2016.

Quantitative Impact Study Working Group of the Basel Committee on Banking Supervision

Chairman	Mr Martin Birn, Secretariat of the Basel Committee on Banking Supervision, Bank for International Settlements, Basel	

The representatives in *italics* are members of the analysis team and provided analytical support at the Secretariat.

Argentina	Ms Verónica Balzarotti	Central Bank of Argentina
Australia	Mr David Connolly	Australian Prudential Regulation Authority
Belgium	Ms Claire Renoirte	National Bank of Belgium
Brazil	Mr Joao Resende	Central Bank of Brazil
Canada	Mr Sungchul Shin	Office of the Superintendent of Financial Institutions
China	Ms Jiao Yan	China Banking Regulatory Commission
France	Ms Anne-Sophie Borie-Tessier	French Prudential Supervisory Authority
Germany	Ms Dorothee Holl	Deutsche Bundesbank
	Ms Juliane Liefeldt *Mr Florian Naunheim* *Ms Laura Niederpruem*	
India	Mr Santosh Pandey	Reserve Bank of India
	Mr Manoj Kumar Poddar	
Indonesia	Mr Boyke W Suadi	Indonesia FSA (OJK)
Italy	Mr Francesco Piersante	Bank of Italy
	Mr Emiliano Sabatini *Mr Gianluca Sisinni*	
Japan	Mr Takahito Yamada	Bank of Japan
	Mr Hiroyuki Hirota *Mr Ken Taniguchi*	
	Mr Noboru Tomita	Financial Services Agency
	Mr Takahiro Ito *Mr Kosuke Kishimoto*	
Korea	Mr KyungHwan Sohn	Financial Supervisory Service
Luxembourg	Ms Natalia Katilova	Surveillance Commission for the Financial Sector
Mexico	Mr Juan Cardenas	Bank of Mexico
	Mr Jonás Bernes	National Banking and Securities Commission
Netherlands	Mr Joost van der Burgt	Netherlands Bank
Russia	Mr Aleksandr Stezhkin	Central Bank of the Russian Federation
Saudi Arabia	Mr Suliman Aljabrin	Saudi Arabian Monetary Agency
Singapore	Ms Sandy Ho	Monetary Authority of Singapore
South Africa	Mr Jaco Vermeulen	South African Reserve Bank

Spain	Ms Elva Garcia	Bank of Spain
Sweden	Mr Andreas Borneus	Finansinspektionen
	Ms Amelie Stierna	Sveriges Riksbank
	Ms Emanuel Alfranseder	
Switzerland	Mr Uwe Steinhauser	Swiss Financial Market Supervisory Authority FINMA
Turkey	Mr Erhan Cetinkaya	Banking Regulation and Supervision Agency
United Kingdom	Ms Shiny Kaur	Prudential Regulation Authority
	Ms Lynnette Withfield	
United *States*	Mr Eric Kennedy	Board of Governors of the Federal Reserve System
	Ms Victoria Maizenberg *Ms Sviatlana Phelan*	
	Ms Eva Shi	Federal Reserve Bank of New York
	Ms Andrea Plante	Federal Deposit Insurance Corporation
	Mr Andrew Carayiannis *Ms Irina S Leonova* *Ms Kayla Shoemaker* *Mr Paul Vigil* *Mr Peter Yen*	
	Mr Benjamin Pegg	Office of the Comptroller of the Currency
European Central Bank	Mr Gernot Stania	ECB Single Supervisory Mechanism
	Mr Timotej Homar	
Observers	Mr Lampros Kalyvas	European Banking Authority
	Mr Gintaras Griksas	European Commission
Secretariat	Mr Sietse Bracke Mr S'thembiso Chonco Mr Davy Reinard Mr Kamil Pliszka	Bank for International Settlements
	Mr Otakar Cejnar *Ms Alisa Dombrovskaya* *Ms Lillie Lam* *Mr Roberto Ottolini* *Ms Crystal Pun* *Mr Christopher Zuin*	

Highlights of the Basel III monitoring exercise as of 31 December 2015

All large internationally active banks meet Basel III minimum and CET1 target capital requirements

To assess the impact of the Basel III framework on banks,[1] the Basel Committee on Banking Supervision monitors the effects and dynamics of the reforms. For this purpose, a semiannual monitoring framework has been set up on the risk-based capital ratio, the leverage ratio and the liquidity metrics using data collected by national supervisors on a representative sample of institutions in each country. This report is the tenth publication of results from the Basel III monitoring exercise[2] and summarises the aggregate results using data as of 31 December 2015. The Committee believes that the information contained in the report will provide relevant stakeholders with a useful benchmark for analysis.

This release also includes a special feature with highlights from an ad hoc exercise on end-2015 data. This refers to large exposures to central counterparties and large interbank exposures, both being subject to a review clause in the large exposures standard issued by the Committee in 2014.[3]

A major element of the Committee's post-crisis regulatory reform agenda is its work to address the problem of excessive variability in risk-weighted assets. A key input to assisting the Committee in finalising this work by the end of the year will be the results of a cumulative data collection exercise conducted by the Committee. These data are still subject to further analysis with an aim to publish key results around the end of the year.

Information considered for this report was obtained by voluntary and confidential data submissions from individual banks and their national supervisors. Data were provided for a total of 228 banks, including 100 large internationally active ("Group 1") banks and 128 other ("Group 2") banks.[4] Members' coverage of their banking sector is very high for Group 1 banks, reaching 100% coverage for some countries, while coverage is lower for Group 2 banks and varies by country.

In general, this report does not take into account any transitional arrangements such as phase-in of deductions and grandfathering arrangements. Rather, the estimates presented generally assume full

1 Basel Committee on Banking Supervision, *Basel III: A global framework for more resilient banks and the banking system*, December 2010 and revised June 2011; Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013; Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014; Basel Committee on Banking Supervision, *Basel III: the net stable funding ratio,* October 2014. These documents are available on the Committee's website at www.bis.org/bcbs/basel3.htm.

2 A list of previous publications is included in the Annex.

3 Basel Committee on Banking Supervision, *Supervisory framework for measuring and controlling large exposures*, April 2014, www.bis.org/publ/bcbs283.htm.

4 Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks. Not all banks provided data relating to all parts of the Basel III framework.

implementation of the final Basel III requirements based on data as of 31 December 2015. No assumptions have been made about banks' profitability or behavioural responses, such as changes in bank capital or balance sheet composition, either since this date or in the future. For this reason, the results are not comparable with current industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, and they also incorporate estimates where information is not publicly available. Furthermore, the report does not reflect any additional capital requirements under Pillar 2 of the Basel II framework, any higher loss absorbency requirements for domestic systemically important banks, nor does it reflect any countercyclical capital buffer requirements.

Table 1 provides an overview of the results for the 30 June and 31 December 2015 reporting dates.

Overview of results

Table 1

	30 June 2015			31 December 2015		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Average CET1 ratio (%)	11.5	11.4	12.8	11.8	11.7	13.1
CET1 target shortfall (€bn)	0.0	0.0	0.2	0.0	0.0	0.2
AT1 target shortfall (€bn)	3.4	0.0	2.9	3.3	0.0	1.5
Tier 2 target shortfall (€bn)	12.8	11.4	5.6	5.5	1.7	4.7
Sum (€bn)	16.2	11.4	8.6	8.8	1.7	6.4
Leverage ratio (%)	5.2	5.2	5.4	5.6	5.6	5.6
LCR (%)	123.6	123.4	140.1	125.2	123.8	148.1
NSFR (%)	111.9	114.6	114.0	113.7	116.2	115.9

All data provided on a fully phased-in basis. Target level capital requirements are 7.0%–9.5% CET1; 8.5%–11.0% Tier 1; and 10.5%–13.0% total capital.

Source: Basel Committee on Banking Supervision.

Risk-based capital requirements

In the analysis of the risk-based capital requirements, this report focuses on the following items, assuming that the positions as of 31 December 2015 were subject to the fully phased-in Basel III standards:

- Changes to bank capital ratios under the Basel III requirements, and estimates of any capital deficiencies relative to fully phased-in minimum and target capital requirements (including capital surcharges for global systemically important banks – G-SIBs);
- Changes to the definition of capital that result from the full phasing-in of the Basel III capital standard, referred to as common equity Tier 1 (CET1), including a reallocation of deductions to CET1, and changes to the eligibility criteria for additional Tier 1 and Tier 2 capital; and
- Increases in risk-weighted assets resulting from phasing-in changes to the definition of capital.

Capital ratios

Compared with the transitional Basel III framework, the average CET1 ratio under the fully phased-in Basel III framework[5] would decline from 12.2% to 11.8% for Group 1 banks. The Tier 1 capital ratios of Group 1 banks would decline on average from 13.3% to 12.6% and total capital ratios would decline from 15.9% to 14.4%. For Group 2 banks, the decline in capital ratios is slightly less pronounced than for Group 1. Assuming full phasing-in of Basel III, the aggregate CET1 ratio would decline from 13.5% to 13.1% and Tier 1 capital ratios would decline on average from 14.0% to 13.5%. Total capital ratios would decline by a slightly greater amount, on average from 16.0% to 15.0% due to the phase-out of Tier 2 instruments which will no longer be eligible in 2022.

CET1 capital shortfalls

Assuming full phasing-in of the Basel III requirements as of 31 December 2015, including changes to the definition of capital and risk-weighted assets, all Group 1 banks would meet the CET1 minimum capital requirement of 4.5% and the CET1 target level of 7.0% (ie including the capital conservation buffer); this target also includes the G-SIB surcharge according to the list of banks published by the Financial Stability Board in November 2015 where applicable.[6] Group 1 banks report no shortfall at the CET1 target level for the third consecutive reporting period.

Under the same assumptions, all Group 2 banks would meet the CET1 minimum capital requirement of 4.5%; however, the capital shortfall is estimated at €0.2 billion at the CET1 target level of 7.0%.

Leverage ratio

The average transitional Basel III Tier 1 leverage ratios (ie reflecting all applicable transitional arrangements to the definition of capital) would be 5.8% for Group 1 banks and for G-SIBs 5.9%, while it would amount to 5.7% for Group 2 banks. The average fully phased-in Basel III Tier 1 leverage ratios are 5.6% for Group 1 banks, G-SIBs and Group 2 banks. Three out of 109 Group 2 banks with an aggregate shortfall of €1.5 billion would not meet a fully phased-in minimum Basel III Tier 1 leverage ratio of 3%, while all Group 1 banks meet the requirement.

Combined shortfall amounts

This Basel III monitoring report also analyses the combined shortfall amounts needed to meet both risk-based capital and any applicable Tier 1 leverage ratio requirements (see Section 2.6).

For Group 1 banks, the leverage ratio has no impact on the capital shortfalls at the minimum or target levels. For Group 2 banks, the inclusion of the fully phased-in Basel III Tier 1 leverage ratio shortfall raises the additional Tier 1 capital shortfall at the minimum level from zero to €1.5 billion. At the target level, the additional Tier 1 capital shortfall rises by €1.5 billion (from €1.5 billion to €3.0 billion) when the Basel III Tier 1 leverage ratio requirement is included. In turn, this inclusion of applicable Basel III Tier 1

[5] See Section 1.1 for details on the scope of the exercise.

[6] See Financial Stability Board, *2015 update of list of global systemically important banks (G-SIBs)*, 3 November 2015, www.financialstabilityboard.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf.

leverage ratio shortfalls increases the total capital shortfall from €0.2 billion to €1.6 billion considering all capital ratio minimums and from €6.4 billion to €7.9 billion at the target level.

Liquidity standards

Liquidity Coverage Ratio

The Liquidity Coverage Ratio (LCR) was revised by the Committee in January 2013[7] and came into effect on 1 January 2015. This marks the second reporting period in which all banks are subject to the minimum 60% requirement that came into effect on 1 January 2015 according to the Basel III phase-in arrangements. The minimum requirement is initially set at 60% for 2015 and will then rise in equal annual steps of 10 percentage points to reach 100% in 2019. The end-December 2015 reporting period was the seventh data collection exercise for which a comprehensive calculation of the revised LCR standard could be conducted. Key observations from a comparison of current period to previous period results include:

- A total of 90 Group 1 and 70 Group 2 banks participated in the LCR monitoring exercise for the end-December 2015 reference period.[8]
- The average LCR for the Group 1 bank sample was 125.2%. For Group 2 banks, the average LCR was 148.1%. These figures compare to average LCRs of 123.6% and 140.1% for Group 1 banks and Group 2 banks, respectively, at end-June 2015.
- Some 85.6% of all Group 1 banks and 82.9% of Group 2 banks in the Basel III monitoring sample already meet or exceed the final LCR minimum requirement of 100%, while 97.8% of Group 1 and 98.6% of Group 2 banks have LCRs that are at or above the initial 60% minimum requirement. One bank each in Group 1 and Group 2 does currently not meet the initial 60% LCR minimum requirement; the relevant national supervisory authorities have taken all necessary actions to restore the minimum LCR ratio.
- The aggregate LCR shortfall at a minimum requirement of 100% was €65.4 billion for Group 1 and Group 2 combined, which represents approximately 0.1% of the more than €62.6 trillion in total assets of the aggregate sample. This compares to a shortfall of €57.2 billion (which represents approximately 0.1% of the €64.2 trillion total assets of the aggregate sample) as of end-June 2015. The aggregate LCR shortfall at a minimum requirement of 60% was €22.8 billion at end-December 2015, compared to no shortfall at the end-June 2015 and €70 billion at end-December 2014.

Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR) was revised by the Committee in October 2014.[9] Key observations from the current period results include:

- A total of 98 Group 1 and 108 Group 2 banks participated in the NSFR monitoring exercise for the end-December 2015 reference period.

[7] Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools,* January 2013, www.bis.org/publ/bcbs238.htm.

[8] As with the end-June 2015 reporting period, LCR analysis for the end-December 2015 reporting period reflects a sample that excludes all banks from one jurisdiction due to data quality limitations.

[9] Basel Committee on Banking Supervision, *Basel III: The net stable funding ratio,* October 2014, www.bis.org/bcbs/publ/d295.htm.

- The weighted average NSFR was 113.7% for Group 1 banks and 115.9% for Group 2 banks at end-December 2015 compared to 111.9% and 114.0% respectively, at end-June 2015.
- Some 79.6% of Group 1 banks and 87.0% of Group 2 banks meet or exceed the 100% minimum NSFR requirement, with 95.9% of Group 1 banks and 97.2% of Group 2 banks at an NSFR of 90% or higher as of end-December 2015.
- The aggregate NSFR shortfall – which reflects the aggregate shortfall for banks that are below the 100% NSFR requirement and does not reflect any surplus stable funding at banks above the 100% requirement – was €257.0 billion at end-December 2015 compared to €415.2 billion at end-June 2015. The shortfall was €234.5 billion and €22.5 billion at end-December 2015 for Group 1 and Group 2 banks, respectively, compared to €373.8 billion and €41.4 billion at end-June 2015.

  The NSFR, including any potential revisions, will become a minimum standard by 1 January 2018.

Detailed results of the Basel III monitoring exercise as of 31 December 2015

1. General remarks

At its 12 September 2010 meeting, the Group of Governors and Heads of Supervision (GHOS), the oversight body of the Basel Committee on Banking Supervision, announced a substantial strengthening of existing capital requirements and fully endorsed the agreements it had reached on 26 July 2010.[1] These capital reforms, together with the introduction of two international liquidity standards, responded to the core of the global financial reform agenda presented to the Seoul G20 Leaders summit in November 2010. Subsequent to the initial comprehensive quantitative impact study published in December 2010, the Committee continues to monitor and evaluate the impact of these capital, leverage and liquidity requirements (collectively referred to as "Basel III") on a semiannual basis.[2] This report summarises the results of the latest Basel III monitoring exercise using 31 December 2015 data.[3]

A major element of the Committee's post-crisis regulatory reform agenda is its work to address the problem of excessive variability in risk-weighted assets. A key input to assisting the Committee in finalising this work by the end of the year will be the results of a cumulative data collection exercise conducted by the Committee. These data are still subject to further analysis with an aim to publish key results around the end of the year.

1.1 Scope of the monitoring exercise

All but one of the 27 Committee member countries participated in the Basel III monitoring exercise as of 31 December 2015. The estimates presented are based on data submitted by the participating banks and their national supervisors in reporting questionnaires and in accordance with the instructions prepared by the Committee in January 2016.[4] The questionnaire covered components of eligible capital, the calculation

1 See the 26 July 2010 press release "The Group of Governors and Heads of Supervision reach broad agreement on Basel Committee capital and liquidity reform package", www.bis.org/press/p100726.htm, and the 12 September 2010 press release "Group of Governors and Heads of Supervision announces higher global minimum capital standards", www.bis.org/press/p100912.htm.

2 A list of previous publications is included in the Annex.

3 The data for Japan are as of the end of September 2015, as banks in that country report on a biannual basis as of the end of March and the end of September to correspond to the fiscal year-end period. Further, the data for Canada reflect a reporting date of 31 October 2015, which corresponds to Canadian banks' fiscal second quarter-end.

4 See Basel Committee on Banking Supervision, *Instructions for Basel III implementation monitoring*, January 2016, www.bis.org/bcbs/qis/.

of risk-weighted assets (RWA), the calculation of a leverage ratio and components of the liquidity metrics. The final data were submitted to the Secretariat of the Committee by 20 August 2016.

The purpose of the exercise is to provide the Committee with an ongoing assessment of the impact on participating banks of the capital and liquidity standards set out in the following documents:

- *Revisions to the Basel II market risk framework*[5] and *Guidelines for computing capital for incremental risk in the trading book*;[6]
- *Enhancements to the Basel II framework*[7] which include the revised risk weights for re-securitisations held in the banking book;
- *Basel III: A global framework for more resilient banks and the banking system* as well as the Committee's 13 January 2011 press release on loss absorbency at the point of non-viability;[8]
- *Capital requirements for bank exposures to central counterparties*;[9]
- *Global systemically important banks: updated assessment methodology and the additional loss absorbency requirement* as well as the updated list of G-SIBs published by the Financial Stability Board in November 2015;[10]
- *Basel III: the Liquidity Coverage Ratio and liquidity risk monitoring tools;*[11]
- *Basel III: the net stable funding ratio;*[12] *and*
- *Basel III leverage ratio framework and disclosure requirements*.[13]

1.2 Sample of participating banks

Data were provided for a total of 228 banks, including 100 Group 1 banks and 128 Group 2 banks.[14] Group 1 banks are those that have Tier 1 capital of more than €3 billion and are internationally active. All other banks are considered Group 2 banks. Banks were asked to provide data at the consolidated level as of 31 December 2015. Subsidiaries are not included in the analyses to avoid double-counting. For Group 1 banks, members' coverage of their banking sector was very high, reaching 100% coverage for some countries. Coverage for Group 2 banks was lower, and varied across countries.

5 Basel Committee on Banking Supervision, *Revisions to the Basel II market risk framework*, July 2009, www.bis.org/publ/bcbs158.htm.

6 Basel Committee on Banking Supervision, *Guidelines for computing capital for incremental risk in the trading book*, July 2009, www.bis.org/publ/bcbs159.htm.

7 Basel Committee on Banking Supervision, *Enhancements to the Basel II framework*, July 2009, www.bis.org/publ/bcbs157.htm.

8 The Committee's 13 January 2011 press release on loss absorbency at the point of non-viability is available at www.bis.org/press/p110113.htm.

9 Basel Committee on Banking Supervision, *Capital requirements for bank exposures to central counterparties*, July 2012, www.bis.org/publ/bcbs227.htm.

10 Basel Committee on Banking Supervision, *Global systemically important banks: updated assessment methodology and the additional loss absorbency requirement*, July 2013, www.bis.org/publ/bcbs255.htm; Financial Stability Board, *2015 update of list of global systemically important banks (G-SIBs)*, 3 November 2015, www.financialstabilityboard.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf.

11 Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, www.bis.org/publ/bcbs238.htm.

12 Basel Committee on Banking Supervision, *Basel III: the net stable funding ratio,* October 2014, www.bis.org/bcbs/publ/d295.htm.

13 Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, www.bis.org/publ/bcbs270.htm.

14 See Table A.1 in the Statistical Annex for details on the sample.

For a small number of banks data relating to some parts of the Basel III framework were unavailable. Accordingly, these banks are excluded from individual sections of the Basel III monitoring analysis due to incomplete data. In certain sections, data are based on a consistent sample of banks. This consistent sample represents only those banks that reported necessary data at the June 2011 (labelled "H1 2011") through December 2015 ("H2 2015") reporting dates, in order to make more meaningful period-to-period comparisons. Unless noted otherwise, the consistent sample includes 90 Group 1 banks, of which 30 are G-SIBs, and 69 Group 2 banks. The 30 banks in the G-SIB time series analyses are those banks which have been classified as G-SIBs as of November 2015, irrespective of whether they have also been classified as G-SIBs previously.

The Committee appreciates the significant efforts contributed by both banks and national supervisors to this ongoing data collection exercise.

1.3 Methodology

Unless otherwise noted, the impact assessment was carried out by comparing banks' capital positions under fully phased-in Basel III to the transitional Basel III framework as implemented by the national supervisor (ie with phase-in arrangements). The fully phased-in Basel III results are calculated without considering transitional arrangements pertaining to the phase-in of deductions and grandfathering arrangements set out in the Basel III framework. However, banks in some countries had difficulties providing fully phased-in Basel III capital amounts; in such cases, the capital amounts according to the fully phased-in *national implementation* of the Basel III framework were used instead.

Consistent with previous reports, this report does not reflect any additional capital requirements under Pillar 2 of the Basel II framework, any higher loss absorbency requirements for domestic systemically important banks, nor does it reflect any countercyclical capital buffer requirements.

Reported average amounts in this document have been calculated by creating a composite bank at a total sample level, which effectively means that the total sample averages are weighted. For example, the average common equity Tier 1 capital ratio is the sum of all banks' common equity Tier 1 (CET1) capital for the total sample divided by the sum of all banks' risk-weighted assets for the total sample. Similarly, the average fully phased-in Basel III Tier 1 leverage ratio is the sum of all banks' fully phased-in Tier 1 capital for the total sample divided by the sum of all banks' Basel III leverage ratio exposures for the total sample.

To preserve confidentiality, some of the results shown in this report are presented using box plot charts. The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample unless noted otherwise.

1.4 Data quality

For this monitoring exercise, participating banks submitted comprehensive and detailed non-public data on a voluntary and best-efforts basis. As with the previous studies, national supervisors worked extensively with banks to ensure data quality, completeness, and consistency with the published reporting instructions. Banks are included in the various analyses below only to the extent that they were able to provide data of sufficient quality to complete the analyses.

1.5 Interpretation of results

The following caveats apply to the interpretation of results shown in this report:

- When comparing results to prior reports, sample differences as well as minor revisions to data from previous periods need to be taken into account. Sample differences also explain why results presented for the December 2015 reporting date may differ from the H2 2015 data point in graphs and tables showing the time series for the consistent sample of banks as described above.

- The actual impact of the new requirements will almost certainly be less than shown in this report given the phased-in implementation of the standards and interim adjustments made by the banking sector to changing economic conditions and the regulatory environment. For example, the results do not consider bank profitability, changes in capital or portfolio composition, or other management responses to the policy changes since 31 December 2015 or in the future. For this reason, the results are not comparable to industry estimates, which tend to be based on forecasts and consider management actions to mitigate the impact, as well as incorporate estimates where information is not publicly available.
- The Basel III capital amounts shown in this report assume that all common equity deductions are fully phased in and all non-qualifying capital instruments are fully phased out (ie it is assumed that none of these capital instruments will be replaced by eligible instruments). As such, these amounts underestimate the amount of Tier 1 capital and Tier 2 capital held by a bank as they do not give any recognition for non-qualifying instruments that will actually be phased out over six years.
- The treatment of deductions and non-qualifying capital instruments also affects figures reported in the section on the Basel III leverage ratio. The assumption that none of these capital instruments will be replaced by eligible instruments will become less of an issue as the implementation date of the Basel III leverage ratio nears.

2. Regulatory capital, capital requirements and capital shortfalls

Table 2 shows the aggregate capital ratios under the transitional and fully phased-in Basel III frameworks and the capital shortfalls if Basel III were fully phased-in ("view 2022"), both for the definition of capital and the calculation of risk-weighted assets, as of December 2015. Details of capital ratios and capital shortfalls are provided in Sections 2.1 and 2.2.

The Basel III framework includes the following phase-in provisions for capital ratios:

- Regulatory adjustments (ie possibly stricter sets of deductions that apply under Basel III) will be fully phased in by 1 January 2018;
- An additional 2.5% capital conservation buffer above the regulatory minimum capital ratios, which must be met with CET1, will be phased in by 1 January 2019; and
- The additional loss absorbency requirement for G-SIBs, which ranges from 1.0% to 2.5%, will be fully phased in by 1 January 2019. It will be applied as an extension of the capital conservation buffer and must be met with CET1.

The Annex includes a detailed overview of the Basel Committee's phase-in arrangements.

Aggregate capital ratios and (incremental) capital shortfalls

Table 2

	Fully implemented requirement, in per cent		Basel III capital ratios, in per cent		Risk-based capital shortfalls, in billions of euros[1]		Combined risk-based capital and leverage ratio shortfalls, in billions of euros[1]	
	Min	Target[2]	Transitional	Fully phased-in	Min	Target[2]	Min	Target[2]
Group 1 banks								
CET1 capital	4.5	7.0–9.5	12.2	11.8	0.0	0.0	0.0	0.0
Tier 1 capital[3]	6.0	8.5–11.0	13.3	12.6	0.0	3.3	0.0	3.3
Total capital[4]	8.0	10.5–13.0	15.9	14.4	0.0	5.5	0.0	5.5
Sum					0.0	8.8	0.0	8.8
Of which: G-SIBs								
CET1 capital	4.5	8.0–9.5	12.1	11.7	0.0	0.0	0.0	0.0
Tier 1 capital[3]	6.0	9.5–11.0	13.4	12.7	0.0	0.0	0.0	0.0
Total capital[4]	8.0	11.5–13.0	16.0	14.5	0.0	1.7	0.0	1.7
Sum					0.0	1.7	0.0	1.7
Group 2 banks								
CET1 capital	4.5	7.0	13.5	13.1	0.0	0.2	0.0	0.2
Tier 1 capital[3]	6.0	8.5	14.0	13.5	0.0	1.5	1.5	3.0
Total capital[4]	8.0	10.5	16.0	15.0	0.2	4.7	0.2	4.7
Sum					0.2	6.4	1.6	7.9

[1] The shortfall is calculated as the sum across individual banks where a shortfall is observed. The calculation includes all changes to risk-weighted assets (eg definition of capital, counterparty credit risk, trading book and securitisation in the banking book). The Tier 1 and total capital shortfalls are incremental assuming that the higher-tier capital requirements are fully met. [2] The shortfalls at the target level include the capital conservation buffer and the capital surcharges for 30 G-SIBs as applicable. [3] The shortfalls presented in the Tier 1 capital row are *additional* Tier 1 capital shortfalls. [4] The shortfalls presented in the total capital row are *Tier 2* capital shortfalls.

Source: Basel Committee on Banking Supervision.

2.1 Capital ratios

As compared with transitional CET1, the average CET1 capital ratio of Group 1 banks would have fallen from 12.2% to 11.8% (a decline of 0.4 percentage points) when Basel III deductions and risk-weighted assets are fully taken into account. For Group 2 banks, the CET1 capital ratio declines from 13.5% under transitional rules to 13.1% as a result of the full phasing-in of Basel III (a reduction of 0.4 percentage points). Results continue to show significant variation across banks as shown in Graph 1 for the transitional Basel III rules and Graph 2 for fully phased-in Basel III. The reduction in CET1 ratios is driven by the *full* application of the new definition of eligible capital instruments, deductions that were not previously applied at the common equity level of Tier 1 capital in most countries (numerator),[15] and by increases in risk-weighted assets (denominator). Since all countries in the sample have already implemented Basel III as of end-June 2015 the overall change in RWA is very limited and mainly due to different national phase-in plans.

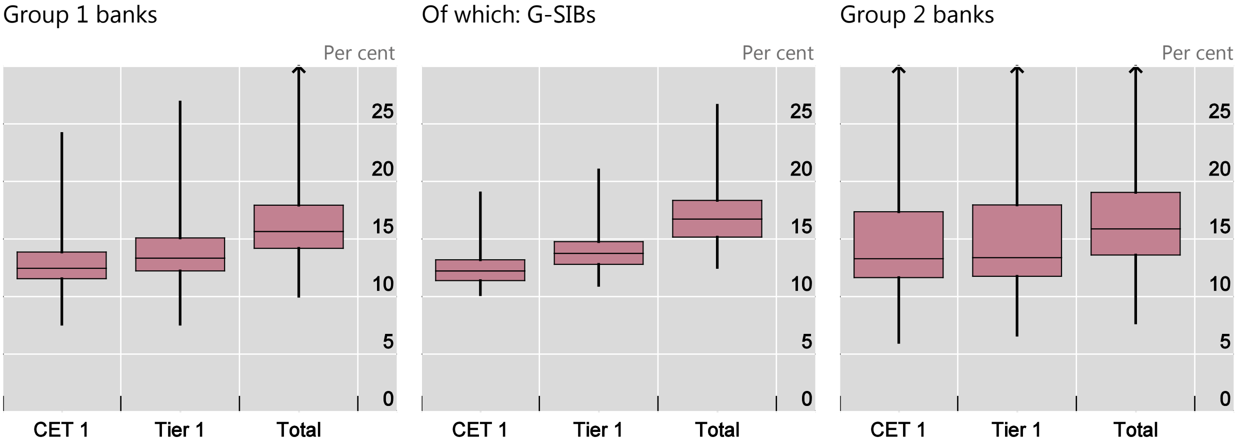
Tier 1 capital ratios of Group 1 banks would on average decline 0.7 percentage points from 13.3% to 12.6%, and total capital ratios of this same group would decline on average by 1.5 percentage points from 15.9% to 14.4%. Group 2 banks show similar declines in Tier 1 capital ratios (from 14.0% to 13.5%)

[15] See also Table A.12 and Table A.13.

and total capital ratios (from 16.0% to 15.0%). The stronger decline of total capital ratios is caused by the phase-out of Tier 2 instruments which will no longer be eligible in 2022.

Transitional Basel III CET1, Tier 1 and total capital ratios

Graph 1

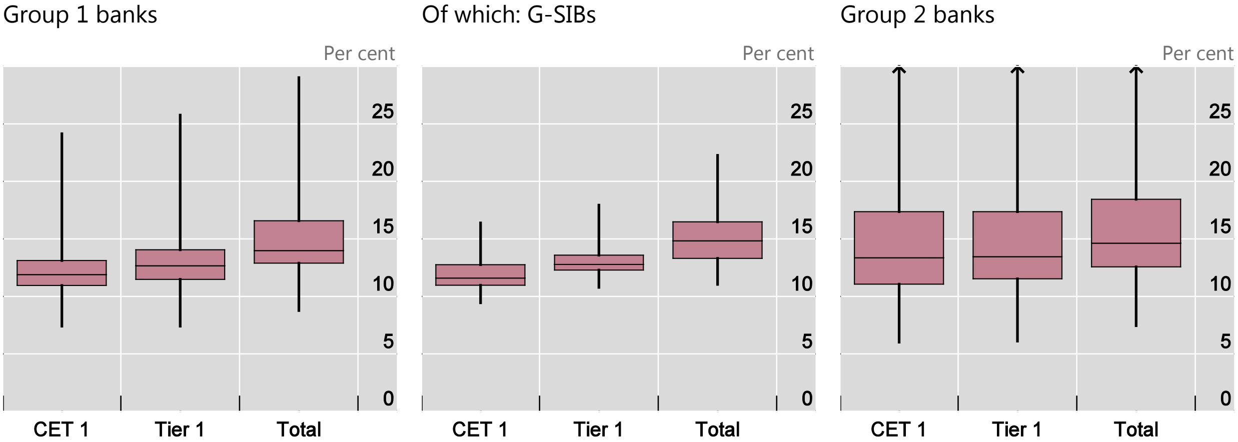


[1] The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the vertical lines generally show the range of the entire sample. In some cases, arrows at the top of the vertical line indicate banks with capital ratios outside the range shown in the graph.

Source: Basel Committee on Banking Supervision. See also Table A.2.

Fully phased-in Basel III CET1, Tier 1 and total capital ratios

Graph 2



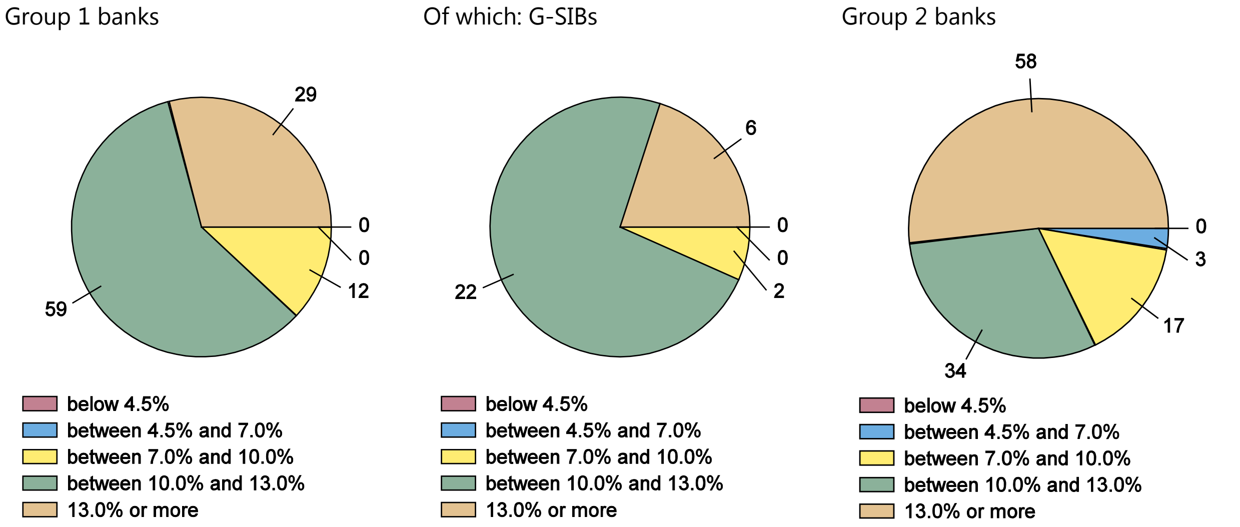
[1] The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the vertical lines generally show the range of the entire sample. In some cases, arrows at the top of the vertical line indicate banks with capital ratios outside the range shown in the graph.

Source: Basel Committee on Banking Supervision. See also Table A.3.

Graph 3 shows that, out of the 100 banks in the Group 1 sample, all show a CET1 ratio under fully phased-in Basel III that is above both the 4.5% minimum capital requirement and the 7.0% target ratio (ie the minimum capital requirement plus the capital conservation buffer). Of 116 banks in the Group 2 sample, all report a CET1 ratio equal to or higher than 4.5%, while 97.4% also achieve the target of 7.0%.

Distribution of fully phased-in Basel III CET1 ratios

Graph 3



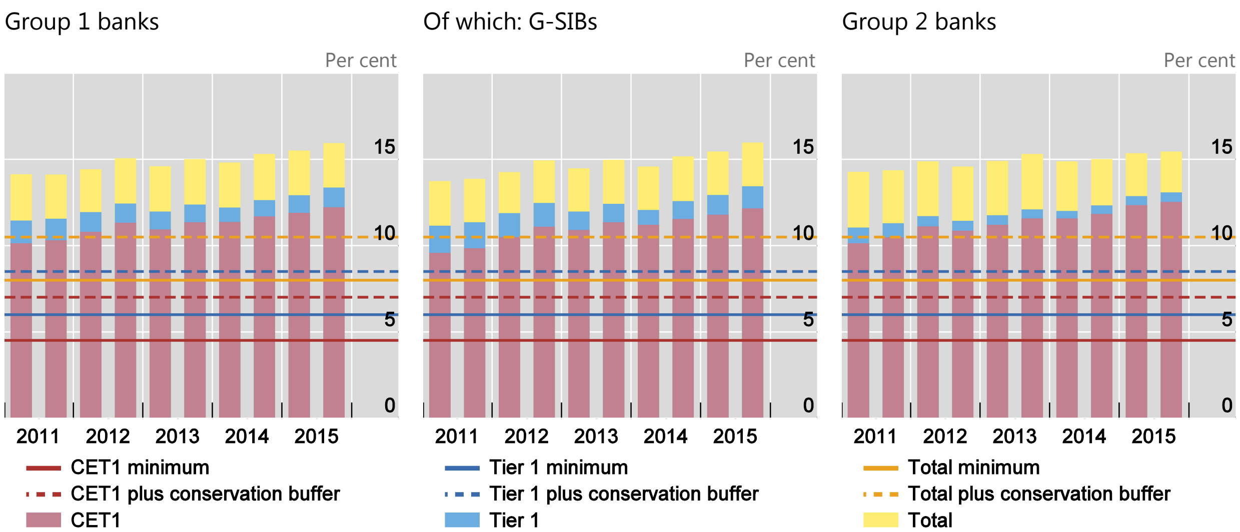
Source: Basel Committee on Banking Supervision.

Graph 4 below shows the average capital ratios under transitional Basel III rules for a consistent sample of Group 1 and Group 2 banks for the periods end-June 2011 through end-December 2015. Transitional capital ratios have not changed greatly.

Average transitional Basel III CET1, Tier 1 and total capital ratios[1]

Consistent sample of banks[2]

Graph 4



[1] Before the implementation of the Basel III framework, results have been calculated on the basis of the relevant national regulatory frameworks in place at the reporting dates. [2] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

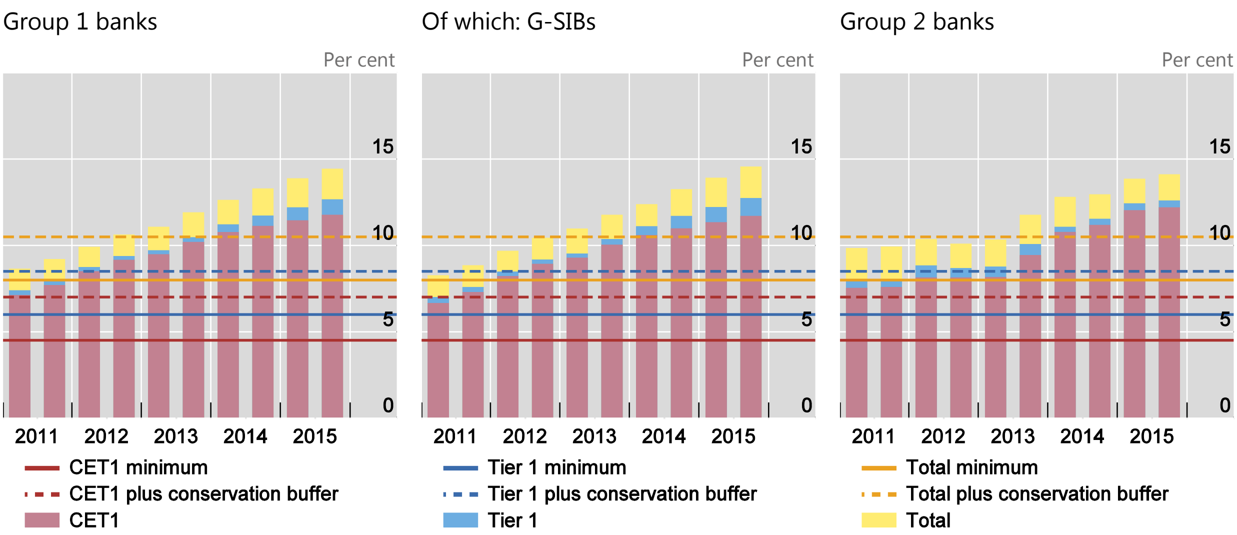
Source: Basel Committee on Banking Supervision. See also Table A.4.

After full phasing in of Basel III (Graph 5), the CET1, Tier 1 and total capital ratios for this consistent sample of Group 1 banks improved by 0.4, 0.5 and 0.5 percentage points, respectively, over the previous six months. For Group 2 banks, the improvement in risk-based capital ratios over the reporting period was 0.2, 0.2, and 0.3 percentage points respectively. The general improvement in fully phased-in

Basel III capital ratios for both groups is due to Basel III-eligible capital added and, to a lesser extent, lower levels of deductions that reduce CET1, in spite of slightly higher overall risk-weighted assets.

Average fully phased-in Basel III CET1, Tier 1 and total capital ratios

Consistent sample of banks[1] Graph 5



[1] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision. See also Table A.5.

2.2 Capital shortfalls

This section shows the capital shortfalls for the Group 1 and Group 2 bank samples assuming full phasing in of the Basel III requirements based on data as of 31 December 2015 and disregarding transitional arrangements. The shortfalls presented are measured against different minimum capital ratio requirements (ie 4.5% CET1, 6.0% Tier 1 and 8.0% total capital) as well as against the *target* level, which includes the 2.5% capital conservation buffer and capital surcharges for 30 G-SIBs as applicable.

Graph 6 and Graph 7 below as well as Table 2 above provide estimates of the amount of capital that Group 1 and Group 2 banks would need based on data as of 31 December 2015 in addition to capital already held at the reporting date, in order to meet the target CET1, Tier 1 and total capital ratios under Basel III assuming fully phased-in requirements and deductions. Under these assumptions, there is no CET1 capital shortfall for Group 1 or Group 2 banks with respect to the 4.5% CET1 minimum requirement. For a CET1 target of 7.0% (ie the 4.5% CET1 minimum plus the 2.5% capital conservation buffer) plus any capital surcharge for Group 1 G-SIBs as applicable according to the updated list of banks published by the Financial Stability Board in November 2015, the Group 1 banks also have no shortfall, while the shortfall for Group 2 banks is €0.2 billion. As a point of reference, the aggregate sum of after-tax profits prior to distributions for the six-month period ending 31 December 2015 for Group 1 and Group 2 banks was €206.8 billion and €11.0 billion.

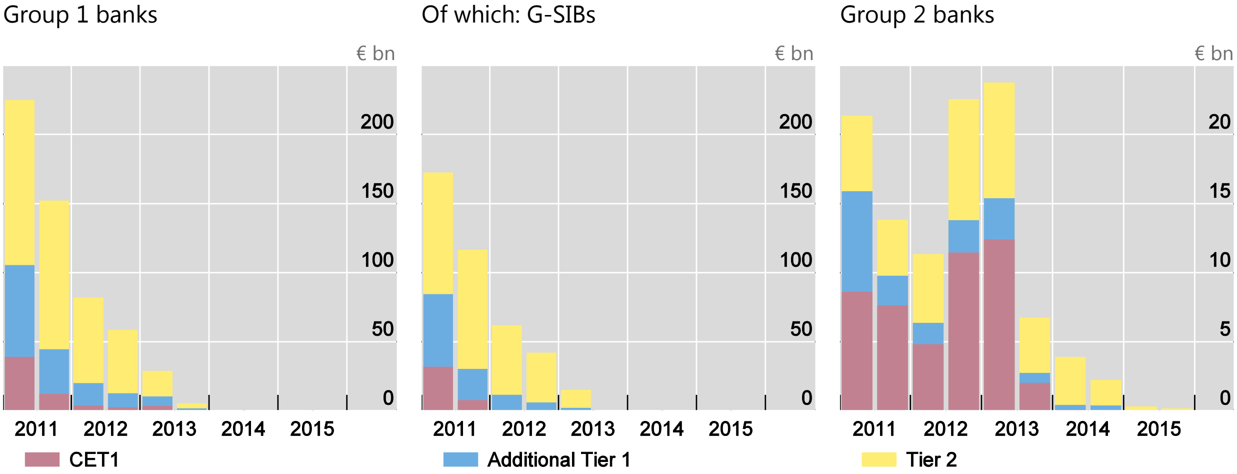
Group 1 banks would not need additional Tier 1 or CET1 capital to meet the minimum Tier 1 capital ratio requirement of 6.0%. Assuming banks already hold 7.0% CET1 capital plus the surcharges on G-SIBs as applicable, Group 1 banks would need an additional €3.3 billion of additional Tier 1 or CET1 capital to meet the Tier 1 capital target ratio of 8.5% (ie the 6.0% Tier 1 minimum plus the 2.5% CET1 capital conservation buffer) plus the surcharges on G-SIBs as applicable, respectively. Group 2 banks need no additional Tier 1 or CET1 capital to meet the minimum Tier 1 capital requirement but require an additional €1.5 billion to meet the target ratio.

Group 1 banks do not need additional Tier 2 or higher-quality capital to meet the minimum total capital ratio requirement of 8.0% but require an additional €5.5 billion of Tier 2 or higher-quality capital to meet the total capital target ratio of 10.5% (ie the 8.0% Tier 1 minimum plus the 2.5% CET1 capital conservation buffer) plus the surcharges on G-SIBs as applicable. Group 2 banks would need an additional €0.2 billion of Tier 2 or higher-quality capital to meet the total capital minimum requirement and an additional €4.7 billion of Tier 2 or higher-quality capital to meet the total capital target ratio.

As indicated above, no assumptions have been made about bank profits or behavioural responses, such as changes in balance sheet composition that would serve to reduce the impact of capital shortfalls over time.

Estimated capital shortfalls at the minimum level[1]

Fully phased-in Basel III, sample and exchange rates as at the reporting dates[2] Graph 6



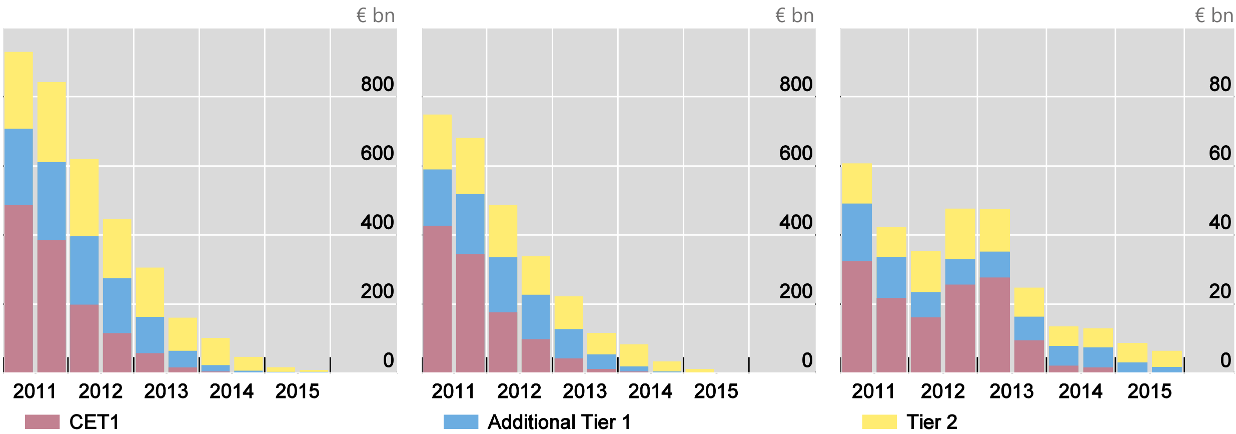
[1] The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Tier 1 and total) of capital. [2] Group 1 includes 101 banks in H1 2011 and H2 2011, 100 banks in H1 2012 and H2 2012, 101 banks in H1 2013 and in H2 2013 and 97 in H1 2014, H2 2014 and 100 in H1 2015 and H2 2015; Group 2 includes 109 banks in H1 2011, 107 in H2 2011, 104 in H1 2012, 115 in H2 2012, 118 in H1 2013, 113 in H2 2013, 114 in H1 2014, 108 in H2 2014, 114 in H1 2015 and 111 in H2 2015.

Source: Basel Committee on Banking Supervision. See also Table A.6.

At the CET1 target level of 7.0% plus the surcharges on G-SIBs as applicable, the aggregate CET1 shortfall of Group 1 banks remained zero over the six-month period ending 31 December 2015 (see Graph 7). Among Group 2 banks the CET1 shortfall at the 7.0% target level is at the same level as from June 2015.

Estimated capital shortfalls at the target level[1]

Fully phased-in Basel III, sample and exchange rates as at the reporting dates[2] Graph 7



[1] The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Tier 1 and total) of capital. [2] Group 1 includes 101 banks in H1 2011 and H2 2011, 100 banks in H1 2012 and H2 2012, 101 banks in H1 2013 and in H2 2013 and 97 in H1 2014, H2 2014 and 100 in H1 2015 and H2 2015; Group 2 includes 109 banks in H1 2011, 107 in H2 2011, 104 in H1 2012, 115 in H2 2012, 118 in H1 2013, 113 in H2 2013, 114 in H1 2014, 108 in H2 2014, 114 in H1 2015 and 111 in H2 2015.

Source: Basel Committee on Banking Supervision. See also Table A.7.

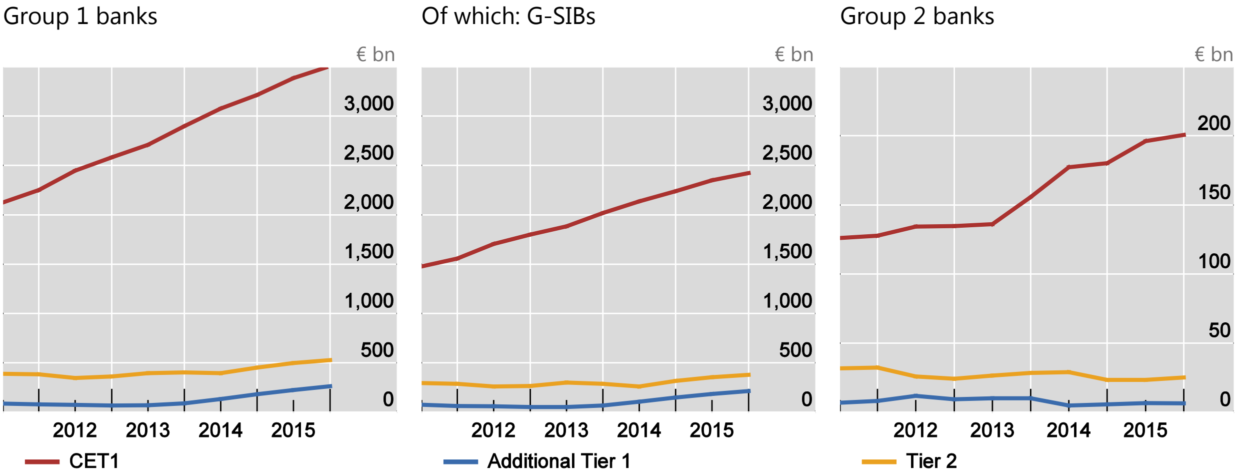
2.3 Level of capital

Graph 8 shows the development of the level of CET1 capital of banks in the consistent sample assuming full phasing-in of Basel III separately for Group 1 banks, Group 2 banks and G-SIBs. From end-June 2015 to end-December 2015, the level of Group 1 banks' CET1 has increased by €123 billion or 3.6% to €3,507 billion. Around 60% of this increase, €74 billion, can be attributed to the G-SIBs in the sample which collectively held €2,424 billion of CET1 at December 2015. Group 2 banks' CET1 has increased by €5 billion or 2.6% to €201 billion.

Since end-June 2011, the consistent sample of Group 1 banks have increased their CET1 capital by 65.1%. The overall increase for the G-SIBs included in this sample is similar (64.2%), while the CET1 of the consistent sample of Group 2 banks has increased by 59.5%.

Level of capital after full phasing in of Basel III

Consistent sample of banks,[1] exchange rates as of 31 December 2015 — Graph 8



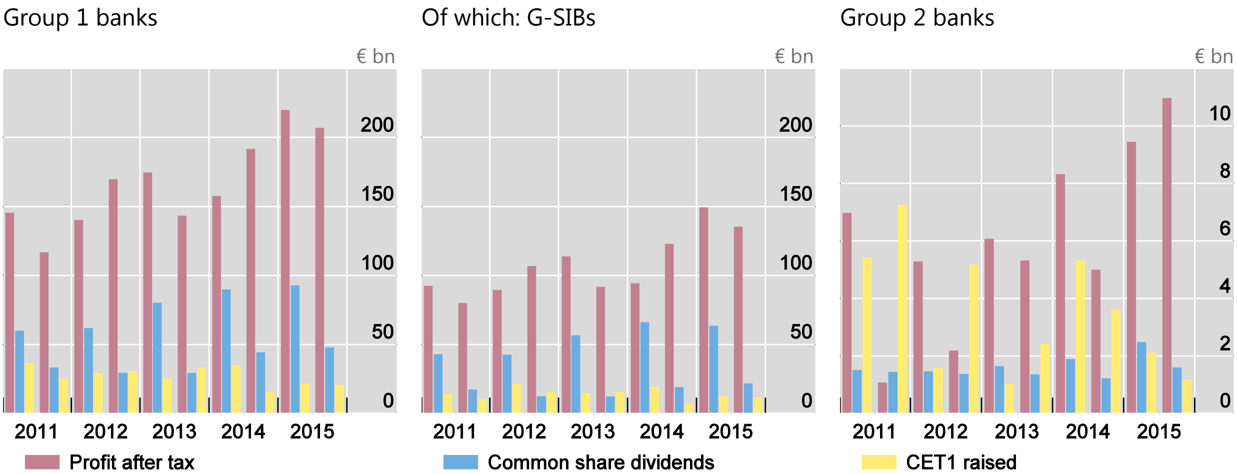
[1] Group 1 includes 91 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision. See also Table A.8.

The CET1 capital raised by the consistent sample of Group 1 banks (see Graph 9) varied between €36.3 billion in the first half of 2011 and €20.6 billion in the second half of 2015. Of these amounts, capital raised by the G-SIBs in the sample was 39.4% in the first half of 2011 and 54.9% in the second half of 2015. For the consistent sample of Group 2 banks, capital raised was the lowest in the first half of 2013 at slightly more than €1 billion, while the amount raised in the second half of 2015 was €1.2 billion.

Profits, dividends and CET1 capital raised

Consistent sample of banks,[1] exchange rates as of 31 December 2015 — Graph 9



[1] Group 1 includes 89 banks, G-SIB includes 29 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision. See also Table A.9.

In the second half of 2015 the full sample of Group 1 banks raised €25.4 billion of CET1 capital (see Table 3). Of this amount, 63.0% was raised by G-SIBs within the sample. Group 2 banks collectively raised €6.4 billion of CET1 capital during the reporting period.

Capital raised during H2 2015

Full sample of banks, gross amounts, in billions of euros — Table 3

	Number of banks	Number of banks that raised capital	CET1	Additional Tier 1	Tier 2
Group 1	100	61	25.4	36.0	51.9
of which: G-SIBs	30	22	16.0	28.7	34.9
Group 2	108	39	6.4	0.9	2.7

Source: Basel Committee on Banking Supervision.

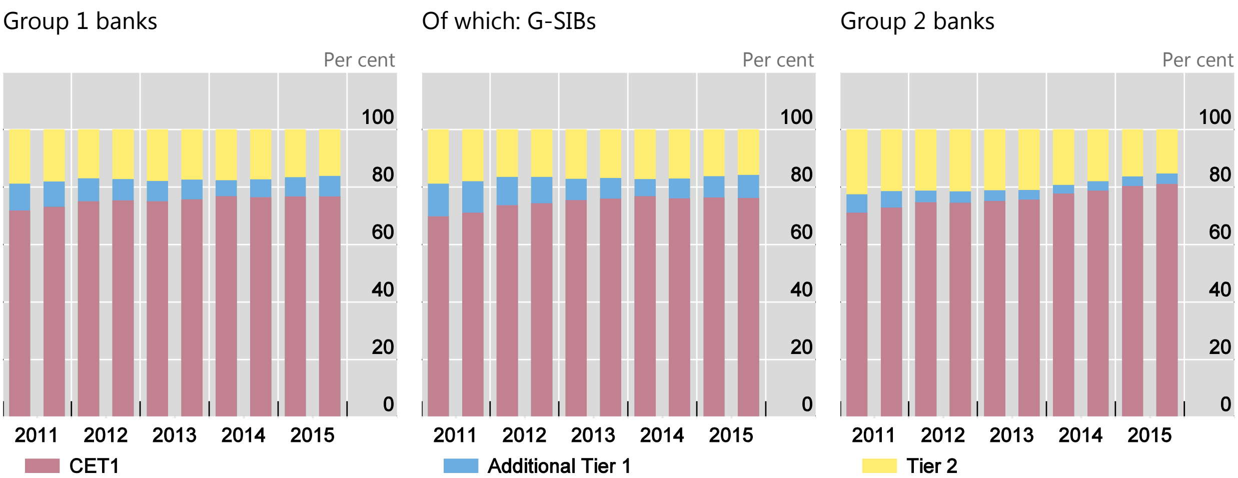
2.4 Composition of capital

The graphs below show the composition of total capital for Group 1 and Group 2 banks under transitional Basel III rules (Graph 10) and after full phasing-in of Basel III (Graph 11).

For Group 1 banks, the share of fully phased-in Basel III CET1 to total capital is 81.6%. Additional Tier 1 and Tier 2 capital amount to 6.1% and 12.3% of the total capital of Group 1 banks, respectively. Of the Group 1 bank sample, approximately 30.0% hold Basel III CET1 representing 90% or more of Basel III total capital. In the Group 2 sample, banks hold a similar share of CET1 at 86.4% with shares of additional Tier 1 capital and Tier 2 capital amounting to 2.8% and 10.8%, respectively. Under transitional Basel III rules, the share of CET1 to total capital is lower at 76.7% for Group 1 banks and at 81.0% for Group 2 banks, with correspondingly higher shares of additional Tier 1 and Tier 2 capital.

Structure of regulatory capital under transitional Basel III rules

Consistent sample of banks[1] — Graph 10

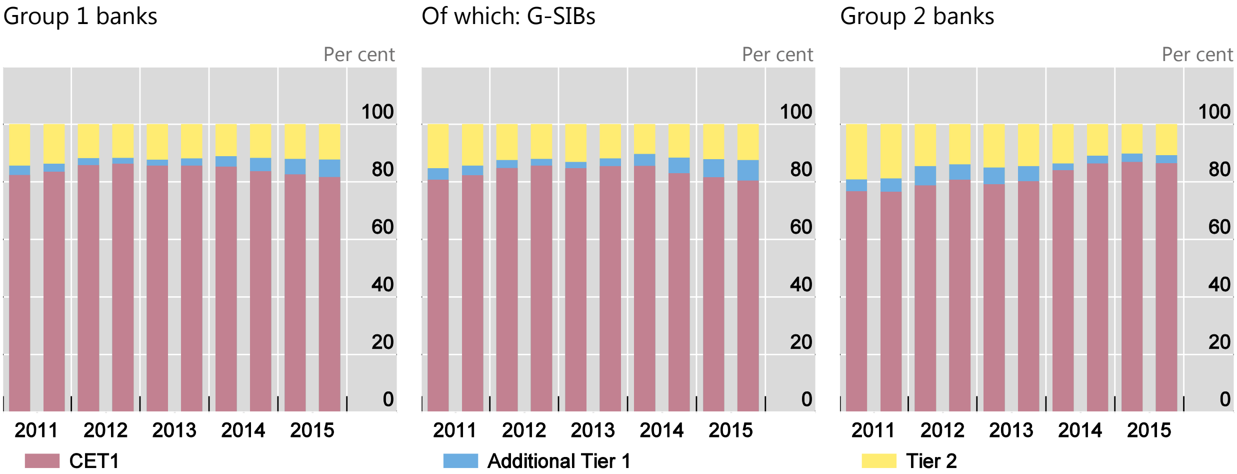


[1] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision. See also Table A.10.

Structure of regulatory capital under fully phased-in Basel III

Consistent sample of banks[1] Graph 11



[1] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision. See also Table A.11.

Regarding the composition of Basel III CET1 capital itself, retained earnings (56.0% for Group 1 banks and 36.3% for Group 2 banks) and paid-in capital (36.9% for Group 1 banks and 45.9% for Group 2 banks) comprise the predominant form of gross CET1 outstanding. Accumulated other comprehensive income (AOCI) makes up a substantial portion of CET1 outstanding in a few countries but contributes only 5.9% of gross CET1 on average for Group 1 banks and 14.0% for Group 2 banks. Meanwhile, total minority interest given recognition in CET1 contributes only a respective 0.9% and 3.9% to the outstanding CET1 balances of Group 1 and Group 2 banks.

2.5 Leverage ratio

Key results

The results regarding the Basel III leverage ratio are provided using the two following measures of Tier 1 capital in the numerator:

- *Transitional Basel III Tier 1*, which is Tier 1 capital eligible under the national implementation of the Basel III framework in place in member countries at the reporting date, including any phase-in arrangements; and
- *Fully phased-in Basel III Tier 1* capital.

Under the January 2014 Basel III leverage ratio framework,[16] the Basel III leverage ratio exposure measure (the denominator of the Basel III leverage ratio) includes:

- on-balance sheet assets, excluding securities financing transactions (SFTs) and derivatives;
- SFTs, with limited recognition of netting of cash receivables and cash payables with the same counterparty under strict criteria;

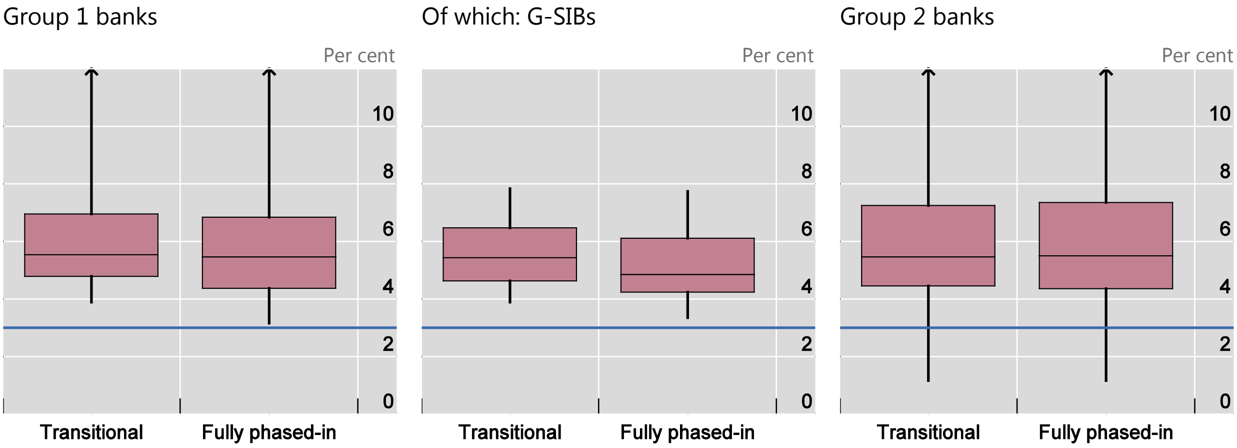
[16] Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, www.bis.org/publ/bcbs270.htm. The Committee proposed revisions to the leverage ratio framework in April 2016, see Basel Committee on Banking Supervision, *Revisions to the Basel III leverage ratio framework, consultative document*, April 2016, www.bis.org/bcbs/publ/d365.htm.

- derivative exposures at replacement cost (net of cash variation margin meeting a set of strict eligibility criteria) plus an add-on for potential future exposure based on the current exposure method (CEM);
- written credit derivative exposures at their effective notional amount (net of negative changes in fair value that have been incorporated into the calculation of Tier 1 capital) reduced by the effective notional amount of purchased credit derivatives that meet offsetting criteria related to reference name, level of seniority and maturity;
- off-balance sheet exposures, obtained by multiplying notional amounts by the credit conversion factors in the standardised approach to credit risk, subject to a floor of 10%; and
- other exposures as specified in the Basel III leverage ratio framework.

Total exposures of the 100 Group 1 banks and the 109 Group 2 banks in the sample were €76.1 trillion. Graph 12 presents summary statistics related to the distribution of Basel III leverage ratios based on transitional Basel III Tier 1 and fully phased-in Basel III Tier 1 capital for Group 1 banks, G-SIBs and Group 2 banks. The weighted average transitional Basel III Tier 1 leverage ratios would be 5.8% for Group 1 banks and for G-SIBs 5.9% alone, while it would amount to 5.7% for Group 2 banks. The weighted average fully phased-in Basel III Tier 1 leverage ratios are 5.6% for Group 1 banks, G-SIBs and Group 2 banks. Group 2 banks show a greater dispersion compared to Group 1 banks.

Under both the transitional and the fully phased-in Basel III Tier 1 leverage ratios, three banks in the sample would not meet the 3% ratio level, all of them being Group 2 banks, with an aggregate shortfall of €1.5 billion.

Transitional Basel III Tier 1 and fully phased-in Basel III Tier 1 leverage ratios[1] Graph 12



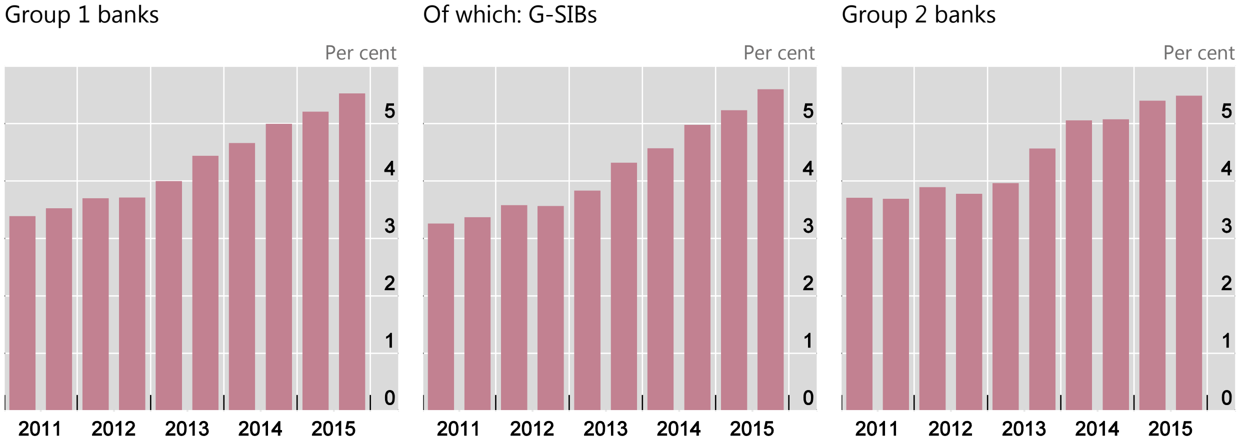
[1] The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the vertical lines generally show the range of the entire sample. Banks with Basel III leverage ratios above 12% are included in the calculation but are not shown in the graph.

Source: Basel Committee on Banking Supervision. See also Table A.14.

Graph 13 shows how the fully phased-in Basel III Tier 1 leverage ratios have evolved over time for a consistent sample of 90 Group 1 banks (including 30 G-SIBs) and 68 Group 2 banks, all of which provided leverage ratio data for all reporting dates from June 2011 to December 2015.

Fully phased-in Basel III Tier 1 leverage ratios[1]

Consistent sample of banks — Graph 13



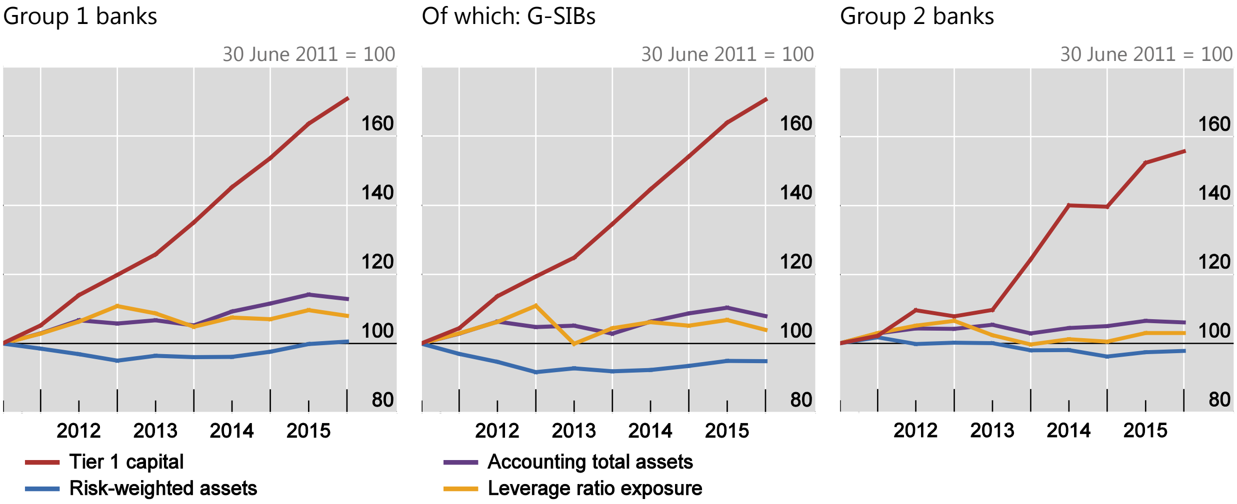
[1] Note that the data points for H1 2013 use an approximation for the final definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used. Consistent sample across periods; Group 1 includes 90 banks, G-SIBs include 30 banks and Group 2 includes 68 banks.

Source: Basel Committee on Banking Supervision. See also Table A.15.

Graph 14 shows the evolution of the components of the risk-based capital and leverage ratios over time for a consistent sample of banks, ie banks that have consistently been providing the four data series for the period June 2011 to December 2015. The four components are Basel III Tier 1 capital, risk-weighted assets and the leverage ratio exposure measure, all assuming full implementation of Basel III, as well as accounting total assets. For Group 1 banks, capital steadily increased over the period, whereas leverage ratio exposures followed a similar pattern until end-2012 and remained relatively stable thereafter. Furthermore, since June 2012, changes in accounting total assets and risk-weighted assets have been relatively modest. For Group 2 banks these three time series track more closely and have remained rather stable over the last four years. Group 2 banks also report significant increases in fully phased-in Basel III Tier 1 capital since the December 2013 reporting period.

Tier 1 capital, risk-weighted assets, leverage ratio exposure and accounting total assets[1]

Consistent sample of banks, exchange rates as of 31 December 2015 Graph 14



[1] Tier 1 capital, risk-weighted assets and leverage ratio exposure assume full implementation of Basel III. Note that the data points for H1 2013 use an approximation for the final definition of the Basel III leverage ratio exposure where gross instead of adjusted gross securities financing transaction values are used. Consistent sample across periods; Group 1 includes 90 banks, G-SIBs include 30 banks and Group 2 includes 68 banks.

Source: Basel Committee on Banking Supervision. See also Table A.16.

Relationship between the Basel III leverage ratio and risk-based capital requirements

Table 4 below shows the migration of banks from *bounded* to *non-bounded* after Tier 1 capital rising to meet the target Tier 1 risk-based capital ratio.[17] It shows in particular that 1.5% of the banks in the sample do not meet the minimum Basel III leverage ratio of 3%, even after increasing Tier 1 capital to meet the target risk-based Tier 1 capital requirements.

Share of banks meeting the fully phased-in Basel III leverage ratio before and after capital raising to meet the risk-based target Tier 1 ratio

In per cent Table 4

		Target Tier 1 ratio binding (<8.5% + G-SIB surcharge)?			
		Yes	No	Total	Total after capital raising to meet **target** Tier 1 ratio
Leverage ratio binding (<3%)?	Yes	0.5	1.0	1.5	1.5
	No	5.0	93.5	98.5	98.5
	Total	5.5	94.5	100.0	100.0

Source: Basel Committee on Banking Supervision.

Graph 15 below shows the interaction between the fully phased-in Basel III Tier 1 leverage ratios (horizontal axis) and the fully phased-in Basel III Tier 1 risk-weighted capital ratios (vertical axis). Ratios of

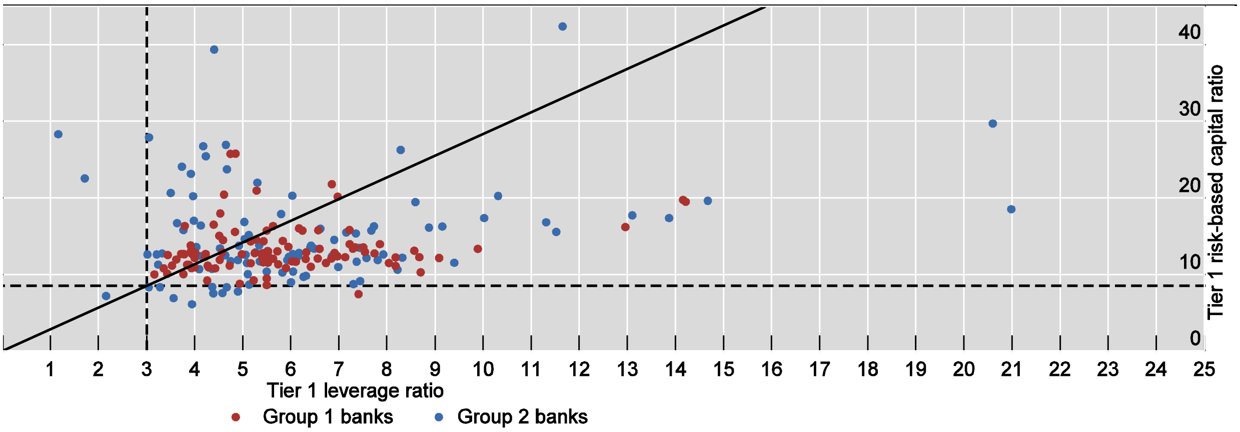
[17] That is, a Tier 1 minimum capital ratio of 6% plus a capital conservation buffer of 2.5% plus, where applicable, any G-SIB capital surcharges.

Group 1 banks are marked with red dots and those of Group 2 banks with blue dots. The dashed horizontal line represents a Tier 1 target risk-based capital ratio of 8.5%,[18] whereas the dashed vertical line represents a Basel III Tier 1 leverage ratio of 3%.

The diagonal line represents points where an 8.5% fully phased-in Basel III Tier 1 target risk-based capital ratio results in the same amount of required fully phased-in Basel III Tier 1 capital as a fully phased-in Basel III Tier 1 leverage ratio of 3%. By construction, it also represents a multiple of 8.5%/3%≈2.83 between risk-weighted assets and the Basel III leverage ratio exposure measure. Therefore, for banks plotted above the diagonal line, the Basel III Tier 1 leverage ratio requires more Tier 1 capital than the Tier 1 risk-based capital ratio (ie the Basel III Tier 1 leverage ratio becomes the constraining requirement).[19] For banks plotted below the diagonal line, the target Tier 1 risk-based capital ratio requires more capital than the leverage ratio (ie the Tier 1 capital ratio remains the constraining requirement).

Fully phased-in Basel III Tier 1 risk-based capital and leverage ratios

Consistent sample of banks, in per cent[1] Graph 15



[1] Banks with a risk-based Basel III Tier 1 capital ratio of more than 45% or a Basel III Tier 1 leverage ratio of more than 25% have been excluded from the graph.

Source: Basel Committee on Banking Supervision.

As shown in Graph 15, three Group 2 banks do not meet the minimum fully phased-in Basel III Tier 1 leverage ratio of 3% (plotted left of the vertical dashed line). One of these banks also does not meet the Basel III Tier 1 target capital ratio of 8.5% (plotted in the southwest quadrant of Graph 15). This graph also shows that the fully phased-in Basel III Tier 1 leverage ratio is constraining for 64 banks out of 209, including 32 Group 1 and 32 Group 2 banks (plotted above the diagonal line).

Pending settlement transactions

Different accounting options for pending settlement transactions related to the regular purchase or sale of financial assets under IFRS and GAAP have raised level playing field concerns across banks. IFRS gives entities the option to apply trade or settlement date accounting for regular purchases or sales of financial

[18] Calculated as the sum of a 6.0% Tier 1 minimum capital ratio plus 2.5% capital conservation buffer.

[19] Note that the effect of the G-SIB surcharge is not taken into account. As the G-SIB surcharges only apply to the risk-based requirement, the relevant proportion between risk-weighted assets and total leverage ratio exposure that determines whether the Basel III leverage ratio is constraining or not may vary on a bank by bank basis.

assets.[20] US GAAP and Japanese GAAP require trade date accounting for banks and broker-dealers; broker-dealers may also offset the receivables and payables associated with pending settlement transactions.

The Committee received 150 valid submissions on the treatment of pending settlement transactions.[21] Table 5 shows the current distribution between Group 1 and Group 2 banks. According to this table, results differ across bank groups. Group 2 banks tend to apply settlement date accounting, while the majority of Group 1 banks apply trade date accounting. Banks using the trade date accounting with netting are mostly Group 1 banks.

Total number of banks by group and accounting treatment

Table 5

	Settlement date accounting	Trade date accounting without netting	Trade date accounting with netting[1]
Group 1	25	40	14
Group 2	49	21	1
Total	74	61	15

[1] Four out of the 12 banks that have reported using trade date accounting with netting have also reported to be IFRS banks, which may imply application of *conditional* netting under IFRS (see IAS 32) despite instructions for the reporting of this item to not reference such conditional netting.

2.6 Combined shortfall amounts

Graph 16 below shows a breakdown of risk-based capital shortfalls and combined risk-based and Basel III leverage ratio capital shortfalls for Group 1 banks, Group 2 banks and G-SIBs.

Each box consists of four bars. The leftmost bar in each of the boxes (labelled *Minimum*) shows the capital shortfall arising from a fully phased-in Basel III Tier 1 capital requirement of 6% and a fully phased-in Basel III total risk-based minimum capital requirement of 8%. The second leftmost bar (also labelled *Minimum*) shows the *combined* capital shortfall with respect to the fully phased-in Basel III Tier 1 capital ratio of 6%, the fully phased-in Basel III total risk-based minimum capital requirement of 8% *and* the fully phased-in Basel III Tier 1 leverage ratio requirement of 3%. These two bars are not applicable for Group 1 banks (and G-SIBs) as there is no shortfall at *minimum* level anymore.

Similarly, the first bar on the right side (labelled with *Target*) shows the capital shortfall arising from not meeting the fully phased-in Basel III Tier 1 risk-based capital target of 8.5% and the fully phased-in Basel III total capital target of 10.5% plus, where applicable, the G-SIB surcharges, whereas the rightmost bar shows the *combined* shortfall arising from those *target* capital ratios *and* the fully phased-in Basel III Tier 1 leverage ratio of 3%.

All Group 1 banks meet the target level for CET1 capital. For Group 2 banks, the CET1 capital shortfall required to meet the target level is €0.2 billion. The CET1 shortfall amounts are driven purely by the risk-based capital requirements (the red bars do not change when introducing the Basel III Tier 1 leverage ratio requirement), since there is no minimum CET1 Basel III leverage ratio requirement.[22]

[20] IFRS defines a *regular way purchase or sale* as a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the timeframe established generally by regulation or convention in the market place concerned. US GAAP provides a similar definition.

[21] A submission has been considered valid where the bank has correctly reported the accounting treatment used. However, it is still possible that zero figures were reported (eg when there were no pending settlement transactions at the reporting date).

[22] The assumption is that banks will issue more additional Tier 1 capital to meet a Basel III Tier 1 leverage ratio requirement given that the risk-based requirements are already fulfilled.

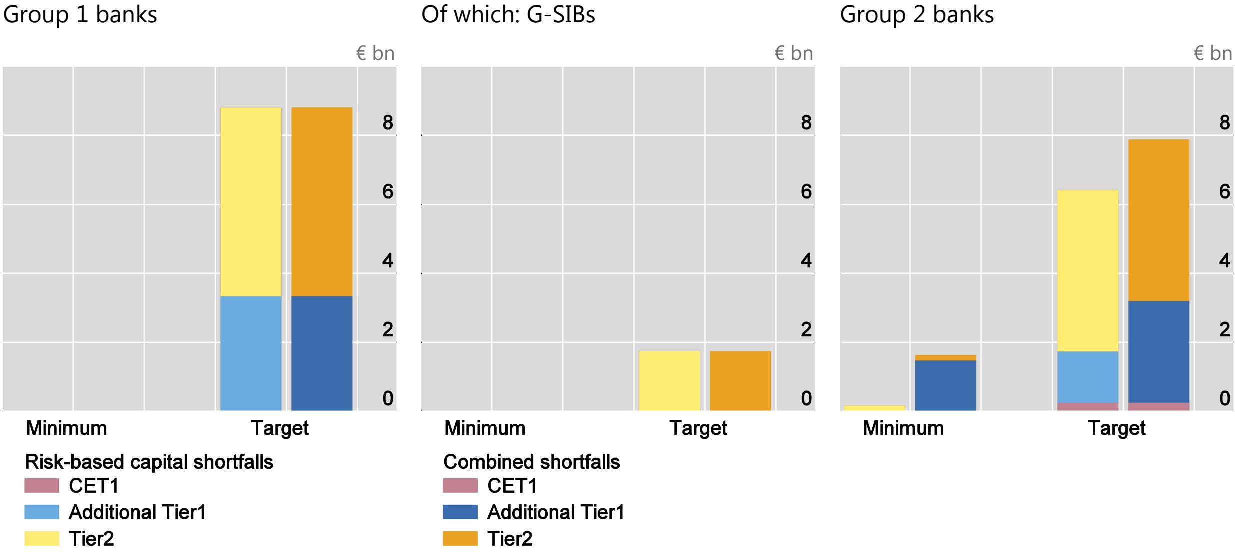
However, the Basel III Tier 1 leverage ratio causes an increase in the additional Tier 1 capital shortfall of Group 2 banks, both at the minimum and target levels. At both levels, the Basel III Tier 1 leverage ratio raises the additional Tier 1 capital shortfall by €1.5 billion (from zero to €1.5 billion and from €1.5 billion to €3.0 billion, respectively).

If the Basel III Tier 1 leverage ratio is included in the calculation, Tier 2 capital shortfalls for the total capital targets are unchanged (ie the orange bars are equivalent to the yellow bars). This is explained by the fact that banks which raised additional Tier 1 capital to meet the Basel III Tier 1 leverage ratio requirement did not have an additional Tier 2 capital shortfall to meet the total risk-based capital ratio.

Overall, the inclusion of applicable Basel III Tier 1 leverage ratio shortfalls has no impact on the capital shortfalls at the minimum or target levels for Group 1 banks. However, it increases the total capital shortfall for Group 2 banks by €1.4 billion at the minimum level and by €1.5 billion at the target level (from €0.2 billion to €1.6 billion and from €6.4 billion to €7.9 billion respectively).

Risk-based capital shortfalls and combined risk-based and leverage ratio capital shortfalls

Fully phased-in Basel III — Graph 16



Source: Basel Committee on Banking Supervision. See also Table 2.

3. Liquidity

3.1 Liquidity Coverage Ratio

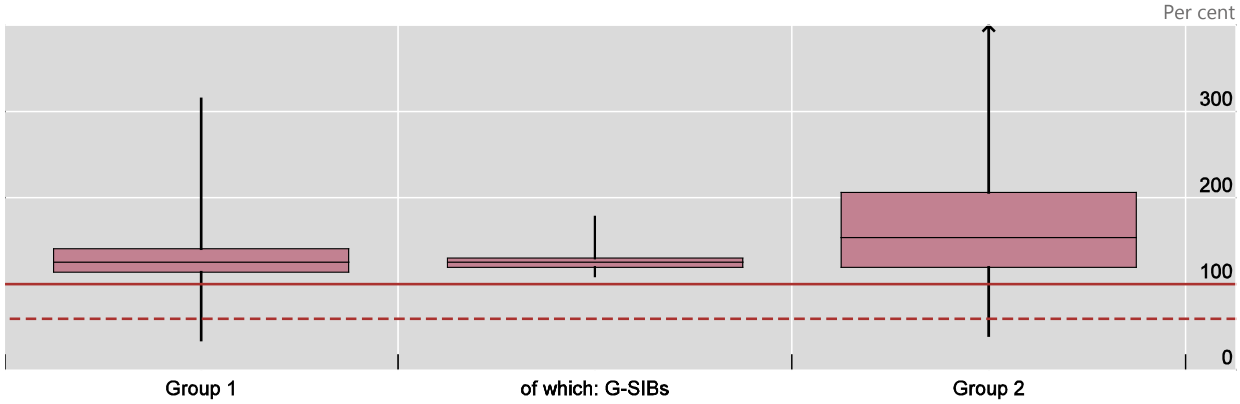
One of the two liquidity standards introduced by the Committee is the 30-day Liquidity Coverage Ratio (LCR), which promotes short-term resilience against potential liquidity disruptions. The LCR requires global banks to have sufficient high-quality liquid assets to withstand a stressed 30-day funding scenario specified by supervisors. The LCR numerator consists of a stock of unencumbered, high-quality liquid assets (HQLAs) that must be available to cover any net outflow, while the denominator comprises cash outflows less cash inflows (subject to a cap at 75% of outflows) that are expected to occur in a severe stress scenario.

The LCR was revised by the Committee in January 2013 and came into effect on 1 January 2015. The minimum requirement is initially set at 60% in 2015 and will then rise in equal annual steps of 10 percentage points to reach 100% in 2019.

Overall, 90 Group 1 and 70 Group 2 banks provided sufficient data in the end-December 2015 Basel III monitoring exercise to calculate the LCR according to the revised standard.[23] The weighted average LCR was 125.2% for Group 1 banks and 148.1% for Group 2 banks, which compare to average LCRs of 123.6% and 140.1% for Group 1 banks and Group 2 banks, respectively, as of end-June 2015.

The aggregate numbers under the revised LCR standard do not speak to the range of results across participating banks. Graph 17 below gives an indication of the distribution of bank results. Some 85.6% of all Group 1 banks and 82.9% of Group 2 banks in the Basel III monitoring sample already meet or exceed the final LCR minimum requirement of 100%, while 97.8% of Group 1 and 98.6% of Group 2 banks have LCRs that are at or above the initial 60% minimum requirement. These results compare to 85.9% and 82.4% of Group 1 and Group 2 banks, respectively, that met the 100% minimum requirement and 100% of all banks that met the 60% minimum requirement as of end-June 2015. One bank each in Group 1 and Group 2 does currently not meet the initial 60% LCR minimum requirement; the relevant national supervisory authorities have taken all necessary actions to restore the minimum LCR ratio.

Liquidity Coverage Ratio[1] Graph 17



[1] The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample. The sample is capped at 400%, meaning that all banks with an LCR above 400% were set to 400%. The red horizontal lines represent the 60% minimum (2015, dashed line) and the 100% minimum (2019, solid line).

Source: Basel Committee on Banking Supervision. See also Table A.17.

Basel III monitoring results show a shortfall (ie the difference between high-quality liquid assets and net cash outflows) of €55.5 billion for Group 1 banks (which represents approximately 0.1% of the €58.0 trillion total assets of the Group 1 sample) and €9.9 billion for Group 2 banks (which represents approximately 0.2% of the €4.6 trillion total assets of the Group 2 sample) as of end-December 2015. This compares to a shortfall of €48.0 billion (0.1% of Group 1 assets)) and €9.1 (0.2% of Group 2 assets) as of end-June 2015. This number is reflective only of the aggregate shortfall for banks that are below an LCR minimum requirement of 100% and does not reflect surplus liquid assets at banks above a 100% requirement. At a minimum requirement of 60% the aggregate shortfall was €21.8 billion for Group 1 banks and €1.0 billion for Group 2 banks at end-December 2015 compared to no shortfall at end-June 2015 and €52.9 billion for Group 1 banks and €17.1 billion for Group 2 banks at end-December 2014.

[23] As with the end-June 2015 reporting period, LCR analysis for the end-December 2015 reporting period reflects a sample that excludes all banks from one jurisdiction due to data quality limitations.

The key components of outflows and inflows are shown in Table 6. Group 1 banks show a notably larger percentage of total outflows, when compared with balance sheet liabilities, than Group 2 banks. This can be explained by the relatively greater contribution of wholesale funding activities and commitments within the Group 1 sample, whereas Group 2 banks, as a whole, are less reliant on these types of activities.

LCR outflows and inflows (post-factor) as a percentage of balance sheet liabilities

Table 6

Category	Group 1	of which: G-SIBs	Group 2
Outflows to…			
Unsecured retail and small business customers	2.4	2.6	2.8
Unsecured non-financial corporates	4.7	5.1	1.9
Unsecured sovereign, central bank, public sector entities (PSEs) and multilateral development banks (MDBs)	0.9	1.0	0.9
Unsecured financial institutions and other legal entities	5.0	5.0	2.4
Other unsecured wholesale funding incl. unsecured debt issuance	1.2	1.1	0.5
Secured funding and collateral swaps	1.9	2.4	0.4
Collateral, securitisations and own debt	0.6	0.7	0.5
Credit and liquidity facilities	2.0	2.1	0.9
Other contractual and contingent cash outflows including derivative payables	2.5	2.6	1.9
Total outflows[1]	**21.0**	**22.3**	**11.8**
Inflows from…			
Financial institutions	1.9	1.7	1.2
Retail and small business customers, non-financial corporates, central banks and other entities	1.4	1.4	1.0
Secured lending and collateral swaps	1.9	2.4	0.4
Other cash inflows including derivative receivables	0.6	0.6	0.7
Total inflows[1,2]	**5.8**	**6.1**	**3.2**

[1] May contain rounding differences. [2] The 75% cap is only applied to the "total inflow" category, which leads the sum of the individual inflow categories for Group 2 banks to exceed the total inflow contribution on account of banks that report inflows that exceeded the cap.

Source: Basel Committee on Banking Supervision.

75% cap on total inflows

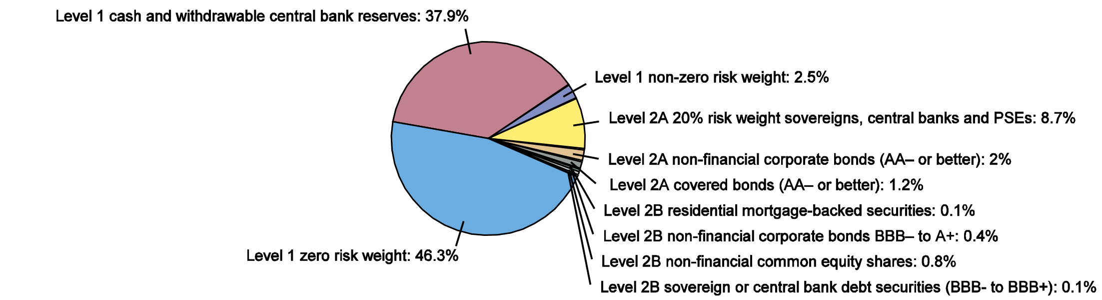
As at end-December 2015, no Group 1 and five Group 2 banks reported inflows that exceeded the 75% cap. Of these five Group 2 banks, all exhibit LCR ratios well above the minimum requirement of 100%.

Composition of high-quality liquid assets

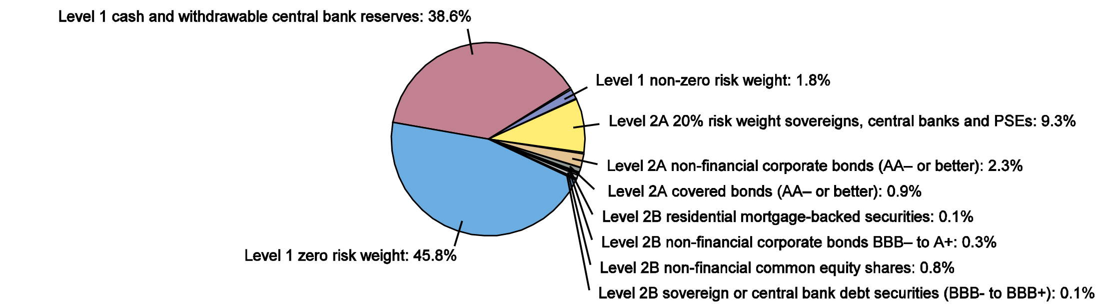
The composition of high-quality liquid assets (measured after application of the LCR haircuts) currently held at banks is depicted in Graph 18. The majority of Group 1 and Group 2 banks' holdings, in aggregate, are comprised of Level 1 assets, however, the sample as a whole shows diversity in their holdings of eligible liquid assets. Within Level 1 assets, 0% risk-weighted securities issued or guaranteed by sovereigns, central banks and public sector entities, and cash and central bank reserves comprise the most significant portions of the qualifying pool for Group 1 banks (together accounting for 84.2% of all eligible liquid assets). While these particular Level 1 assets represent a significant portion of eligible liquid assets for Group 2 banks as well (together accounting for 72.5% of eligible liquid assets), Group 2 banks also hold a significant portion of Level 1 non-0% risk-weighted securities issued or guaranteed by sovereigns, central banks and public sector entities (accounting for an additional 21.2% of eligible liquid assets compared to an additional 2.5% for Group 1 banks). Within the Level 2A asset class, the majority of holdings for Group 1 banks comprise 20% risk-weighted securities issued or guaranteed by sovereigns, central banks or public sector entities, while the majority of holdings for Group 2 banks comprise covered bonds (rated AA- or better). Eligible non-financial common equity shares comprise the majority of holdings of Level 2B assets for Group 1 banks. For Group 2 banks, the majority of holdings of Level 2B assets comprise a roughly even mix of residential mortgage-backed securities, non-financial institution corporate bonds (rated BBB- to A+) and non-financial common equity shares.

Composition of holdings of eligible liquid assets — Graph 18

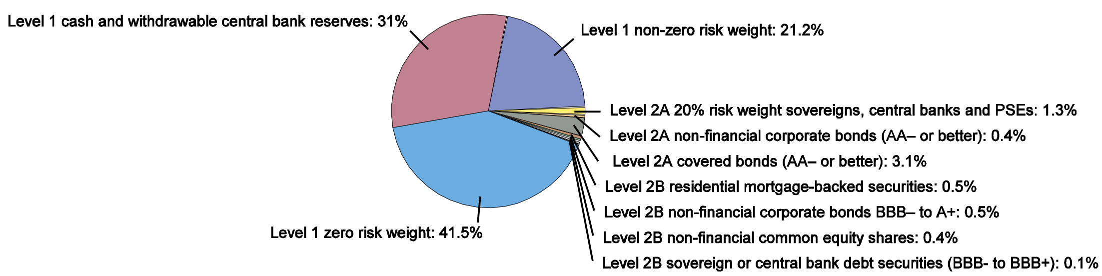
Group 1 banks



G-SIBs



Group 2 banks



Source: Basel Committee on Banking Supervision.

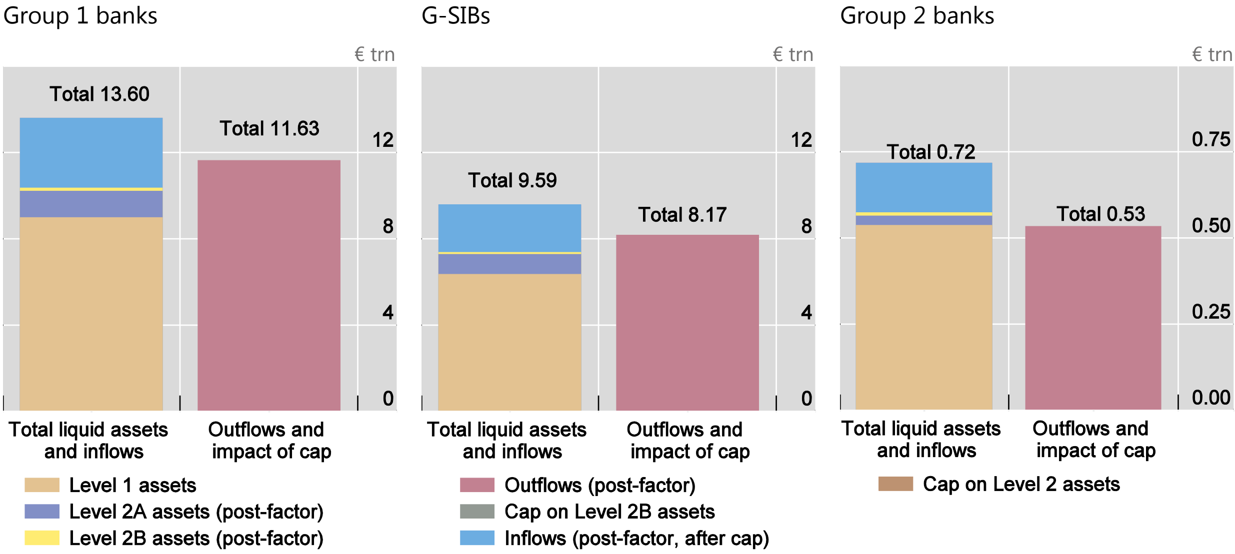
Caps on Level 2B and Level 2 assets

Due to the 15% Level 2B cap and the 40% overall Level 2 cap, €4.6 billion of Level 2 assets are excluded from high-quality liquid assets. In total, five banks are constrained, of which three banks are constrained only by the Level 2B cap and two banks are constrained only by the Level 2 cap. No bank is constrained by both caps. Of the five total banks that are constrained, one fails to meet an LCR minimum requirement of 100%.

Comparison of liquid assets and inflows to outflows and caps

Graph 19 combines the above LCR components by comparing liquidity resources (pool of high-quality liquid assets and inflows) to outflows. Note that the €1.97 trillion Group 1 gross surplus shown in the graph differs from the €55.5 billion gross shortfall at an LCR minimum requirement of 100% that is noted above, as it is assumed here that excess assets at one bank can offset those at another. In practice the aggregate position in the industry is likely to lie somewhere between these two numbers depending on how efficiently banks redistribute liquidity around the system. Similarly, the gross surplus for Group 2 banks was €0.19 trillion.

Comparison of HQLA pool and inflows to outflows and caps — Graph 19



Source: Basel Committee on Banking Supervision. See also Table A.18.

3.2 Net Stable Funding Ratio

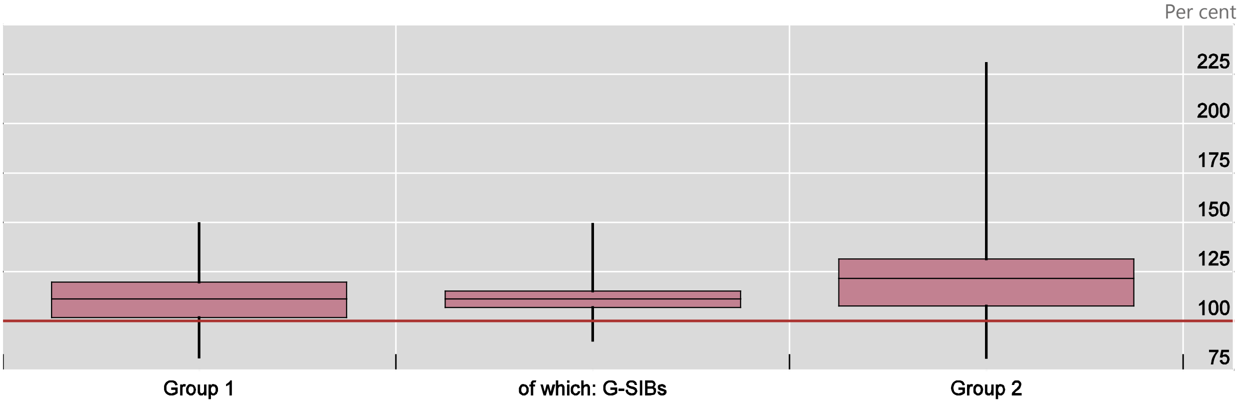
The second liquidity standard introduced by the Basel III reforms is the Net Stable Funding Ratio (NSFR), a longer-term structural ratio designed to reduce funding risk over a longer time horizon by requiring banks to fund their activities with sufficiently stable sources of funding in order to mitigate the risk of future funding stress.

Overall, 98 Group 1 and 108 Group 2 banks provided sufficient data in the end-December 2015 Basel III monitoring exercise to calculate the revised NSFR according to the standard issued by the Committee in October 2014. Some 79.6% of Group 1 banks and 87.0% of Group 2 banks already meet or exceed the 100% minimum NSFR requirement, with 95.9% of Group 1 banks and 97.2% of Group 2 banks at an NSFR of 90% or higher as of end-December 2015. This compares to 79.0% of Group 1 banks and 83.3% of Group 2 banks which met or exceeded the 100% minimum standard and 92.0% of Group 1 banks and 94.1% of Group 2 banks that had an NSFR 90% or higher in the end-June 2015 period.

The weighted average NSFR was 113.7% for Group 1 banks and 115.9% for Group 2 banks at end-December 2015 compared to 111.9% and 114.0% respectively, at end-June 2015. Graph 20 shows the distribution of results for Group 1 and Group 2 banks; the red line indicates the 100% minimum requirement, the black horizontal lines inside the boxes indicate the median for the respective bank group.

Net stable funding ratio[1]

Graph 20



[1] The median value is represented by a horizontal line, with 50% of the values falling in the range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample.

Source: Basel Committee on Banking Supervision. See also Table A.17.

Banks in the sample had a shortfall of stable funding[24] of €257.0 billion at end-December 2015 compared to €415.2 billion at end-June 2015. This number is reflective only of the aggregate shortfall for banks that are below the 100% NSFR requirement and does not reflect any surplus stable funding at banks above the 100% requirement. For the 98 Group 1 banks in the sample, the shortfall, as described above, is €234.5 billion at end-December 2015 compared to €373.8 billion at end-June 2015. For the 108 Group 2 banks in the sample, the shortfall, as described above, is €22.5 billion at end-December 2015 compared to €41.4 billion at end-June 2015.

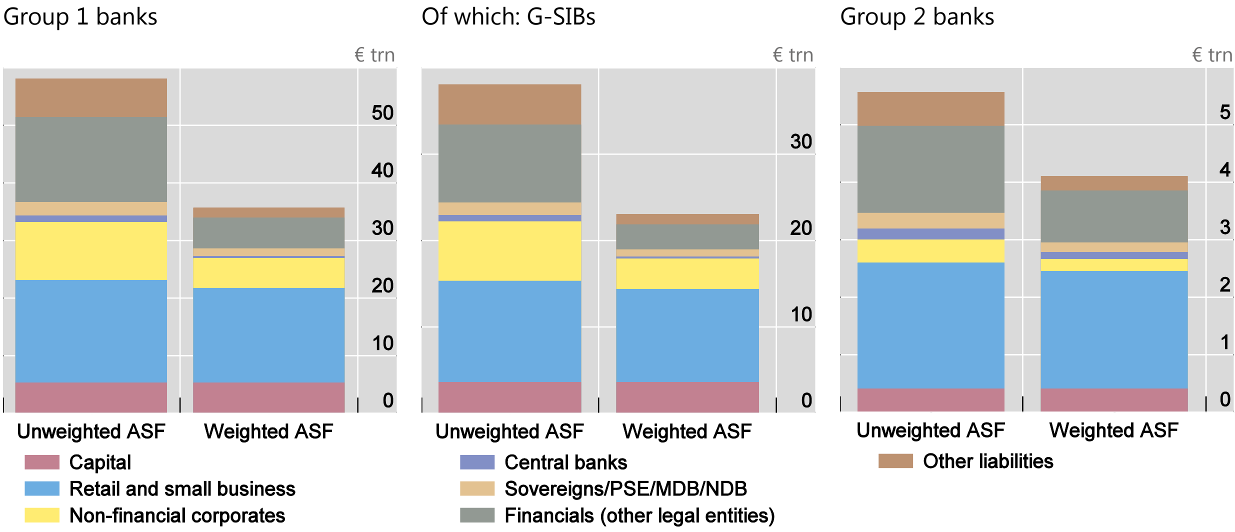
Stable funding sources

Deposits from retail and small business customers (ie "stable" and "less stable" deposits, as defined in the LCR) accounted for a significant portion of stable funding for banks in the sample, representing just under half of total weighted available stable funding for both Group 1 banks (46.1%) and Group 2 banks (49.6%). To a lesser degree, banks in the sample utilised funding from financial counterparties, which represented roughly 15.0% of total weighted available stable funding for Group 1 banks and 22.0% for Group 2 banks. By comparison, funding from non-financial corporate counterparties accounted for a greater proportion of total weighted available stable funding for Group 1 banks (14.5%) relative to Group 2 banks (5.2%). Operational deposits, which the NSFR treats similarly regardless of counterparty, accounted for 9.1% of total weighted available stable funding for Group 1 banks and 2.5% for Group 2 banks.

[24] The shortfall in stable funding measures the difference between balance sheet positions after the application of available stable funding factors and the application of required stable funding factors for banks where the former is less than the latter.

Aggregate available stable funding (ASF) by counterparty

Graph 21



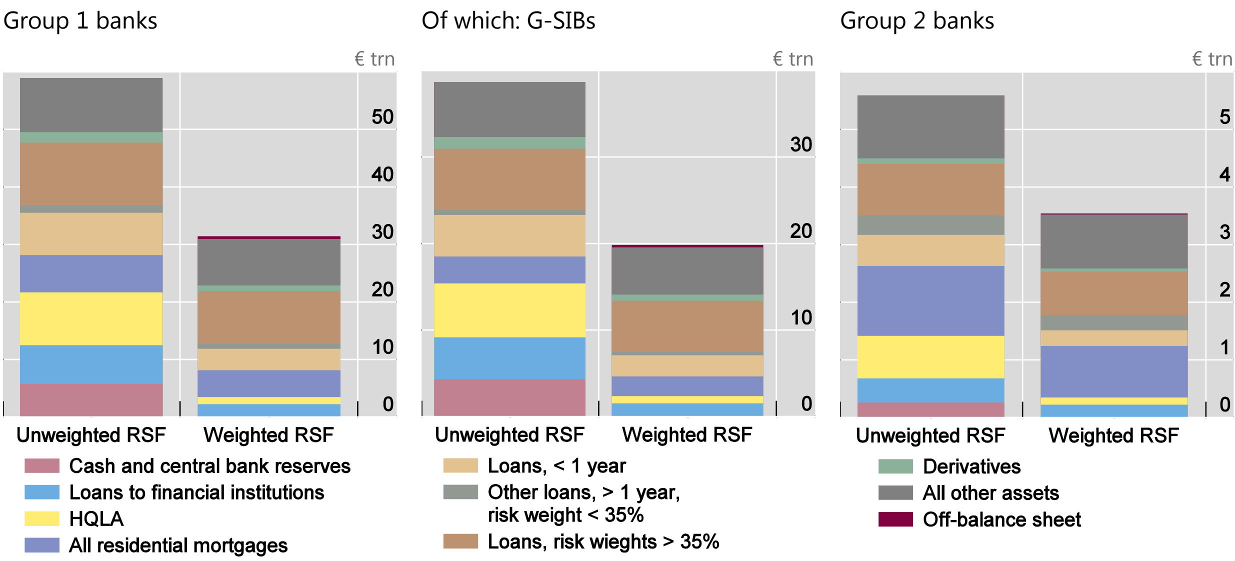
Source: Basel Committee on Banking Supervision. See also Table A.19.

Funding requirements

The NSFR generally assumes short-dated (ie maturing in less than one year) and higher quality assets require a smaller proportion of stable funding relative to longer term and lower quality assets. Indeed, much of the stable funding requirement across all banks in the sample was the result of longer-term assets such as loans. Loans with longer terms, including mortgages, represented roughly half of the stable funding requirement across all banks (46.9% for Group 1 banks and 54.1% for Group 2 banks). By comparison, HQLA securities represented 3.9% of the total stable funding requirement for Group 1 banks and 3.5% for Group 2 banks. Assets encumbered for more than six months represented 11.3% of total stable funding requirement (the NSFR treats assets encumbered for less than six months as unencumbered).

Aggregate required stable funding (RSF) by counterparty

Graph 22



Source: Basel Committee on Banking Supervision. See also Table A.20.

3.3 Liquidity Coverage Ratio and Net Stable Funding Ratio shortfalls over time

Graph 23 below displays the weighted average LCR, weighted average NSFR and shortfalls associated with each standard for a consistent sample of banks across reporting periods since end-December 2012.[25]

Group 1 banks that have reported LCR data for each of the reporting periods since end-December 2012 show ratios in recent periods that have increased from ratios reported to earlier periods. The weighted average LCR for these banks was 125.2% and 123.6% at end-December 2015 and end-June 2015, respectively, compared to 115.8% and 120.5% at end-June 2013 and end-December 2012. While Group 2 banks that have reported LCR data for each of the reporting periods since end-December 2012 show ratios that have trended lower for several periods, a weighted average LCR of 145.5% for these banks at the end-December 2015 period represents the highest ratio since the June-2013 reporting period. Additionally, the overall level of ratios for Group 2 banks remains higher than those observed for Group 1 banks.

The graph also displays net stable funding ratios since end-December 2012.[26] Group 1 banks that have reported NSFR data for each of the reporting periods since end-December 2012 show ratios in recent periods that have increased from ratios reported in earlier periods. The weighted average NSFR for these Group 1 banks was 113.6% and 111.8% at end-December 2015 and end-June 2015, respectively, compared to 99.9% and 99.6% at end-June 2013 and end-December 2012. Similarly, Group 2 banks that have reported NSFR data for each of the reporting periods since end-December 2012 show ratios that have trended higher in recent periods, rising to 116.8% and 115.1% at end-December 2015 and end-June 2015, respectively, compared to 102.0% and 100.4% at end-June 2013 and end-December 2012.

The aggregate shortfall at the 100% LCR minimum requirement was €54.2 billion for Group 1 banks and €8.8 billion for Group 2 banks at end-December 2015. While the shortfall observed for both bank groups increased slightly between the current and end-June 2015 reporting periods (€47.0 billion and €7.9 billion for Group 1 and Group 2 banks, respectively), shortfalls observed in recent periods remain well below those observed in earlier periods for both bank groups (€450.2 billion for Group 1 banks and €19.3 billion for Group 2 banks at end-December 2012, respectively).

The aggregate shortfall for Group 1 and Group 2 banks that do not meet the 100% LCR or NSFR requirement has generally declined for each of the respective standards since end-June 2012. The aggregate shortfall at the 100% NSFR minimum requirement was €234.5 billion for Group 1 banks and €8.6 billion for Group 2 banks at end-December 2015. This compares to shortfalls of €373.2 billion and €28.1 billion at end-June 2015 and €1,745.4 billion and €169.1 billion at end-December 2012.

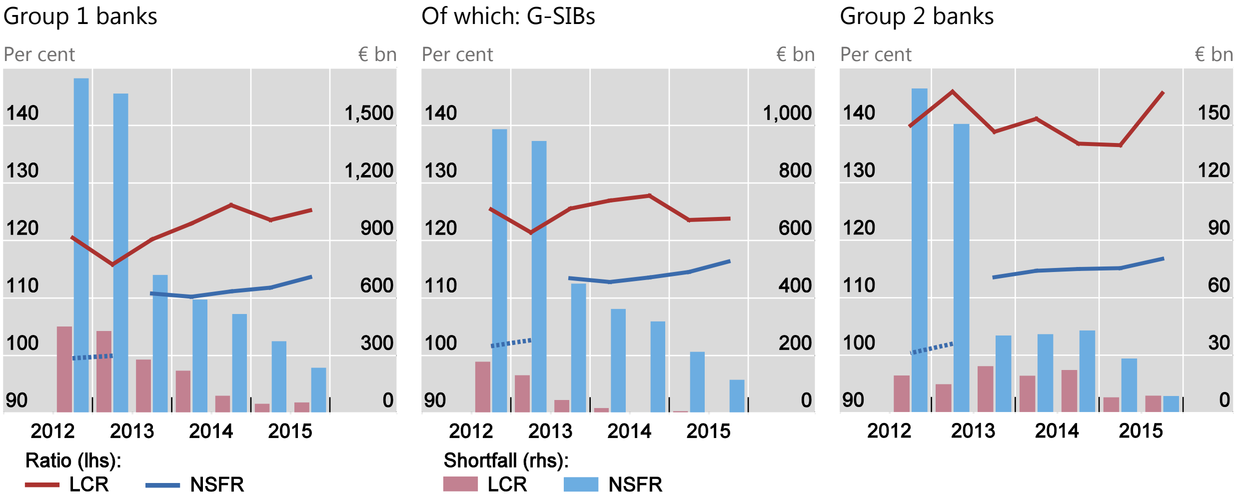
Graph 24 compares the trend in liquidity resources (ie HQLA and inflows) to outflows for a consistent sample of banks reporting LCR data since end-December 2012. This comparison displays the extent to which HQLA and inflows offset outflows for these banks. The balance of HQLA and inflows has exceeded the balance of outflows for all periods since end-December 2012 for both Group 1 and Group 2 banks. This difference reached €2.05 trillion and €0.14 trillion for Group 1 and Group 2 banks, respectively, at end-December 2015, which is the largest difference across all reporting periods since end-December 2012.

[25] Data for Graph 23 reflects only those banks reporting LCR and NSFR data for each reporting period since end-December 2012. LCR and NSFR samples are different.

[26] This graph depicts the NSFR as calculated under different versions of the NSFR framework (released in December 2010, January 2014 and October 2014, respectively). Calculations performed according to the final standard approved by the Committee in October 2014 start with the end-December 2014 reporting period. See Basel Committee on Banking Supervision, *Basel III: the net stable funding ratio*, October 2014, www.bis.org/bcbs/publ/d295.htm.

LCR, NSFR and shortfall at a 100% minimum requirement

Consistent sample of banks, exchange rates as at the reporting dates — Graph 23

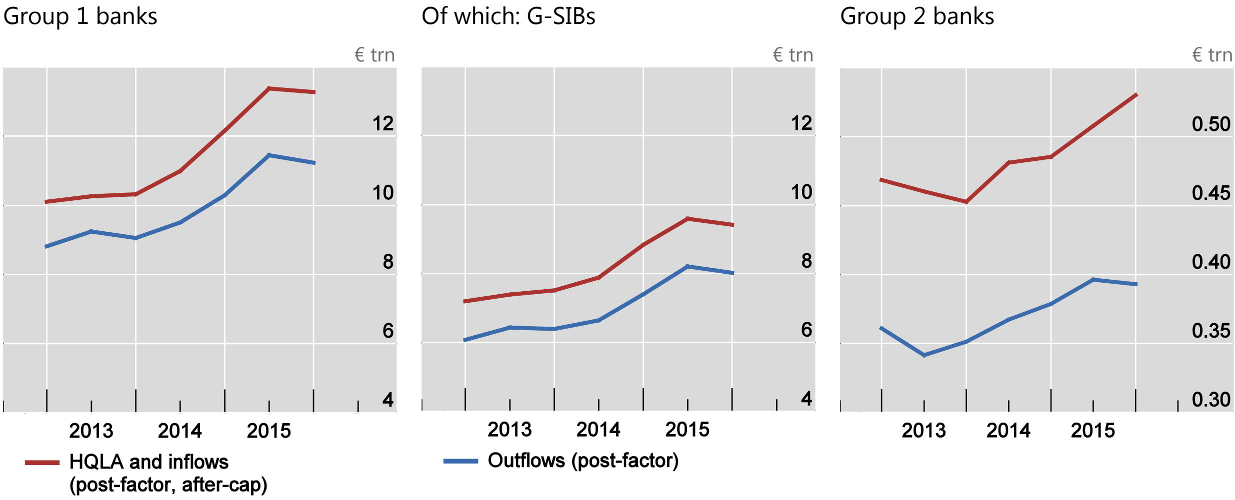


Consistent sample across periods. For the LCR analysis, Group 1 includes 83 banks, G-SIBs include 26 banks and Group 2 includes 57 banks. For the NSFR analysis, Group 1 includes 91 banks, G-SIBs include 28 banks and Group 2 includes 75 banks. As described in the text, the NSFR time series depicts data reflecting NSFR standard released in December 2010, January 2014 and October 2015.

Source: Basel Committee on Banking Supervision. See also Table A.21.

High quality liquid assets and inflows versus outflows over time

Consistent sample of banks[1], exchange rates as at the reporting dates — Graph 24



[1] Consistent sample across periods. Group 1 includes 83 banks, G-SIBs include 26 banks and Group 2 includes 57 banks.

Source: Basel Committee on Banking Supervision. See also Table A.22.

Marie-Céline Bard
Secretariat of the Basel Committee on Banking Supervision

Ken Taniguchi
Bank of Japan

Lynnette Withfield
Prudential Regulation Authority

Results of the quantitative impact study on the large exposures review clause

Background

When the Basel Committee issued the final standard *Supervisory framework for measuring and controlling large exposures*[1] (hereafter "the LE standard") in April 2014, it specified that interbank exposures and exposures to qualifying[2] central counterparties (CCPs) will be monitored and their treatment reviewed having assessed the appropriateness of the general treatment (ie a large exposure limit set at 25% of Tier 1 capital).

To assess the treatment to CCPs, the Committee agreed to also consider other post-crisis reforms, in particular regarding the Financial Stability Board's (FSB) mandate on mandatory clearing of OTC derivatives. The expectation was that a better informed assessment of banks' exposures to CCPs would be possible in 2015 and 2016 compared to 2013, which was the original time of data collection to assess the impact of the large exposures framework.

Regarding interbank exposures, the objective was to verify whether the application of the Tier 1 limit of 25% to interbank exposures was compatible with the efficient implementation of monetary policy.

Large exposures to central counterparties

Sample

The sample is formed of 74 banks from 17 countries that reported a total of 159 large exposures to central counterparties (CCPs). These included 19 G-SIBs, where G-SIBs are defined based on the announcement by the FSB in November 2015.[3] Furthermore, 31 other non-G-SIB Group 1 banks as well as 24 Group 2 banks reported data for the exercise.

Definitions

The LE standard identifies a list of exposures between exposures related to clearing activities as well as their exposure values (see below table extracted from paragraph 87 of the LE standard). The exposures

1 Basel Committee on Banking Supervision, *Supervisory framework for measuring and controlling large exposures*, April 2014, www.bis.org/publ/bcbs283.htm.

2 The review clause only applies to qualifying CCPs. For simplicity and considering that no exposure to non-Q-CCPs was reported, the report only refers to exposures to CCPs.

3 See Financial Stability Board, *2015 update of list of global systemically important banks (G-SIBs)*, November 2015, www.financialstabilityboard.org/wp-content/uploads/2015-update-of-list-of-global-systemically-important-banks-G-SIBs.pdf.

meeting this definition are summed together to measure the exposure value for large exposures purposes. This set of exposures is subject to the review clause.

Trade exposures	The exposure value of trade exposures must be calculated using the exposure measures prescribed in other parts of this framework for the respective type of exposures (eg using the SA-CCR for derivative exposures).
Segregated initial margin	The exposure value is 0.[4]
Non-segregated initial margin	The exposure value is the nominal amount of initial margin posted.
Pre-funded default fund contributions	Nominal amount of the funded contribution.[5]
Unfunded default fund contributions	The exposure value is 0.
Equity stakes	The exposure value is the nominal amount.[6]

Any other exposure to a CCP has to be considered as unrelated to clearing.

Key results

The graphs below focus on the 140 large exposures to CCPs related to clearing that were subject to the review clause. In some cases, banks also reported exposures to the same CCPs or to other CCPs unrelated to clearing activities, these are not detailed here as they are not subject to the review clause.

As illustrated in graphs below, the majority of exposures related to clearing are below 20% of Tier 1 of the reporting bank. However, 14 (ie 10%) were above the 25% (of Tier 1) limit applicable for exposures to other counterparties. These exposures concerned banks in seven different jurisdictions.

Of note, there is still some uncertainty whether the exposure values reported in the QIS exercises are representative of the amount of these exposures when the large exposures standard is implemented. Some factors could influence the level of these exposures in the future, in particular the regulatory method to calculate counterparty credit risk (CCR)[7] exposures and progress made in implementing mandatory clearing of standardised OTC derivatives across jurisdictions.

4 When the initial margin (IM) posted is bankruptcy-remote from the CCP – in the sense that it is segregated from the CCP's own accounts, eg when the IM is held by a third-party custodian – this amount cannot be lost by the bank if the CCP defaults; therefore, the IM posted by the bank can be exempted from the large exposure limit.

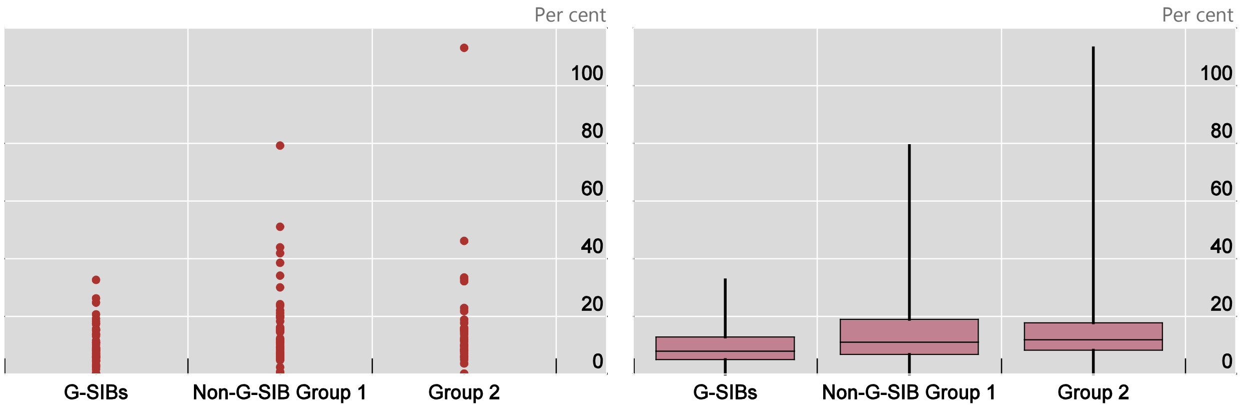
5 The exposure value for pre-funded default fund contributions may need to be revised if applied to QCCPs and not only to non QCCPs.

6 If equity stakes are deducted from the level of capital on which the large exposure limit is based, such exposures must be excluded from the definition of an exposure to a CCP.

7 Banks will be required to use the standardised approach to measuring counterparty credit risk (SA-CCR) instead of the internal measurement method (IMM) to measure CCR exposures.

Distribution of total exposures (related to clearing activities)

In per cent of Tier 1 capital Graph 1



Source: Basel Committee on Banking Supervision.

Interbank large exposures

Sample

The scope includes all interbank exposures with a residual maturity beyond the same business day, coherently with the large exposures framework. The sample is formed of 149 banks from 20 countries that reported data to the QIS on large interbank exposures. These included 24 G-SIBs, 55 other non-G-SIB Group 1 banks as well as 70 Group 2 banks. Participating banks were requested to report the sum of all their exposures to G-SIBs and their exposures to non-G-SIBs representing more than 5% of Basel III-eligible Tier 1 capital, as well as the breakdowns, which include exposures that are potentially related to the monetary policy implementation.

Method

For the purposes of assessing the consequences of applying the LE standard on interbank exposures, a definition of interbank exposures *that are potentially related to monetary policy implementation* was established for the purposes of this exercise. The types of exposures identified in at least one of the Committee member jurisdictions include: call money market exposures (secured and unsecured), repos and reverse repos (collateralised by sovereign bonds, corporate bonds, equities), marketable securities (such as commercial papers and negotiable certificates of deposit), foreign exchange spot transactions, interest rate swaps and futures, foreign exchange swaps, Overnight Index Swaps, futures and options. All the exposures values are measured according to the provisions of the LE standard, including regarding the recognition of collateral.

Beyond, the assessment included a counterfactual analysis conducted under the assumption that central bank monetary policy, namely the implementation of paying interest on excess reserves, would have a negative impact on the level of interbank exposures (*substitution effect*). The results of this additional analysis are not shown here.

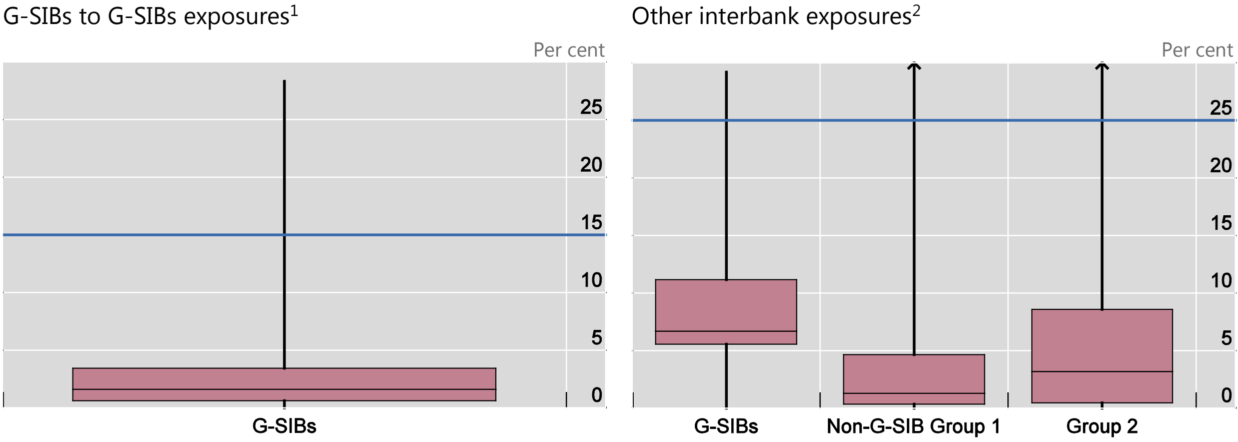
Key results

Under the current policy environment of unconventional monetary policy, at least for certain jurisdictions, the vast majority of interbank exposures are below the LE limit, but a notable number of interbank exposures (including exposures identified as potentially related to monetary policy implementation), are above the LE limit (20 out of the 567, ie 3% of inter-G-SIB[8] exposures reported are above the 15% Tier 1 limit and 72 out of the 2678 other interbank exposures,[9] ie 3%, are above the 25% limit).

Distribution of large exposures ratio, including exposures potentially related to monetary policy implementation

In per cent of Tier 1 capital

Graph 2



[1] The blue line represents a level of 15% of Tier 1 capital. [2] The blue line represents a level of 25% of Tier 1 capital.

Source: Basel Committee on Banking Supervision. See also Table A.23.

[8] Inter-G-SIB exposures refer to exposures from one G-SIB to another.

[9] Other interbank exposures refer to all interbank exposures expect inter G-SIBs exposures, ie: exposures from G-SIBs to non-G-SIBs, non-G-SIBs to G-SIBs, and non-G-SIBs to non-G-SIBs.

Statistical Annex

Number of banks for which data have been provided

Table A.1

	Group 1 banks					Group 2 banks				
	All	RWA and capital	Leverage	LCR	NSFR	All	RWA and capital	Leverage	LCR	NSFR
Argentina	0	0	0	0	0	2	2	2	2	2
Australia	4	4	4	4	4	1	1	1	1	1
Belgium	2	2	2	2	2	3	3	2	2	2
Brazil	2	2	2	2	2	0	0	0	0	0
Canada	6	6	6	6	6	2	2	2	2	2
China	6	6	6	6	6	0	0	0	0	0
France	5	5	5	5	5	2	2	2	2	2
Germany	8	8	8	0	8	41	41	38	0	35
Hong Kong SAR	0	0	0	0	0	0	0	0	0	0
India	4	4	4	4	3	6	6	6	6	6
Indonesia	0	0	0	0	0	2	2	2	2	2
Italy	2	2	2	2	2	14	14	13	13	13
Japan	14	14	14	14	14	4	4	4	4	4
Korea	5	5	5	5	5	3	3	3	3	3
Luxembourg	0	0	0	0	0	1	1	1	1	1
Mexico	0	0	0	0	0	7	7	7	7	7
Netherlands	3	3	3	3	3	10	6	9	8	9
Russia	1	1	1	1	1	0	0	0	0	0
Saudi Arabia	3	3	3	3	3	0	0	0	0	0
Singapore	3	3	3	3	3	0	0	0	0	0
South Africa	3	3	3	3	3	2	2	2	2	2
Spain	2	2	2	2	2	6	6	6	6	6
Sweden	4	4	4	4	4	4	3	1	1	3
Switzerland	2	2	2	2	2	8	8	4	4	4
Turkey	3	3	3	3	3	0	0	0	0	0
United Kingdom	5	5	5	4	4	10	10	4	4	4
United States	13	13	13	12	13	0	0	0	0	0
Total	100	100	100	90	98	128	123	109	70	108
of which: G-SIBs	30									

Source: Basel Committee on Banking Supervision.

Current CET1, Tier 1 and total capital ratios

In per cent — Table A.2

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Tier 1	Total	CET1	Tier 1	Total	CET1	Tier 1	Total
Max	24.2	26.9	30.3	19.0	21.0	26.6	65.0	75.1	75.1
75th percentile	13.9	15.1	18.0	13.2	14.8	18.4	17.4	18.0	19.1
Median	12.5	13.3	15.7	12.2	13.8	16.7	13.3	13.4	15.9
25th percentile	11.5	12.2	14.2	11.4	12.8	15.2	11.6	11.8	13.6
Min	7.6	7.6	10.0	10.2	11.0	12.5	6.0	6.7	7.7

Source: Basel Committee on Banking Supervision.

Fully phased-in Basel III CET1, Tier 1 and total capital ratios

In per cent — Table A.3

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Tier 1	Total	CET1	Tier 1	Total	CET1	Tier 1	Total
Max	24.2	25.8	29.0	16.4	17.9	22.3	65.0	75.1	75.1
75th percentile	13.1	14.1	16.6	12.8	13.6	16.5	17.4	17.4	18.4
Median	11.9	12.7	14.0	11.6	12.8	14.8	13.4	13.4	14.6
25th percentile	10.9	11.5	12.9	11.0	12.3	13.3	11.1	11.5	12.6
Min	7.4	7.4	8.8	9.4	10.8	11.0	6.0	6.1	7.5

Source: Basel Committee on Banking Supervision.

Current CET1, Tier 1 and total capital ratios

In per cent, consistent sample of banks[2] Table A.4

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Tier 1	Total	CET1	Tier 1	Total	CET1	Tier 1	Total
H1 2011	10.1	11.4	14.1	9.6	11.1	13.7	10.1	11.0	14.3
H2 2011	10.3	11.5	14.1	9.8	11.3	13.9	10.5	11.3	14.4
H1 2012	10.8	11.9	14.4	10.5	11.9	14.2	11.1	11.7	14.9
H2 2012	11.3	12.4	15.0	11.1	12.5	14.9	10.9	11.4	14.6
H1 2013	10.9	12.0	14.6	10.9	12.0	14.5	11.2	11.7	14.9
H2 2013	11.3	12.4	15.0	11.4	12.4	15.0	11.6	12.1	15.3
H1 2014	11.4	12.2	14.8	11.2	12.1	14.6	11.6	12.0	14.9
H2 2014	11.7	12.6	15.3	11.5	12.6	15.2	11.8	12.3	15.0
H1 2015	11.9	12.9	15.5	11.8	12.9	15.4	12.3	12.8	15.3
H2 2015	12.2	13.3	15.9	12.1	13.4	16.0	12.5	13.1	15.4

[1] Before the implementation of the Basel III framework, results have been calculated on the basis of the relevant national regulatory frameworks in place at the reporting dates. [2] Group 1 includes 91 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

Fully phased-in Basel III CET1, Tier 1 and total capital ratios

In per cent, consistent sample of banks[1] Table A.5

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Tier 1	Total	CET1	Tier 1	Total	CET1	Tier 1	Total
H1 2011	7.1	7.4	8.6	6.7	7.0	8.3	7.5	7.9	9.8
H2 2011	7.7	7.9	9.2	7.3	7.6	8.9	7.6	8.0	9.9
H1 2012	8.5	8.7	9.9	8.2	8.5	9.7	8.1	8.8	10.4
H2 2012	9.2	9.4	10.6	8.9	9.2	10.4	8.1	8.7	10.1
H1 2013	9.5	9.7	11.1	9.3	9.5	11.0	8.2	8.8	10.3
H2 2013	10.2	10.5	11.9	10.0	10.4	11.8	9.4	10.1	11.8
H1 2014	10.8	11.2	12.6	10.6	11.1	12.4	10.8	11.1	12.8
H2 2014	11.1	11.7	13.3	11.0	11.7	13.2	11.2	11.5	13.0
H1 2015	11.4	12.2	13.9	11.3	12.2	13.9	12.0	12.4	13.8
H2 2015	11.8	12.7	14.4	11.7	12.7	14.5	12.2	12.6	14.1

[1] Group 1 includes 91 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

Estimated capital shortfalls at the minimum level

In billions of euros, fully phased-in Basel III, sample and exchange rates as at the reporting dates[1] Table A.6

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2
H1 2011	38.8	66.6	119.3	31.7	52.6	87.9	8.6	7.3	5.5
H2 2011	11.9	32.5	107.7	7.6	22.6	86.2	7.6	2.1	4.1
H1 2012	3.7	16.2	61.8	0.1	11.2	50.4	4.8	1.6	5.0
H2 2012	2.2	10.2	45.7	0.0	5.9	36.1	11.4	2.3	8.7
H1 2013	3.3	6.9	18.6	0.0	1.8	13.0	12.4	3.0	8.4
H2 2013	0.1	1.4	3.6	0.0	0.0	0.2	2.0	0.7	4.0
H1 2014	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	3.5
H2 2014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.8
H1 2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
H2 2015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2

[1] The sample of banks is not consistent (Group 1 includes 101 banks in H1 2011 and H2 2011, 100 banks in H1 2012 and H2 2012, 101 banks in H1 2013 and in H2 2013, 97 in H1 2014 and H2 2014 and 100 in H1 2015 and H2 2015; Group 2 includes 109 banks in H1 2011, 107 in H2 2011, 104 in H1 2012, 115 in H2 2012, 118 in H1 2013, 113 in H2 2013, 114 in H1 2014, 108 in H2 2014, 114 in H1 2015 and 111 in H2 2015).

Source: Basel Committee on Banking Supervision.

Estimated capital shortfalls at the target level

In billions of euros, fully phased-in Basel III, sample and exchange rates as at the reporting dates[1] Table A.7

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2
H1 2011	485.6	221.2	222.6	425.9	163.2	158.8	32.4	16.6	11.6
H2 2011	384.1	226.2	231.5	343.9	173.6	162.5	21.7	11.9	8.6
H1 2012	197.9	197.0	223.7	175.2	159.3	151.7	16.0	7.3	12.0
H2 2012	115.0	158.8	170.9	97.5	128.3	112.0	25.6	7.4	14.6
H1 2013	57.5	104.5	143.3	41.8	84.8	95.1	27.7	7.5	12.3
H2 2013	15.1	48.8	95.4	11.8	41.7	62.5	9.4	6.9	8.3
H1 2014	3.9	18.6	78.8	3.9	14.3	64.6	2.1	5.7	5.7
H2 2014	0.0	6.5	39.7	0.0	3.8	29.6	1.5	5.9	5.5
H1 2015	0.0	2.9	13.0	0.0	0.0	11.6	0.2	2.9	5.6
H2 2015	0.0	3.3	5.5	0.0	0.0	1.7	0.2	1.5	4.7

[1] The sample of banks is not consistent (Group 1 includes 101 banks in H1 2011 and H2 2011, 100 banks in H1 2012 and H2 2012, 101 banks in H1 2013 and in H2 2013, 97 in H1 2014 and H2 2014 and 100 in H1 2015 and H2 2015; Group 2 includes 109 banks in H1 2011, 107 in H2 2011, 104 in H1 2012, 115 in H2 2012, 118 in H1 2013, 113 in H2 2013, 114 in H1 2014, 108 in H2 2014, 114 in H1 2015 and 111 in H2 2015).

Source: Basel Committee on Banking Supervision.

Level of capital after full phasing in of Basel III

In billions of euros, consistent sample of banks[1], exchange rates as of 31 December 2015 — Table A.8

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET 1	Add. Tier 1	Tier 2	CET 1	Add. Tier 1	Tier 2	CET 1	Add. Tier 1	Tier 2
H1 2011	2,124	87	389	1,476	75	294	126	7	32
H2 2011	2,249	78	384	1,556	62	285	128	8	32
H1 2012	2,448	72	346	1,704	58	260	134	12	26
H2 2012	2,582	68	361	1,798	52	266	135	9	24
H1 2013	2,709	70	395	1,883	53	299	136	10	26
H2 2013	2,897	88	403	2,018	69	285	156	10	28
H1 2014	3,078	133	395	2,137	105	259	177	5	29
H2 2014	3,216	181	451	2,240	149	317	180	6	23
H1 2015	3,384	225	498	2,350	184	353	196	7	23
H2 2015	3,507	263	528	2,424	214	378	201	6	25

[1] Group 1 includes 91 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision.

Profits, dividends and CET1 capital raised

In billions of euros, consistent sample of banks[1], exchange rates as of 31 December 2015 — Table A.9

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	Profit after tax	Common share dividend	CET1 raised	Profit after tax	Common share dividend	CET1 raised	Profit after tax	Common share dividend	CET1 raised
H1 2011	145.2	59.9	36.3	92.3	42.9	14.3	7.0	1.5	5.4
H2 2011	116.7	33.1	25.1	79.9	17.1	10.2	1.1	1.4	7.2
H1 2012	140.0	61.8	28.9	89.3	42.5	21.2	5.3	1.5	1.6
H2 2012	169.7	29.3	30.6	106.8	12.4	15.5	2.2	1.4	5.2
H1 2013	174.4	80.1	25.4	113.6	56.3	14.2	6.1	1.6	1.0
H2 2013	143.1	29.1	33.1	91.6	12.1	15.5	5.3	1.4	2.4
H1 2014	157.4	89.7	34.7	94.2	66.1	19.2	8.3	1.9	5.3
H2 2014	191.7	44.2	15.4	122.8	18.9	6.8	5.0	1.2	3.6
H1 2015	219.7	92.6	21.4	149.2	63.4	12.4	9.4	2.5	2.1
H2 2015	206.8	47.7	20.6	135.2	21.5	11.3	11.0	1.6	1.2

[1] Group 1 includes 89 banks, G-SIB includes 29 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

Structure of regulatory capital under transitional Basel III rules[1]

In per cent, consistent sample of banks[2] — Table A.10

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2
H1 2011	71.8	9.3	18.9	69.7	11.4	18.8	71.0	6.5	22.5
H2 2011	73.0	8.9	18.1	71.1	10.9	18.1	72.8	5.7	21.5
H1 2012	75.0	7.9	17.0	73.6	9.8	16.6	74.6	4.1	21.3
H2 2012	75.3	7.4	17.3	74.3	9.2	16.5	74.4	4.0	21.6
H1 2013	75.0	7.1	17.9	75.4	7.4	17.2	75.1	3.7	21.2
H2 2013	75.7	6.8	17.5	76.0	7.1	17.0	75.6	3.3	21.1
H1 2014	76.7	5.6	17.7	76.8	5.9	17.3	77.7	2.9	19.4
H2 2014	76.4	6.2	17.4	76.1	6.8	17.1	78.7	3.3	18.0
H1 2015	76.7	6.6	16.7	76.3	7.4	16.3	80.3	3.3	16.4
H2 2015	76.7	7.2	16.2	76.1	8.1	15.8	81.0	3.6	15.4

[1] Before the implementation of the Basel III framework, results have been calculated on the basis of the relevant national regulatory frameworks in place at the reporting dates. [2] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision.

Structure of regulatory capital under fully phased-in Basel III

In per cent, consistent sample of banks[1] — Table A.11

	Group 1 banks			Of which: G-SIBs			Group 2 banks		
	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2	CET1	Add. Tier 1	Tier 2
H1 2011	82.4	3.2	14.5	80.7	4.0	15.3	76.7	4.1	19.2
H2 2011	83.5	2.8	13.7	82.3	3.3	14.4	76.5	4.7	18.9
H1 2012	85.8	2.4	11.8	84.7	2.9	12.4	78.7	6.6	14.6
H2 2012	86.2	2.1	11.7	85.5	2.3	12.1	80.7	5.3	14.0
H1 2013	85.6	2.1	12.4	84.6	2.2	13.1	79.1	5.8	15.1
H2 2013	85.6	2.4	12.0	85.3	2.7	11.9	80.1	5.3	14.6
H1 2014	85.2	3.6	11.2	85.5	4.1	10.4	84.0	2.3	13.7
H2 2014	83.6	4.6	11.8	82.9	5.4	11.7	86.3	2.6	11.0
H1 2015	82.5	5.4	12.1	81.5	6.3	12.2	86.8	2.9	10.3
H2 2015	81.6	6.1	12.3	80.4	7.1	12.5	86.4	2.8	10.8

[1] Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 69 banks.

Source: Basel Committee on Banking Supervision.

CET1 regulatory adjustments

Group 1 banks, in per cent of CET1 capital prior to adjustments — Table A.12

	Number of banks	Goodwill	Intangibles	DTA[1]	Financials	DTA above threshold	Excess above 15%[2]	Other[3]	Total
H1 2011	90	–15.3	–3.7	–3.3	–3.0	–1.8	–2.1	–3.1	–32.1
H2 2011	90	–14.0	–3.5	–2.8	–1.9	–1.6	–1.6	–3.7	–29.2
H1 2012	90	–13.3	–3.3	–2.5	–1.8	–1.1	–1.3	–3.3	–26.7
H2 2012	90	–12.3	–3.1	–2.6	–2.4	–1.2	–1.1	–2.8	–25.6
H1 2013	90	–12.0	–2.9	–2.7	–2.4	–1.0	–0.9	–2.1	–23.9
H2 2013	90	–11.2	–2.7	–2.4	–1.4	–0.5	–0.4	–1.5	–20.1
H1 2014	90	–10.7	–2.6	–2.2	–1.3	–0.4	–0.2	–1.4	–18.8
H2 2014	90	–10.3	–2.5	–2.0	–0.9	–0.4	–0.2	–1.5	–18.2
H1 2015	90	–10.0	–2.4	–1.9	–0.7	–0.3	–0.1	–1.5	–17.3
H2 2015	90	–9.5	–2.3	–1.8	–0.6	–0.3	–0.1	–1.5	–16.7

[1] DTAs are the deferred tax assets that are deducted in full under Basel III (ie they exclude DTAs that are related to temporary differences, which are only deducted when they exceed a threshold). [2] Excess above 15% pertains to significant investments in the common shares of unconsolidated financial institutions, mortgage servicing rights, and DTAs due to timing differences that do not separately exceed the 10% category thresholds but in the aggregate exceed the 15% basket threshold. [3] Other includes adjustments related to investment in own shares, shortfall of provisions to expected losses, cash flow hedge reserves, cumulative changes in fair value due to changes in own credit risk, net pension fund assets, securitisation gains on sale, mortgage servicing rights and deductions from additional Tier 1 capital to the extent they exceed a bank's additional Tier 1 capital.

Source: Basel Committee on Banking Supervision.

CET1 regulatory adjustments

Group 2 banks, in per cent of CET1 capital prior to adjustments

Table A.13

	Number of banks	Goodwill	Intangibles	DTA[1]	Financials	DTA above threshold	Excess above 15%[2]	Other[3]	Total
H1 2011	68	–14.3	–3.5	–0.3	–4.5	–4.0	–2.0	–4.3	–32.9
H2 2011	68	–8.9	–3.3	–0.5	–4.7	–2.0	–1.3	–4.2	–25.0
H1 2012	68	–8.1	–3.0	–0.3	–4.6	–2.1	–1.3	–4.2	–23.6
H2 2012	68	–7.4	–3.0	–0.8	–5.0	–2.1	–1.1	–4.1	–23.4
H1 2013	68	–7.3	–2.9	–1.0	–5.2	–1.6	–1.3	–4.6	–23.8
H2 2013	68	–5.8	–3.0	–0.6	–4.4	–0.4	–0.8	–4.9	–20.0
H1 2014	68	–5.0	–2.8	–0.6	–3.1	0.0	–0.5	–1.9	–14.0
H2 2014	68	–4.1	–2.9	–0.9	–3.5	–0.3	–0.6	–2.1	–14.7
H1 2015	68	–3.9	–2.7	–0.8	–3.3	–0.2	–0.6	–1.7	–13.2
H2 2015	68	–3.8	–2.7	–0.9	–3.3	–0.1	–0.2	–2.0	–13.3

[1] DTAs are the deferred tax assets that are deducted in full under Basel III (ie they exclude DTAs that are related to temporary differences, which are only deducted when they exceed a threshold). [2] Excess above 15% pertains to significant investments in the common shares of unconsolidated financial institutions, mortgage servicing rights and DTAs due to timing differences that do not separately exceed the 10% category thresholds but in the aggregate exceed the 15% basket threshold. [3] Other includes adjustments related to investment in own shares, shortfall of provisions to expected losses, cash flow hedge reserves, cumulative changes in fair value due to changes in own credit risk, net pension fund assets, securitisation gains on sale, mortgage servicing rights and deductions from additional Tier 1 capital to the extent they exceed a bank's additional Tier 1 capital.

Source: Basel Committee on Banking Supervision.

Transitional and fully phased-in Basel III Tier 1 leverage ratios

In per cent

Table A.14

	Group 1 banks		Of which: G-SIBs		Group 2 banks	
	Transitional	Fully phased-in	Transitional	Fully phased-in	Transitional	Fully phased-in
Max	14.2	14.2	7.8	7.7	21.0	21.0
75th percentile	7.0	6.8	6.5	6.1	7.3	7.4
Median	5.5	5.5	5.4	4.9	5.5	5.5
25th percentile	4.8	4.4	4.6	4.2	4.5	4.4
Min	3.9	3.2	3.9	3.4	1.2	1.2
Weighted average	5.8	5.6	5.9	5.6	5.7	5.6

Source: Basel Committee on Banking Supervision.

Fully phased-in Basel III Tier 1 leverage ratios

Consistent sample of banks, in per cent — Table A.15

	Group 1 banks	Of which: G-SIBs	Group 2 banks
H1 2011	3.4	3.3	3.7
H2 2011	3.5	3.4	3.7
H1 2012	3.7	3.6	3.9
H2 2012	3.7	3.6	3.8
H1 2013	4.0	3.8	4.0
H2 2013	4.4	4.3	4.6
H1 2014	4.7	4.6	5.1
H2 2014	5.0	5.0	5.1
H1 2015	5.2	5.2	5.4
H2 2015	5.5	5.6	5.5

Source: Basel Committee on Banking Supervision.

Tier 1 capital, risk-weighted assets, leverage ratio exposure and accounting total assets

Consistent sample of banks, exchange rates as of 31 December 2015 — Table A.16

	H1 2011	H2 2011	H1 2012	H2 2012	H1 2013	H2 2013	H1 2014	H2 2014	H1 2015	H2 2015
Group 1 banks										
Tier 1 capital	100.0	105.2	113.9	119.8	125.7	135.0	145.2	153.6	163.6	170.7
Risk-weighted assets	100.0	98.5	96.9	95.1	96.5	96.0	96.2	97.6	99.8	100.6
Leverage total exposure	100.0	102.8	106.3	110.8	108.7	104.9	107.5	107.0	109.6	108.0
Accounting total assets	100.0	102.9	106.7	105.8	106.7	105.2	109.3	111.5	114.1	112.9
Of which: G-SIBs										
Tier 1 capital	100.0	104.4	113.7	119.3	124.8	134.6	144.6	154.1	163.9	170.5
Risk-weighted assets	100.0	97.0	94.7	91.7	92.8	91.9	92.4	93.5	95.0	94.9
Leverage total exposure	100.0	102.9	106.2	110.9	99.9	104.4	106.2	105.2	106.8	103.9
Accounting total assets	100.0	102.8	106.3	104.8	105.2	102.8	106.3	108.7	110.4	108.0
Group 2 banks										
Tier 1 capital	100.0	102.2	109.7	107.9	109.7	124.4	140.0	139.7	152.4	155.7
Risk-weighted assets	100.0	101.7	99.8	100.2	100.1	98.0	98.0	96.2	97.5	97.8
Leverage total exposure	100.0	103.0	105.2	106.6	102.4	99.7	101.2	100.6	103.0	103.0
Accounting total assets	100.0	102.9	104.3	104.3	105.4	102.9	104.5	105.0	106.6	106.1

H1 2011 = 100.

Source: Basel Committee on Banking Supervision.

Liquidity coverage ratio and net stable funding ratio

In per cent — Table A.17

	Liquidity coverage ratio			Net stable funding ratio		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Max	314.5	177.5	1,092.2	149.3	148.9	230.4
75th percentile	140.9	130.1	206.2	119.6	115.1	131.4
Median	125.4	125.5	153.8	111.1	111.1	121.4
25th percentile	113.9	119.5	119.2	101.5	106.7	107.6
Min	35.1	109.5	40.4	81.7	90.1	81.5
Weighted average	125.2	123.8	148.1	113.7	116.2	115.9

Source: Basel Committee on Banking Supervision.

Comparison of pool of high-quality liquid assets to outflows and cap

In trillions of euros — Table A.18

Total liquid assets and inflows	Group 1	Of which: G-SIBs	Group 2
Level 1 assets	8.98	6.36	0.54
Level 2A assets (post-factor)	1.23	0.92	0.03
Level 2B assets (post-factor)	0.15	0.09	0.01
Inflows (post-factor, after cap)	3.23	2.21	0.14
Total	13.60	9.59	0.72
Outflows and impact of cap			
Outflows (post-factor)	11.63	8.17	0.53
Cap on Level 2 assets	0.00	0.00	0.00
Cap on Level 2B assets	0.00	0.00	0.00
Total	11.63	8.17	0.53

Source: Basel Committee on Banking Supervision.

Aggregate available stable funding (ASF) by counterparty

In trillions of euros

Table A.19

	Group 1 banks		Of which: G-SIBS		Group 2 banks	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Capital	5.3	5.3	3.6	3.6	0.4	0.4
Retail and small business	17.8	16.4	11.7	10.8	2.2	2.0
Non-financial corporates	10.0	5.2	6.9	3.5	0.4	0.2
Central banks	1.2	0.4	0.7	0.2	0.2	0.1
Sovereigns/PSEs/MDBs/NDBs	2.3	1.3	1.5	0.8	0.3	0.2
Financials (other legal entities)	14.8	5.4	9.0	2.9	1.5	0.9
Other liabilities	6.7	1.7	4.7	1.2	0.6	0.2
Total	58.1	35.7	38.1	23.0	5.6	4.1

Source: Basel Committee on Banking Supervision.

Aggregate required stable funding (RSF) by category

In trillions of euros

Table A.20

	Group 1 banks		Of which: G-SIBs		Group 2 banks	
	Unweighted RSF	Weighted RSF	Unweighted RSF	Weighted RSF	Unweighted RSF	Weighted RSF
Cash and central banks reserves	5.7	0.0	4.3	0.0	0.3	0.0
Loans to financial institutions	6.8	2.2	4.8	1.5	0.4	0.2
HQLA	9.2	1.2	6.2	0.8	0.7	0.1
All residential mortgages	6.5	4.7	3.1	2.3	1.2	0.9
Loans, < 1 year	7.4	3.7	4.8	2.4	0.5	0.3
Other loans, > 1 year, risk weight < 35%	1.2	0.9	0.6	0.4	0.3	0.3
Loans, risk weights > 35%	10.9	9.2	7.1	5.9	0.9	0.8
Derivative	1.9	1.0	1.4	0.7	0.1	0.1
All other assets	9.4	8.1	6.4	5.5	1.1	0.9
Off balance sheet		0.5		0.3		0.0
Total	58.9	31.4	38.7	19.8	5.6	3.5

Source: Basel Committee on Banking Supervision.

LCR, NSFR and shortfalls at a 100% minimum requirement

Consistent sample of banks[1], exchange rates as at the reporting dates — Table A.21

	Group 1		Of which: G-SIBs		Group 2	
	Ratio (%)	Shortfall (€ bn)	Ratio (%)	Shortfall (€ bn)	Ratio (%)	Shortfall (€ bn)
LCR						
H2 2012	120.5	450.2	125.4	177.4	140.0	19.3
H1 2013	115.8	425.9	121.4	130.7	145.9	14.7
H2 2013	120.2	278.4	125.5	44.4	138.8	24.2
H1 2014	123.0	219.6	126.9	16.3	141.1	19.2
H2 2014	126.2	88.5	127.8	0.0	136.8	22.1
H1 2015	123.6	47.0	123.5	5.7	136.5	7.9
H2 2015	125.2	54.2	123.8	0.0	145.5	8.8
NSFR						
H2 2012	99.6	1,745.4	101.6	986.6	100.4	169.1
H1 2013	99.9	1,665.3	102.7	945.3	102.0	150.6
H2 2013	110.8	719.2	113.4	449.6	113.6	40.1
H1 2014	110.2	590.2	112.8	361.2	114.7	40.8
H2 2014	111.2	514.9	113.6	317.2	115.0	42.8
H1 2015	111.8	373.2	114.5	211.8	115.1	28.1
H2 2015	113.6	234.5	116.4	114.7	116.8	8.6

[1] Consistent sample across periods; for LCR, Group 1 includes 83 banks, G-SIBs include 26 banks and Group 2 includes 57 banks; for NSFR, Group 1 includes 91 banks, G-SIBs include 28 banks and Group 2 includes 75 banks.

Source: Basel Committee on Banking Supervision.

High quality liquid assets and inflows versus outflows over time

Consistent sample of banks[1]; exchange rates as at the reporting dates, in trillions of euro — Table A.22

	Group 1 banks		Of which: G-SIBS		Group 2 banks	
	HQLA and inflows (post-factor, after-cap)	Outflows (post-factor)	HQLA and inflows (post-factor, after-cap)	Outflows (post-factor)	HQLA and inflows (post-factor, after-cap)	Outflows (post-factor)
H2 2012	10.11	8.82	7.20	6.08	0.47	0.36
H1 2013	10.26	9.24	7.39	6.43	0.46	0.34
H2 2013	10.32	9.06	7.51	6.39	0.45	0.35
H1 2014	10.99	9.50	7.88	6.64	0.48	0.37
H2 2014	12.16	10.29	8.83	7.40	0.49	0.38
H1 2015	13.38	11.45	9.59	8.20	0.51	0.40
H2 2015	13.28	11.23	9.42	8.02	0.53	0.39

[1] Consistent sample across periods. Group 1 includes 83 banks, G-SIBs include 26 banks and Group 2 includes 57 banks.

Source: Basel Committee on Banking Supervision.

Distribution of total exposures (related and unrelated to clearing activities)

In per cent of Tier 1 capital — Table A.23

	Inter-G-SIBs exposures	Interbank exposures		
	G-SIBs	G-SIBs	Non-G-SIB Group 1	Group 2
Max	28.3	29.2	102.4	348.8
75th percentile	3.4	11.2	4.7	8.6
Median	1.6	6.7	1.3	3.2
25th percentile	0.6	5.5	0.4	0.5
Min	0.0	0.0	0.0	0.0

Source: Basel Committee on Banking Supervision.

Previous monitoring reports published by the Basel Committee

Results of the comprehensive quantitative impact study, December 2010, www.bis.org/publ/bcbs186.htm.

Results of the Basel III monitoring exercise as of 30 June 2011, April 2012, www.bis.org/publ/bcbs217.htm.

Results of the Basel III monitoring exercise as of 31 December 2011, September 2012, www.bis.org/publ/bcbs231.htm.

Results of the Basel III monitoring exercise as of 30 June 2012, March 2013, www.bis.org/publ/bcbs243.htm.

Basel III monitoring report, September 2013, www.bis.org/publ/bcbs262.htm.

Basel III monitoring report, March 2014, www.bis.org/publ/bcbs278.htm.

Basel III monitoring report, September 2014, www.bis.org/publ/bcbs289.htm.

Basel III monitoring report, March 2015, www.bis.org/bcbs/publ/d312.htm.

Basel III monitoring report, September 2015, www.bis.org/bcbs/publ/d334.htm.

Basel III monitoring report, March 2016, www.bis.org/bcbs/publ/d354.htm.

Basel III phase-in arrangements

Basel III phase-in arrangements

Shading indicates transition periods – all dates are as of 1 January.

	2015	2016	2017	2018	As of 2019
Leverage ratio	Parallel run until 1 Jan 2017 Disclosure started 1 Jan 2015			Migration to Pillar 1	
Minimum CET1 ratio	4.5%	4.5%	4.5%	4.5%	4.5%
Capital conservation buffer		0.625%	1.25%	1.875%	2.50%
G-SIB surcharge		Phase-in			1.0%–2.5%
Minimum common equity plus capital conservation buffer	4.5%	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)	40%	60%	80%	100%	100%
Minimum Tier 1 capital	6.0%	6.0%	6.0%	6.0%	6.0%
Minimum total capital	8.0%	8.0%	8.0%	8.0%	8.0%
Minimum total capital plus capital conservation buffer	8.0%	8.625%	9.25%	9.875%	10.5%
Capital instruments that no longer qualify as Tier 1 capital or Tier 2 capital	Phased out over 10 year horizon beginning 2013				
Liquidity coverage ratio	60%	70%	80%	90%	100%
Net stable funding ratio				Introduce minimum standard	