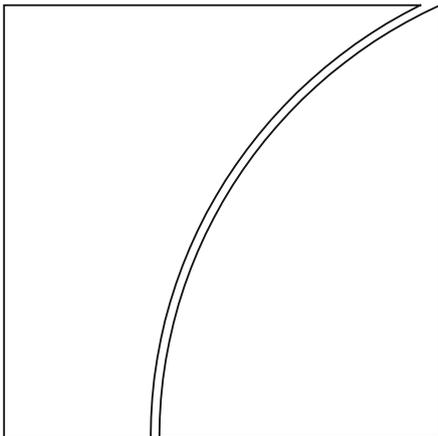


# Basel Committee on Banking Supervision



## Basel III Monitoring Report

February 2017



BANK FOR INTERNATIONAL SETTLEMENTS

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## 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 7 February 2017.

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## Highlights of the Basel III monitoring exercise as of 30 June 2016

### Virtually all participating banks meet Basel III minimum and target CET1 capital requirements as agreed up to end-2015

To assess the impact of the Basel III framework on banks,<sup>1</sup> 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 eleventh publication of results from the periodic Basel III monitoring exercise<sup>2</sup> and summarises the aggregate results using data as of 30 June 2016. The Committee believes that the information contained in the report will provide relevant stakeholders with a useful benchmark for analysis.

For the first time, this report provides results on the progress made by global systemically important banks (G-SIBs) in meeting the requirements for additional loss-absorbing capacity (TLAC).<sup>3</sup> Furthermore, the report includes special features on the results on the impact of the revised minimum capital requirements for market risk<sup>4</sup> and on the preliminary results of a survey on the interaction of regulatory instruments conducted together with the end-June 2016 data collection exercise.

The report does not reflect any standards agreed since the beginning of 2016, such as the revisions to the market risk framework (analysed separately in a special feature).

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 210 banks, including 100 large internationally active ("Group 1") banks and 110 other ("Group 2") banks.<sup>5</sup> 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 implementation of the Basel III requirements as agreed up to end-2015 based on data as of 30 June 2016.

<sup>1</sup> 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](http://www.bis.org/bcbs/basel3.htm).

<sup>2</sup> A list of previous publications is included in the Annex.

<sup>3</sup> Financial Stability Board, *Total Loss-Absorbing Capacity (TLAC): Principles and Term Sheet*, 9 November 2015, [www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet](http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet).

<sup>4</sup> Basel Committee on Banking Supervision, *Minimum capital requirements for market risk*, January 2016, [www.bis.org/bcbs/publ/d352.htm](http://www.bis.org/bcbs/publ/d352.htm).

<sup>5</sup> 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.

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 31 December 2015 and 30 June 2016 reporting dates under fully phased-in Basel III standards as agreed up to end-2015.

Overview of results							Table 1
	31 December 2015			30 June 2016			
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2	
CET1 ratio (%)	11.8	11.7	13.1	11.9	11.8	13.4	
Target capital shortfalls (€ bn)							
CET1	0.0	0.0	0.2	0.0	0.0	0.0	
Additional Tier 1	3.3	0.0	1.5	1.4	0.0	1.0	
Tier 2	5.5	1.7	4.7	3.4	0.9	4.0	
Sum	8.8	1.7	6.4	4.8	0.9	5.0	
TLAC shortfall 2022 minimum (€ bn)	416.2	416.2		318.2	318.2		
Leverage ratio (%)	5.6	5.6	5.6	5.6	5.6	5.6	
LCR (%)	125.2	123.8	148.1	126.2	125.2	155.4	
NSFR (%)	113.7	116.2	115.9	114.0	116.4	114.9	

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 30 June 2016 were subject to the fully phased-in Basel III standards as agreed up to end-2015:

- 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<sup>6</sup> would decline from 12.2% to 11.9% for Group 1 banks. The Tier 1 capital ratios of Group 1 banks would decline on average from 13.4% to 12.9% and total capital ratios would decline from 15.8% to 14.6%. 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 13.8% to 13.4% and Tier 1 capital ratios would decline on average from 14.2% to 13.8%. Total capital ratios would decline by a slightly greater amount, on average from 16.4% to 15.4% 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 agreed up to end-2015 for the 30 June 2016 reporting date, 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.<sup>7</sup> Group 1 banks report no shortfall at the CET1 target level for the fourth consecutive reporting period.

For the first time, there is virtually no CET1 capital shortfall for Group 2 banks both at the minimum and target levels.

## TLAC shortfalls

The Committee also collected data on additional total loss-absorbing capacity (TLAC) for G-SIBs. Overall, applying the 2019 minimum requirements, nine of the 25 G-SIBs in the sample have a shortfall totalling €131.4 billion, compared with €216.3 billion at the end of 2015.<sup>8</sup> Applying the 2022 minimum requirements, 18 of the G-SIBs in the sample have a combined shortfall of €318.2 billion, compared with €416.2 billion at the end of 2015.

## 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, 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. Six out of 104 Group 2 banks with an aggregate shortfall of €2.9 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.

<sup>6</sup> See Section 1.1 for details on the scope of the exercise.

<sup>7</sup> See Financial Stability Board, *2016 list of global systemically important banks (G-SIBs)*, 21 November 2016, [www.fsb.org/wp-content/uploads/2016-list-of-global-systemically-important-banks-G-SIBs.pdf](http://www.fsb.org/wp-content/uploads/2016-list-of-global-systemically-important-banks-G-SIBs.pdf).

<sup>8</sup> Since deductions related to banks' holdings of TLAC instruments are not considered in this exercise, estimated shortfalls could be viewed as representing a lower bound for the actual shortfall amounts.

## 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 2.7).

For Group 1 banks, the leverage ratio has no impact on the capital shortfalls at the minimum (no shortfall) or target levels resulting from the risk-based requirements (€1.4 billion and €4.8 billion of Tier 1 and total capital shortfall, respectively). 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 €2.9 billion. At the target level, the additional Tier 1 capital shortfall rises by €2.9 billion (from €1.0 billion to €3.9 billion) when the Basel III Tier 1 leverage ratio requirement is included. In turn, this inclusion of applicable Basel III Tier 1 leverage ratio shortfalls increases the total capital shortfall from €0.0 billion to €2.9 billion considering all capital ratio minimums and from €5.0 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<sup>9</sup> and came into effect on 1 January 2015. This marks the third reporting period in which all banks are subject to the LCR minimum requirement that came into effect on 1 January 2015 and whose level has increased to 70% on 1 January 2016 according to the Basel III phase-in arrangements. The minimum requirement will continue to rise in equal annual steps of 10 percentage points to reach 100% in 2019. The end-June 2016 reporting period was the eight 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 91 Group 1 and 68 Group 2 banks participated in the LCR monitoring exercise for the end-June 2016 reference period.<sup>10</sup>
- The average LCR for the Group 1 bank sample was 126.2%. For Group 2 banks, the average LCR was 155.4%. These figures compare to average LCRs of 125.2% and 148.1% for Group 1 banks and Group 2 banks, respectively, at end-December 2015.
- Some 87.9% of all Group 1 banks and 94.1% of Group 2 banks in the Basel III monitoring sample already meet or exceed the final LCR minimum requirement of 100%, while all Group 1 and Group 2 banks have LCRs that are at or above the 70% minimum requirement applicable as of January 2016.
- The aggregate LCR shortfall at a minimum requirement of 100% was €29.7 billion for Group 1 and Group 2 combined, which represents less than 0.01% of the more than €63.4 trillion in total assets of the aggregate sample. This compares to a shortfall of €65.4 billion as of end-December 2015. The aggregate LCR shortfall at the currently applicable minimum requirement of 70% was zero at end-June 2016, compared to a €22.8 billion shortfall end-December 2015 at the applicable minimum of 60%.

<sup>9</sup> Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.htm](http://www.bis.org/publ/bcbs238.htm).

<sup>10</sup> As with the end-June 2015 and end-December 2015 reporting periods, LCR analysis for the end-June 2016 reporting period reflects a sample that excludes all banks from one jurisdiction due to data quality limitations.

## Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR) was revised by the Committee in October 2014.<sup>11</sup> Key observations from the current period results include:

- A total of 94 Group 1 and 100 Group 2 banks participated in the NSFR monitoring exercise for the end-June 2016 reference period.
- The weighted average NSFR was 114.0% for Group 1 banks and 114.9% for Group 2 banks at end-June 2016 compared to 113.7% and 115.9% respectively, at end-December 2015.
- Some 84.0% of Group 1 banks and 86.0% of Group 2 banks meet or exceed the 100% minimum NSFR requirement, with 97.9% of Group 1 banks and 96.0% of Group 2 banks at an NSFR of 90% or higher as of end-June 2016.
- 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 €108.6 billion for Group 1 banks and €34.8 billion for Group 2 banks at the end-June 2016 compared to €234.5 billion and €22.5 billion at end-December 2015.

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

<sup>11</sup> Basel Committee on Banking Supervision, *Basel III: The net stable funding ratio*, October 2014, [www.bis.org/bcbs/publ/d295.htm](http://www.bis.org/bcbs/publ/d295.htm).



# Detailed results of the Basel III monitoring exercise as of 30 June 2016

## 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.<sup>1</sup> 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.<sup>2</sup> This report summarises the results of the latest Basel III monitoring exercise using 30 June 2016 data.<sup>3</sup>

The report does not reflect any standards agreed since the beginning of 2016, such as the revisions to the market risk framework (analysed separately in a special feature for both the end-December 2015 and the end-June 2016 reporting dates).

### 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 30 June 2016. 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.<sup>4</sup> The questionnaire covered components of eligible capital, the calculation 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 7 February 2017.

<sup>1</sup> 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](http://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](http://www.bis.org/press/p100912.htm).

<sup>2</sup> A list of previous publications is included in the Annex.

<sup>3</sup> The data for Japan are as of the end of March 2016, 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.

<sup>4</sup> See Basel Committee on Banking Supervision, *Instructions for Basel III implementation monitoring*, January 2016, [www.bis.org/bcbs/qis/](http://www.bis.org/bcbs/qis/).

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*<sup>5</sup> and *Guidelines for computing capital for incremental risk in the trading book*;<sup>6</sup>
- *Enhancements to the Basel II framework*<sup>7</sup> 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;<sup>8</sup>
- *Capital requirements for bank exposures to central counterparties*;<sup>9</sup>
- *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 2016;<sup>10</sup>
- *Total Loss-Absorbing Capacity (TLAC): Principles and Term Sheet*;<sup>11</sup>
- *Basel III: the Liquidity Coverage Ratio and liquidity risk monitoring tools*;<sup>12</sup>
- *Basel III: the net stable funding ratio*;<sup>13</sup> and
- *Basel III leverage ratio framework and disclosure requirements*.<sup>14</sup>

However, the report does not reflect any impact of TLAC *holdings* on Group 1 and Group 2 banks' eligible capital and RWA or of the revised regulatory capital treatment for simple, transparent and comparable (STC) securitisations.<sup>15</sup> Relevant data on those items will be collected starting with the end-December 2016 exercise.

<sup>5</sup> Basel Committee on Banking Supervision, *Revisions to the Basel II market risk framework*, July 2009, [www.bis.org/publ/bcbs158.htm](http://www.bis.org/publ/bcbs158.htm).

<sup>6</sup> Basel Committee on Banking Supervision, *Guidelines for computing capital for incremental risk in the trading book*, July 2009, [www.bis.org/publ/bcbs159.htm](http://www.bis.org/publ/bcbs159.htm).

<sup>7</sup> Basel Committee on Banking Supervision, *Enhancements to the Basel II framework*, July 2009, [www.bis.org/publ/bcbs157.htm](http://www.bis.org/publ/bcbs157.htm).

<sup>8</sup> 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](http://www.bis.org/press/p110113.htm).

<sup>9</sup> Basel Committee on Banking Supervision, *Capital requirements for bank exposures to central counterparties*, July 2012, [www.bis.org/publ/bcbs227.htm](http://www.bis.org/publ/bcbs227.htm).

<sup>10</sup> 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](http://www.bis.org/publ/bcbs255.htm); Financial Stability Board, *2016 list of global systemically important banks (G-SIBs)*, 21 November 2016, [www.fsb.org/wp-content/uploads/2016-list-of-global-systemically-important-banks-G-SIBs.pdf](http://www.fsb.org/wp-content/uploads/2016-list-of-global-systemically-important-banks-G-SIBs.pdf).

<sup>11</sup> Financial Stability Board, *Total Loss-Absorbing Capacity (TLAC): Principles and Term Sheet*, 9 November 2015, [www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet](http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet).

<sup>12</sup> Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013, [www.bis.org/publ/bcbs238.htm](http://www.bis.org/publ/bcbs238.htm).

<sup>13</sup> Basel Committee on Banking Supervision, *Basel III: the net stable funding ratio*, October 2014, [www.bis.org/bcbs/publ/d295.htm](http://www.bis.org/bcbs/publ/d295.htm).

<sup>14</sup> Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, [www.bis.org/publ/bcbs270.htm](http://www.bis.org/publ/bcbs270.htm).

<sup>15</sup> See Basel Committee on Banking Supervision, *TLAC holdings*, October 2016, [www.bis.org/bcbs/publ/d387.htm](http://www.bis.org/bcbs/publ/d387.htm); Basel Committee on Banking Supervision, *Revisions to the securitisation framework*, July 2016, [www.bis.org/bcbs/publ/d374.htm](http://www.bis.org/bcbs/publ/d374.htm).

## 1.2 Sample of participating banks

Data were provided for a total of 210 banks, including 100 Group 1 banks and 110 Group 2 banks.<sup>16</sup> 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 30 June 2016. 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.

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 June 2016 ("H1 2016") reporting dates, in order to make more meaningful period-to-period comparisons. The consistent sample differs for the various analyses; typically it includes around 90 Group 1 banks, of which 30 are G-SIBs, and around 67 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 2016, 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 as agreed up to end-2015 (hereinafter: 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' RWA 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 25th to 75th percentile 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. Finally, weighted averages are represented by dots.

<sup>16</sup> See Table A.1 in the Statistical Annex for details on the sample.

## 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. Also particular attention has been paid on the reconciliation of reported data with existing data from supervisory reporting systems. 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 June 2016 reporting date may differ from the H1 2016 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 30 June 2016 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.

Box A

### Phase-in provisions for capital ratios

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 capital, 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.

## 2. Regulatory capital, capital requirements, capital shortfalls and TLAC

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 RWA, as of June 2016. Details of capital ratios and capital shortfalls are provided in Section 2.1 and Section 2.2.

	Fully implemented requirement, in per cent		Basel III capital ratios, in per cent		Risk-based capital shortfalls, in billions of euros <sup>1</sup>		Combined risk-based capital and leverage ratio shortfalls, in billions of euros <sup>1</sup>	
	Min	Target <sup>2</sup>	Transitional	Fully phased-in <sup>3</sup>	Min	Target <sup>2</sup>	Min	Target <sup>2</sup>
Group 1 banks								
CET1 capital	4.5	7.0–9.5	12.2	11.9	0.0	0.0	0.0	0.0
Tier 1 capital <sup>4</sup>	6.0	8.5–11.0	13.4	12.9	0.0	1.4	0.0	1.4
Total capital <sup>5</sup>	8.0	10.5–13.0	15.8	14.6	0.0	3.4	0.0	3.4
Sum					0.0	4.8	0.0	4.8
Of which: G-SIBs								
CET1 capital	4.5	8.0–9.5	12.1	11.8	0.0	0.0	0.0	0.0
Tier 1 capital <sup>4</sup>	6.0	9.5–11.0	13.4	12.9	0.0	0.0	0.0	0.0
Total capital <sup>5</sup>	8.0	11.5–13.0	15.8	14.7	0.0	0.9	0.0	0.9
Sum					0.0	0.9	0.0	0.9
Group 2 banks								
CET1 capital	4.5	7.0	13.8	13.4	0.0	0.0	0.0	0.0
Tier 1 capital <sup>4</sup>	6.0	8.5	14.2	13.8	0.0	1.0	2.9	3.9
Total capital <sup>5</sup>	8.0	10.5	16.4	15.4	0.0	4.0	0.0	4.0
Sum					0.0	5.0	2.9	7.9

<sup>1</sup> The shortfall is calculated as the sum across individual banks where a shortfall is observed. The calculation includes all changes to RWA (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. <sup>2</sup> The target level includes the capital conservation buffer and the capital surcharges for 30 G-SIBs as applicable. <sup>3</sup> This is as agreed by the Basel Committee up to end-2015. <sup>4</sup> The shortfalls presented in the Tier 1 capital row are *additional* Tier 1 capital shortfalls. <sup>5</sup> The shortfalls presented in the total capital row are *Tier 2* capital shortfalls.

Source: Basel Committee on Banking Supervision.

### 2.1 Capital ratios

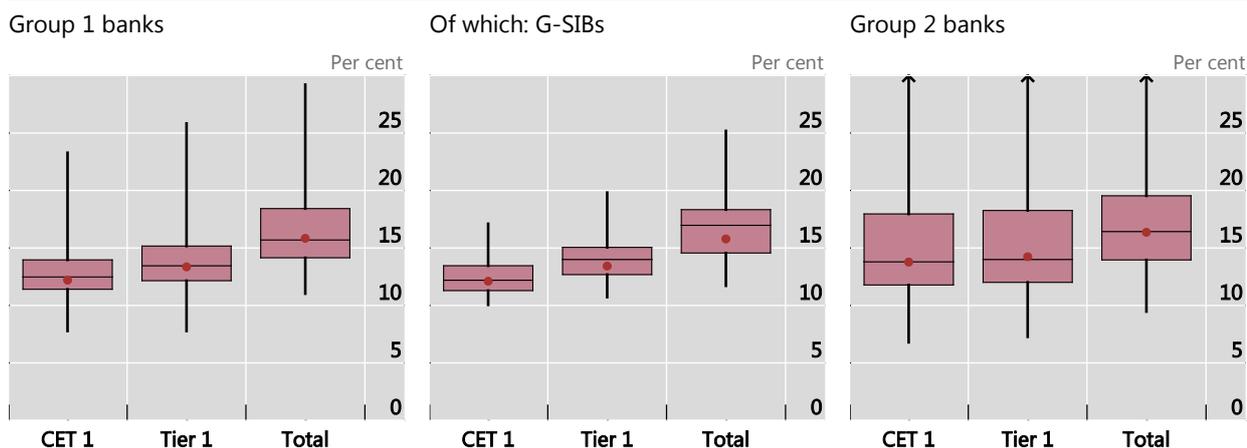
As compared with transitional CET1, the average CET1 capital ratio of Group 1 banks would have fallen from 12.2% to 11.9% (a decline of 0.3 percentage points) when Basel III deductions and RWA are fully taken into account. For Group 2 banks, the CET1 capital ratio declines from 13.8% under transitional rules to 13.4% 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 the fully phased-in Basel III framework. 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),<sup>17</sup> and by increases in RWA (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 0.5 percentage points from 13.4% to 12.9%, and total capital ratios of this same group would decline on average by 1.2 percentage points from 15.8% to 14.6%. Group 2 banks show similar declines in Tier 1 capital ratios (from 14.2% to 13.8 %) and total capital ratios (from 16.4% to 15.4%). 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<sup>1</sup>

Graph 1



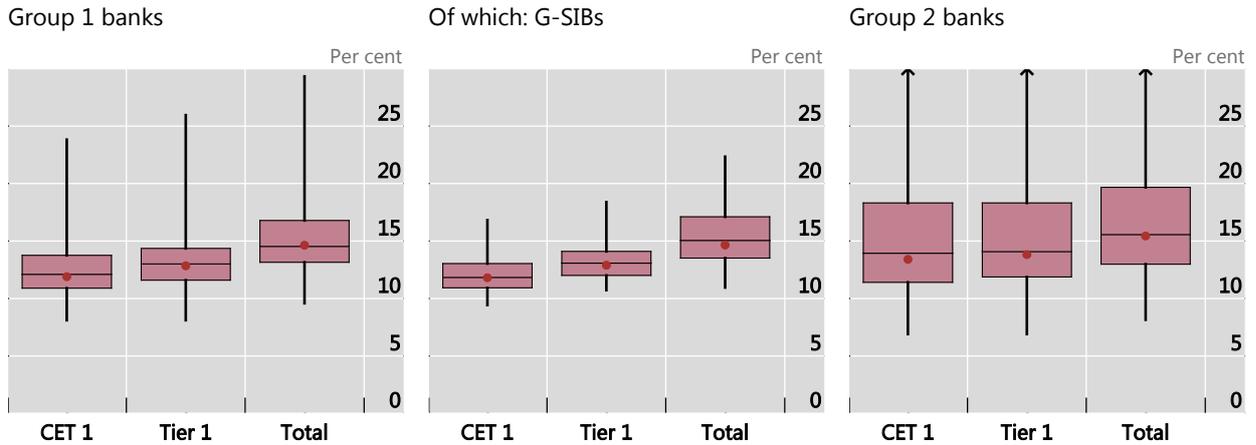
<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the vertical lines generally show the range of the entire sample. In some cases, arrows at the top of the vertical line indicate banks with capital ratios outside the range shown in the graph. The dots represent weighted averages.

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

<sup>17</sup> See also Table A.12 and Table A.13.

Fully phased-in Basel III CET1, Tier 1 and total capital ratios<sup>1</sup>

Graph 2



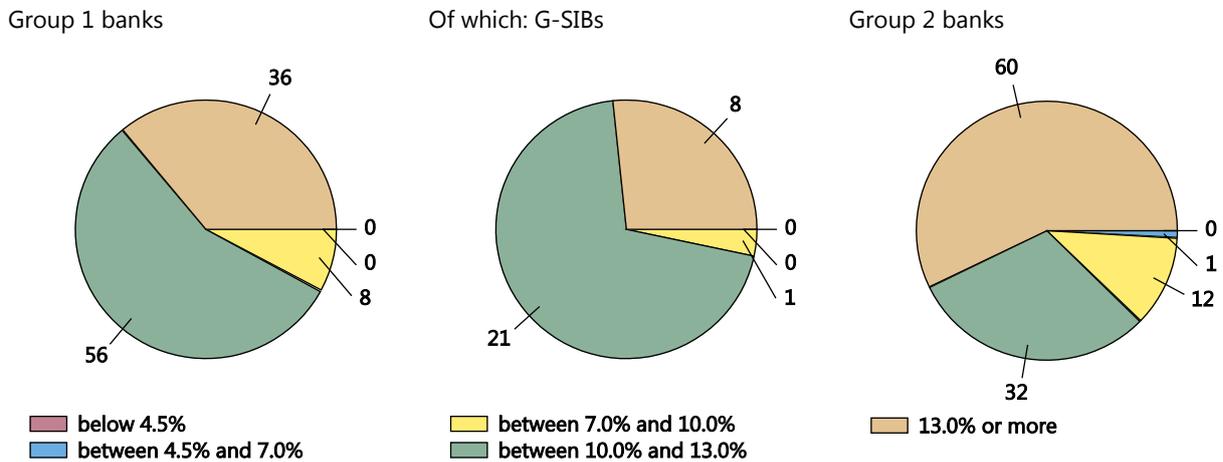
<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the vertical lines generally show the range of the entire sample. In some cases, arrows at the top of the vertical line indicate banks with capital ratios outside the range shown in the graph. The dots represent weighted averages.

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 105 banks in the Group 2 sample, all report a CET1 ratio equal to or higher than 4.5%, while only one does not achieve the target of 7.0%.

Distribution of fully phased-in Basel III CET1 ratios

Graph 3



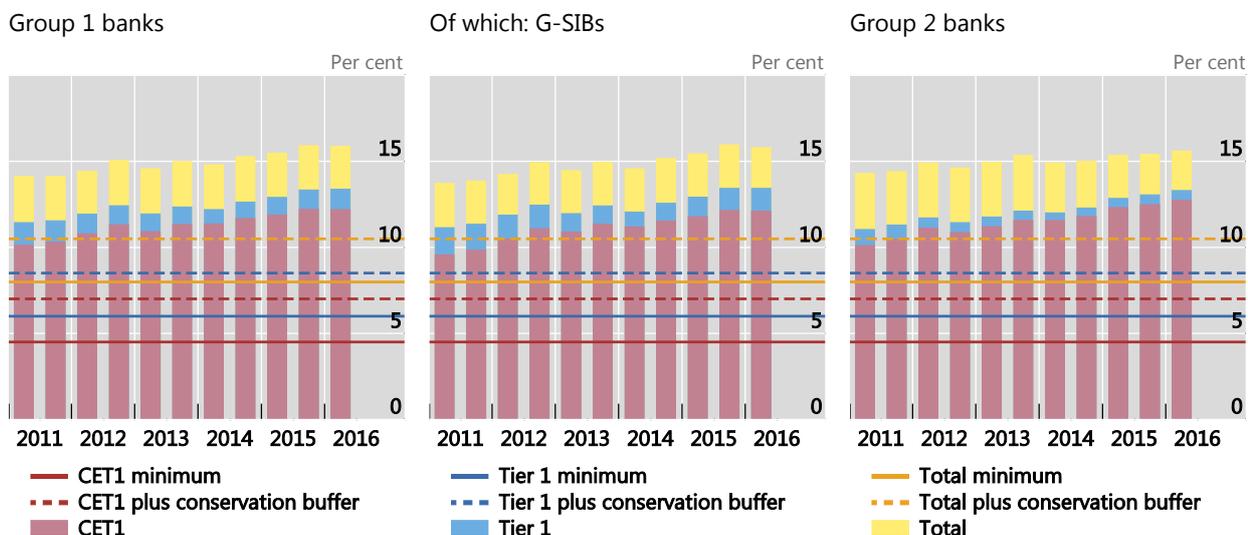
Source: Basel Committee on Banking Supervision.

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-June 2016. Transitional capital ratios have not changed greatly.

## Average transitional Basel III CET1, Tier 1 and total capital ratios<sup>1</sup>

Consistent sample of banks<sup>2</sup>

Graph 4



<sup>1</sup> 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. <sup>2</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 65 banks.

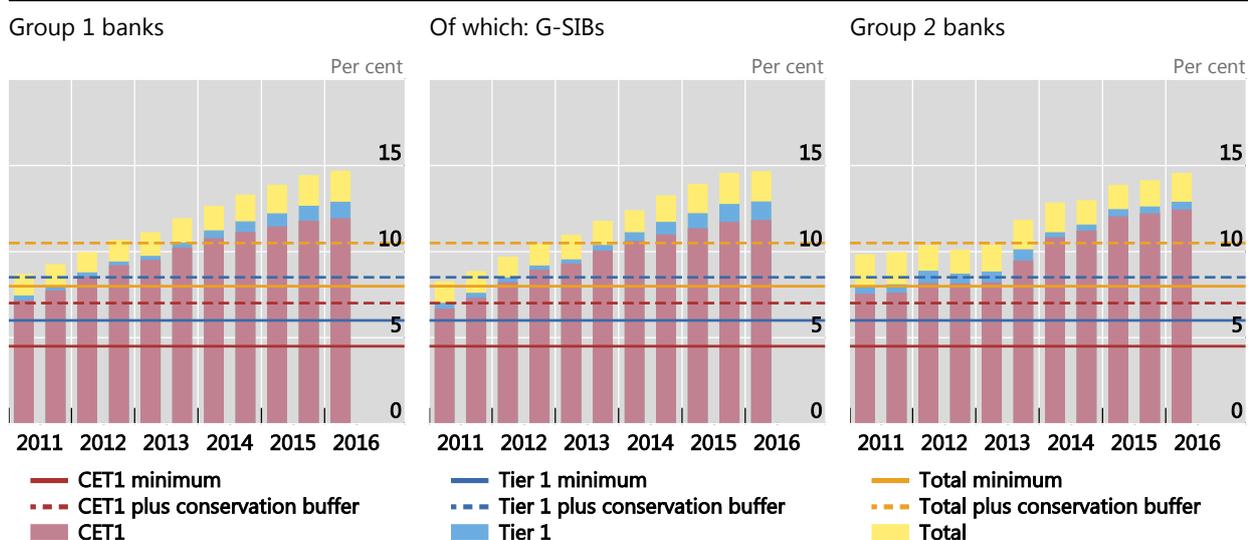
Source: Basel Committee on Banking Supervision. See also Table A.4.

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 0.1, 0.3 and 0.3 percentage points over the previous six months, respectively. For Group 2 banks, the improvement in risk-based capital ratios over the reporting period was 0.2, 0.3, and 0.4 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 RWA.

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

Consistent sample of banks<sup>1</sup>

Graph 5



<sup>1</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 65 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 30 June 2016 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 30 June 2016 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 are no capital shortfalls for Group 1 or Group 2 banks with respect to the CET1, Tier 1 or total capital minimum requirements.

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 G-SIBs as applicable according to the updated list of banks published by the Financial Stability Board in November 2016, the Group 1 and Group 2 banks also have no and virtually no shortfall, respectively.

Group 1 banks would need an additional €1.4 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. Group 2 banks would need an additional €1.0 billion of CET1 or additional Tier 1 capital to meet the target ratio.

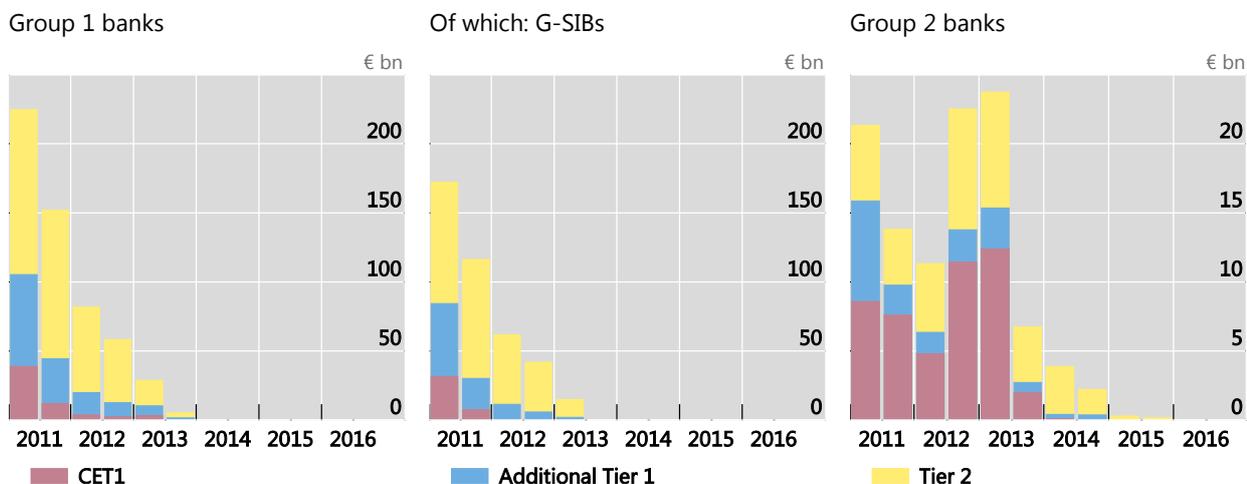
Assuming banks already hold 8.5% Tier 1 capital plus the surcharges on G-SIBs as applicable, Group 1 banks require an additional €3.4 billion of Tier 2 or higher-quality capital to meet the total capital target ratio of 10.5% (ie the 8.0% Tier 1 minimum plus the 2.5% CET1 capital conservation buffer) plus the surcharges on G-SIBs as applicable. Group 2 banks would need an additional €4.0 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. As a point of reference, the aggregate sum of after-tax profits prior to distributions for the six-month period ending 30 June 2016 for Group 1 and Group 2 banks was €263.4 billion and €8.3 billion, respectively.

## Estimated capital shortfalls at the minimum level<sup>1</sup>

Fully phased-in Basel III, sample and exchange rates as at the reporting dates<sup>2</sup>

Graph 6



<sup>1</sup> The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Tier 1 and total) of capital. <sup>2</sup> 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, 100 banks in H1 2015 and H2 2015 and 99 banks in H1 2016; 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, 111 in H2 2015 and 105 in H1 2016.

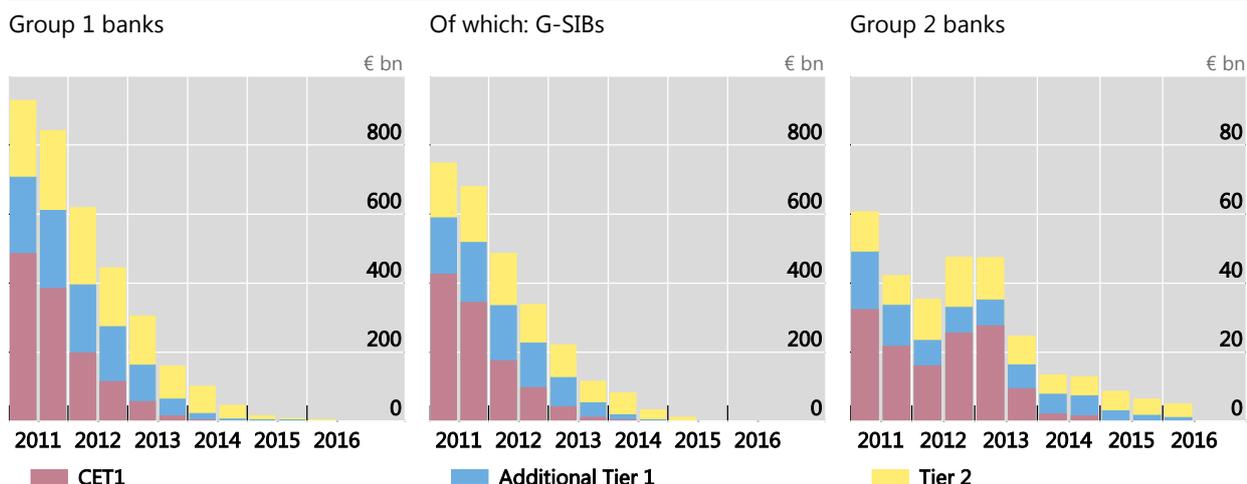
Source: Basel Committee on Banking Supervision. See also Table A.6.

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 30 June 2016 (see Graph 7). Among Group 2 banks the CET1 shortfall at the 7.0% target level has been reduced by €0.2 billion to virtually zero since December 2015.

## Estimated capital shortfalls at the target level<sup>1</sup>

Fully phased-in Basel III, sample and exchange rates as at the reporting dates<sup>2</sup>

Graph 7



<sup>1</sup> The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Tier 1 and total) of capital. <sup>2</sup> 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, 100 banks in H1 2015 and H2 2015 and 99 banks in H1 2016; 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, 111 in H2 2015 and 105 in H1 2016.

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

## 2.3 Level of capital

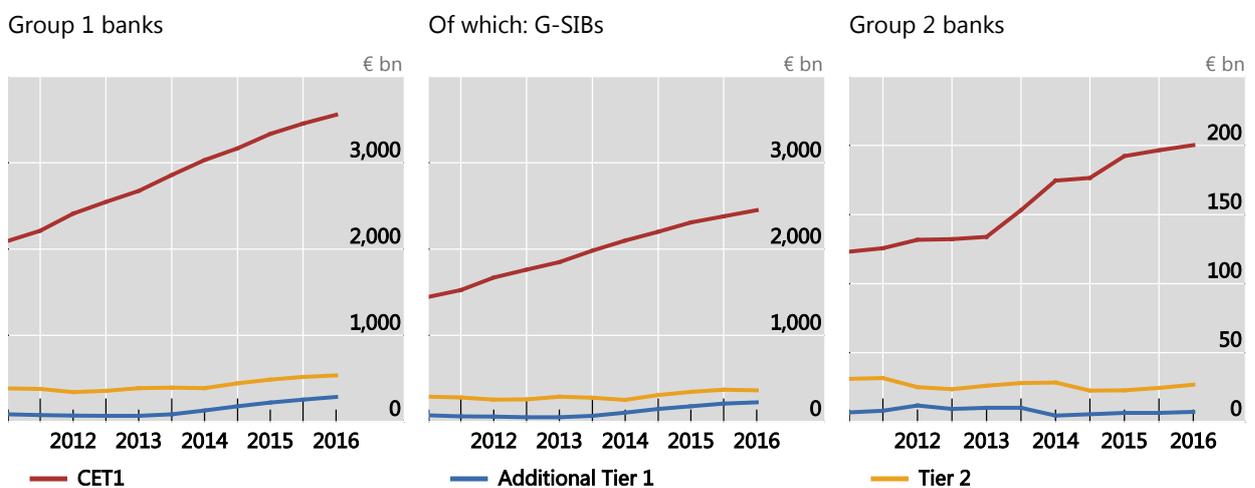
Graph 8 shows the development of the level of CET1 capital of banks in the consistent sample assuming full phasing-in of Basel III separately for Group 1 banks, Group 2 banks and G-SIBs. From end-December 2015 to end-June 2016, the level of Group 1 banks' CET1 has increased by €103 billion or 3.0% to €3,557 billion. More than two thirds of this increase, €71 billion, can be attributed to the G-SIBs in the sample which collectively held €2,452 billion of CET1 at June 2016. Group 2 banks' CET1 has increased by €3 billion or 1.5% to €200 billion.

Since end-June 2011, the consistent sample of Group 1 banks have increased their CET1 capital by 70.0%. The overall increase for the G-SIBs included in this sample is similar (69.7%), while the CET1 of the consistent sample of Group 2 banks has increased by 62.6%.

### Level of capital after full phasing in of Basel III

Consistent sample of banks,<sup>1</sup> exchange rates as of 30 June 2016

Graph 8



<sup>1</sup> Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

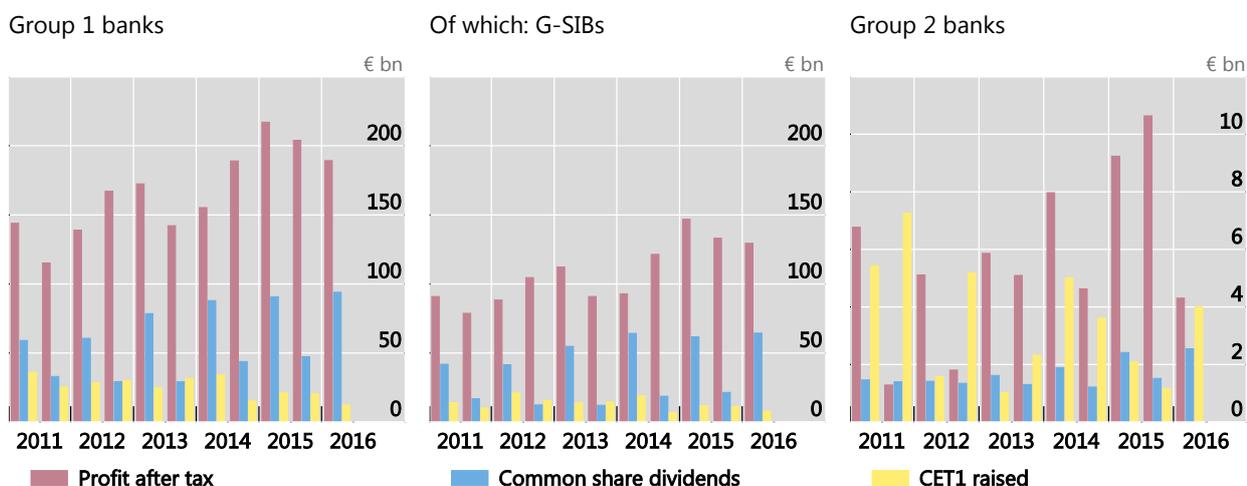
Source: Basel Committee on Banking Supervision. See also Table A.8.

The CET1 capital externally raised (ie excluding retention of earnings) by the consistent sample of Group 1 banks (see Graph 9) varied between €36.2 billion in the first half of 2011 and €12.4 billion in the first half of 2016. Of these amounts, capital raised by the G-SIBs in the sample was 39.0% in the first half of 2011 and 63.7% in the first half of 2016. For the consistent sample of Group 2 banks, capital raised was the lowest in the first half of 2013 with €1.0 billion, while the amount raised in the first half of 2016 was €4.0 billion.

## Profits, dividends and CET1 capital raised externally

Consistent sample of banks,<sup>1</sup> exchange rates as of 30 June 2016

Graph 9



<sup>1</sup> Group 1 includes 88 banks, G-SIB includes 29 banks and Group 2 includes 65 banks.

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

In the first half of 2016 the full sample of Group 1 banks raised €13.0 billion of CET1 capital (see Table 3). Of this amount, 63.8% was raised by G-SIBs within the sample. Group 2 banks collectively raised €9.1 billion of CET1 capital during the reporting period.

## Capital raised during H1 2016

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	65	13.0	27.2	46.4
of which: G-SIBs	30	24	8.3	16.0	22.1
Group 2	106	40	9.1	1.1	2.1

Source: Basel Committee on Banking Supervision.

## 2.4 Composition of capital

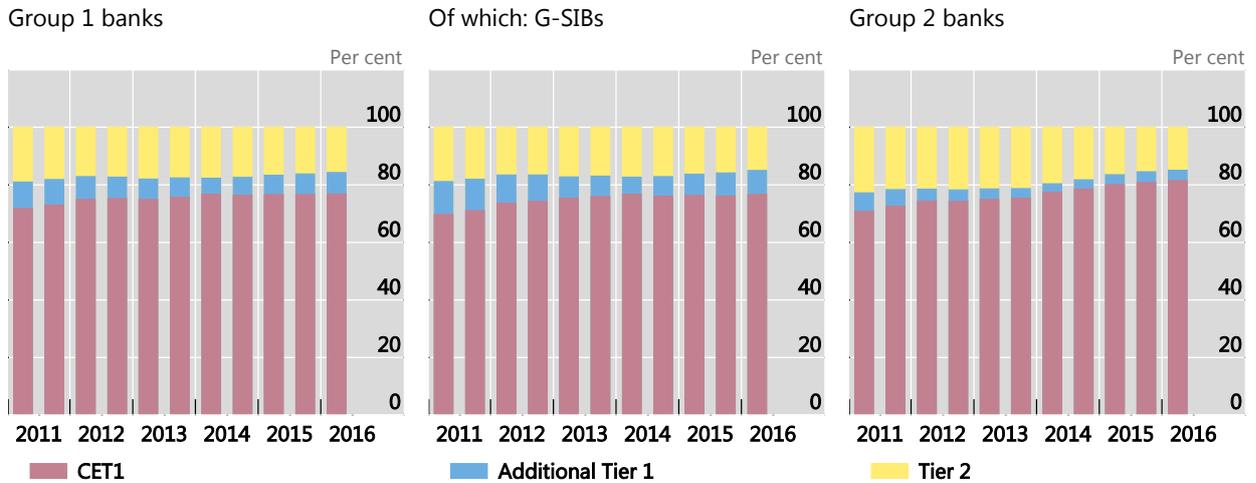
The graphs below show the composition of total capital for Group 1 and Group 2 banks under transitional Basel III rules (Graph 10) and after fully phased-in Basel III (Graph 11).

For Group 1 banks, the share of fully phased-in Basel III CET1 to total capital is 81.2%. Additional Tier 1 and Tier 2 capital amount to 6.5% and 12.3% of the total capital of Group 1 banks, respectively. Of the Group 1 bank sample, approximately almost one-quarter 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 85.5% with shares of additional Tier 1 capital and Tier 2 capital amounting to 3.1% and 11.4%, respectively. Under transitional Basel III rules, the share of CET1 to total capital is lower at 76.9% for Group 1 banks and at 81.5% 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<sup>1</sup>

Graph 10



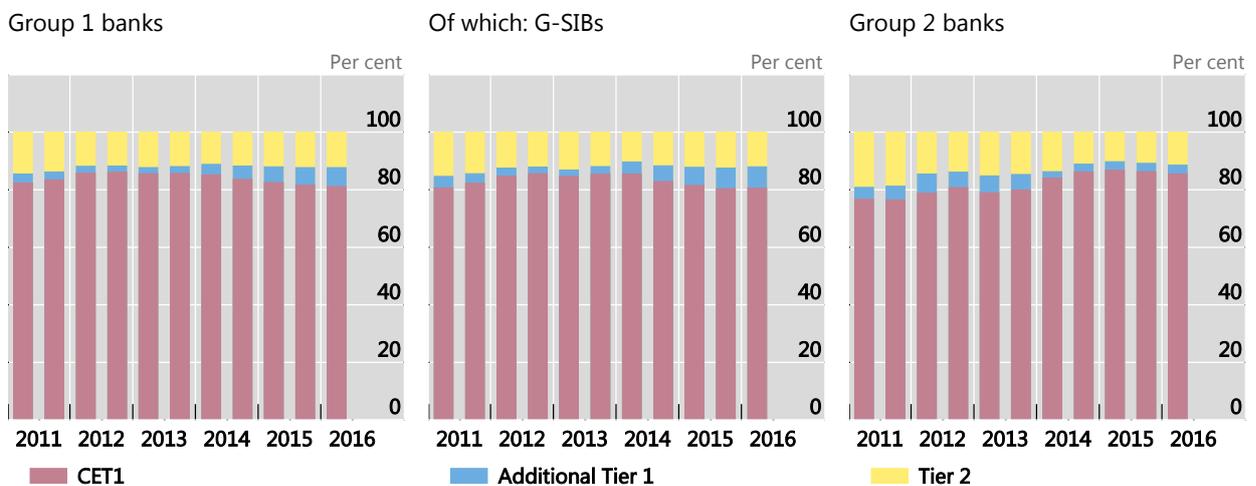
<sup>1</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

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<sup>1</sup>

Graph 11



<sup>1</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

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

Regarding the composition of Basel III CET1 capital itself, retained earnings (57.0% for Group 1 banks and 38.5% for Group 2 banks) and paid-in capital (35.6% for Group 1 banks and 43.6% 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 6.4% 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 4.0% to the outstanding CET1 balances of Group 1 and Group 2 banks.

## 2.5 Components and determinants of capital requirements

Table 4 provides data on relative sizes of asset classes in terms of exposures as well as minimum required capital (MRC)<sup>18</sup> for both Group 1 and Group 2 banks. Additionally, the MRC per exposure suggests the relative riskiness of the different asset classes as measured by the current framework. Both the numerator (MRC) and the denominator (exposure amounts) of this ratio include exposures under the IRB and standardised approaches for credit risk.<sup>19</sup> Where applicable, the MRC reflect the effect of the 1.06 scaling factor applied to IRB credit RWA, and deductions assigned to the securitisation and related entities asset classes. Broadly speaking, an MRC per exposure figure of 8% is comparable to a 100% risk weight. Since a common exposure measure for credit, market and operational risk does not exist, the size in terms of exposure and the MRC per exposure are only defined for asset classes subject to a credit risk treatment.

Looking at Table 4 for Group 1 banks, it is observed that while the corporate, retail, sovereign and CVA asset classes comprise the overwhelming majority of exposures, their relative riskiness as measured by MRC per exposure is rather low in comparison to other asset classes. In particular, for related entities and equity exposures the MRC per exposure is 22.9% and 14.1%, respectively. For Group 2 banks, the corporate, retail and sovereign asset classes also comprise the overwhelming majority of exposures. However, unlike for Group 1 banks, the size of the CVA asset class in terms of exposure is materially lower while the share of the bank asset class is moderately higher. With regard to MRC per exposure, asset classes with higher relative riskiness for Group 2 banks include related entities (23.8%) and equity (19.0%). Interestingly, while Group 1 banks as a whole have a rather large share of exposure to CVA (15.0%), the MRC per exposure is very small (0.5%). In contrast, for Group 2 banks, the share of CVA exposure is negligible at 0.6% but the MRC per exposure is considerably higher (7.0%) compared to Group 1 banks overall.

<sup>18</sup> MRC was calculated at the minimum total capital ratio level of 8%.

<sup>19</sup> The asset classification is mainly based on the IRB approach. Exposures subject to partial use of the standardised approach for credit risk which cannot be assigned to a specific portfolio, as well as past-due items under the standardised approach, are listed separately in Table 4.

## Average asset class size and MRC per exposure

In per cent

Table 4

	Group 1			Group 2		
	Size exposure	Size MRC	MRC per exposure	Size exposure	Size MRC	MRC per exposure
Corporate	28.5	41.9	4.8	19.7	29.7	5.1
Sovereign	17.8	2.4	0.4	26.3	2.7	0.4
Bank	6.9	4.6	2.2	11.7	5.6	1.6
Retail	20.4	14.7	2.3	31.0	19.3	2.1
Equity	0.6	2.8	14.1	1.1	6.3	19.0
Purch. receivables	0.1	0.1	3.0	0.0	0.0	3.4
Securitisation	1.9	1.4	2.4	0.7	0.4	1.8
Related entities	0.1	0.8	22.9	0.0	0.0	23.8
Past-due items	0.1	0.2	9.1	0.7	1.9	9.4
Other assets	4.8	5.2	3.5	1.6	3.7	7.8
Not assigned <sup>1</sup>	3.6	6.3	5.7	6.6	11.0	5.6
CVA	15.0	2.1	0.5	0.6	1.2	7.0
Trading book CCR <sup>2</sup>		0.1			0.0	
Market risk		4.0			2.8	
Other trading book		0.1			0.0	
Operational risk		13.8			7.9	
Reg. difference <sup>3</sup>		-2.2			0.6	
Floor adjustment		1.4			6.3	
Other <sup>4</sup>		0.2			0.6	
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>3.2</b>	<b>100.0</b>	<b>100.0</b>	<b>3.4</b>

<sup>1</sup> The "not assigned" asset class only includes those exposures subject to partial use of the standardised approach which could not be assigned to one of the other asset classes. <sup>2</sup> Counterparty credit risk in the trading book. <sup>3</sup> Includes shortfall (positive) or excess (negative) of provisions over expected loss amounts for exposures subject to the IRB approach for credit risk as well as general provisions (negative) for exposures subject to the standardised approach for credit risk to the extent they are recognised in Tier 2 capital. <sup>4</sup> Includes the reconciliation asset class and other Pillar 1 capital requirements.

Source: Basel Committee on Banking Supervision

## 2.6 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.

## Basel III leverage ratio framework

Under the January 2014 Basel III leverage ratio framework,<sup>①</sup> 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;
- 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.

<sup>①</sup> Basel Committee on Banking Supervision, *Basel III leverage ratio framework and disclosure requirements*, January 2014, [www.bis.org/publ/bcbs270.htm](http://www.bis.org/publ/bcbs270.htm). 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](http://www.bis.org/bcbs/publ/d365.htm).

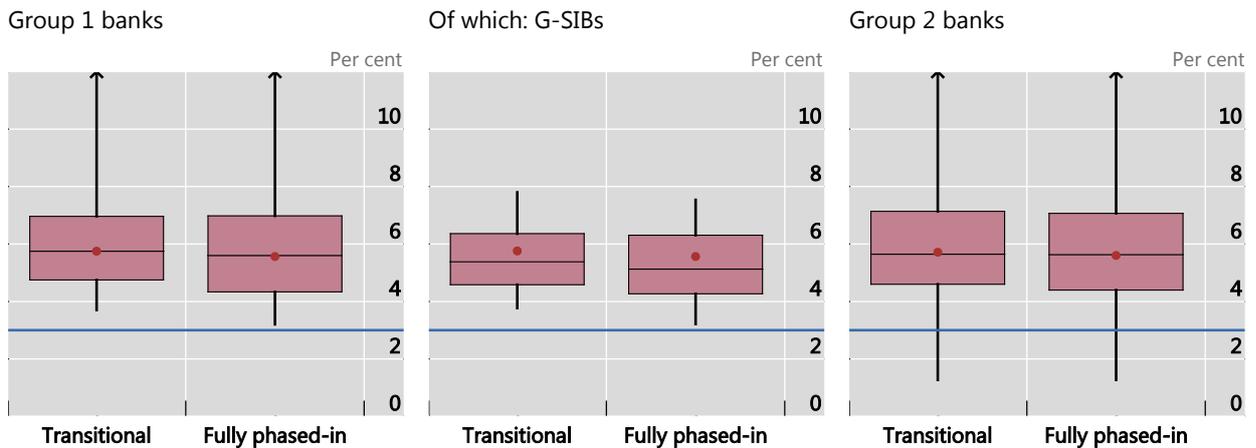
Total exposures of the 100 Group 1 banks and the 104 Group 2 banks in the sample were approximately €77.4 trillion. Graph 12 presents summary statistics related to the distribution of Basel III leverage ratios based on transitional Basel III Tier 1 and fully phased-in Basel III Tier 1 capital for Group 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, 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, six banks in the sample would not meet the 3% ratio level, all of them being Group 2 banks, with an aggregate shortfall of €2.9 billion.<sup>20</sup>

<sup>20</sup> See also Table 2.

Transitional Basel III Tier 1 and fully phased-in Basel III Tier 1 leverage ratios<sup>1</sup>

Graph 12



<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile 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. The dots represent weighted averages.

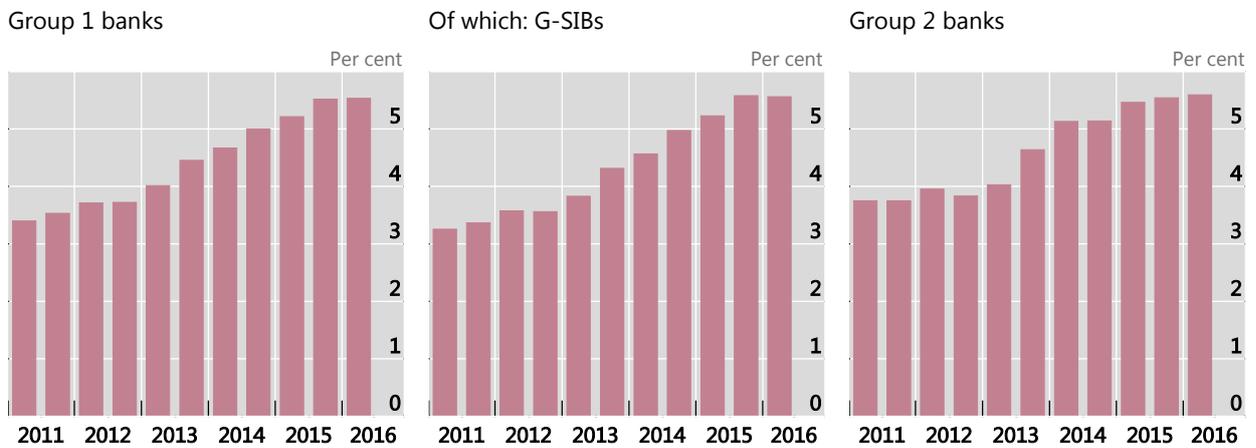
Source: Basel Committee on Banking Supervision. See also Table A.14.

Graph 13 shows how the fully phased-in Basel III Tier 1 leverage ratios have evolved over time for a consistent sample of 89 Group 1 banks (including 30 G-SIBs) and 66 Group 2 banks, all of which provided leverage ratio data for all reporting dates from June 2011 to June 2016.

Fully phased-in Basel III Tier 1 leverage ratios<sup>1</sup>

Consistent sample of banks

Graph 13



<sup>1</sup> 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 89 banks, G-SIBs include 30 banks and Group 2 includes 66 banks.

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

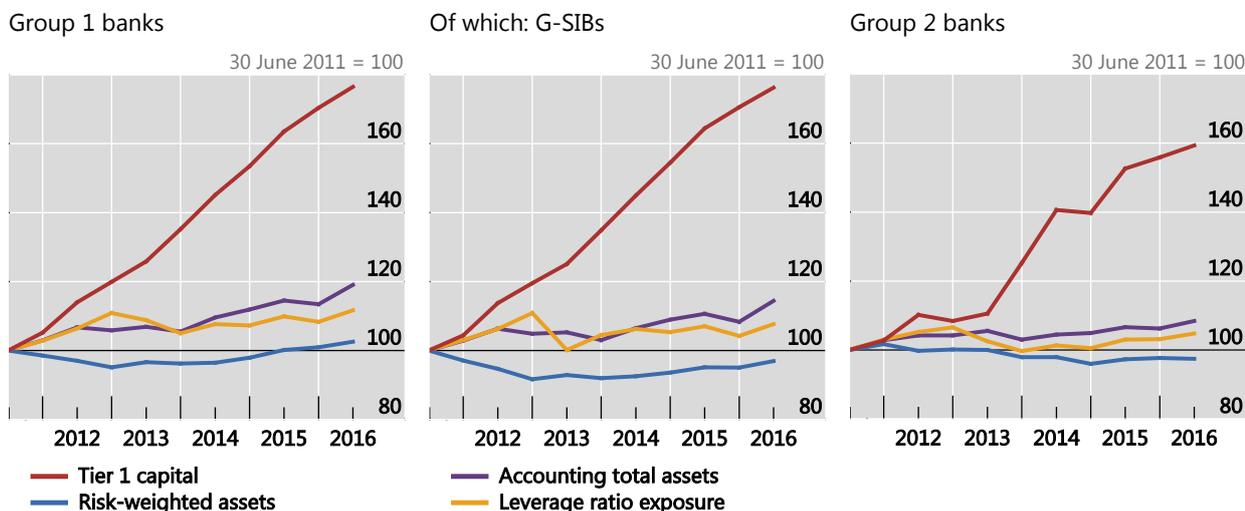
Graph 14 shows the evolution of the components of the risk-based capital and leverage ratios over time for a consistent sample of banks, ie banks that have consistently been providing the four data series for the period June 2011 to June 2016. The four components are Basel III Tier 1 capital, RWA and the leverage ratio exposure measure, all assuming full implementation of Basel III, as well as accounting total assets. For Group 1 banks, RWA and Tier 1 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 RWA have been relatively

modest, with a slight increase noticeable in the first half of 2016. For Group 2 banks, RWA and leverage ratio exposures track more closely and have remained rather stable over the last five years.

### Tier 1 capital, RWA, leverage ratio exposure and accounting total assets<sup>1</sup>

Consistent sample of banks, exchange rates as of 30 June 2016

Graph 14



<sup>1</sup> Tier 1 capital, RWA and leverage ratio exposure assume full implementation of Basel III. Note that the data points for H1 2013 use an approximation for the 2014 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 89 banks, G-SIBs include 30 banks and Group 2 includes 66 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 5 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.<sup>21</sup> It shows in particular that 3.0% 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 5

		Target Tier 1 ratio binding (<8.5% + G-SIB surcharge)?		Total	Total after capital raising to meet <b>target</b> Tier 1 ratio
		Yes	No		
Leverage ratio binding (<3%)?	Yes	0.5	2.5	3.0	3.0
	No	2.5	94.6	97.0	97.0
	Total	3.0	97.0	100.0	100.0

Source: Basel Committee on Banking Supervision.

<sup>21</sup> 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.

Separate results for the Group 1 and Group 2 banks in the sample are included in Table A.17 and Table A.18 in the Statistical Annex, respectively.

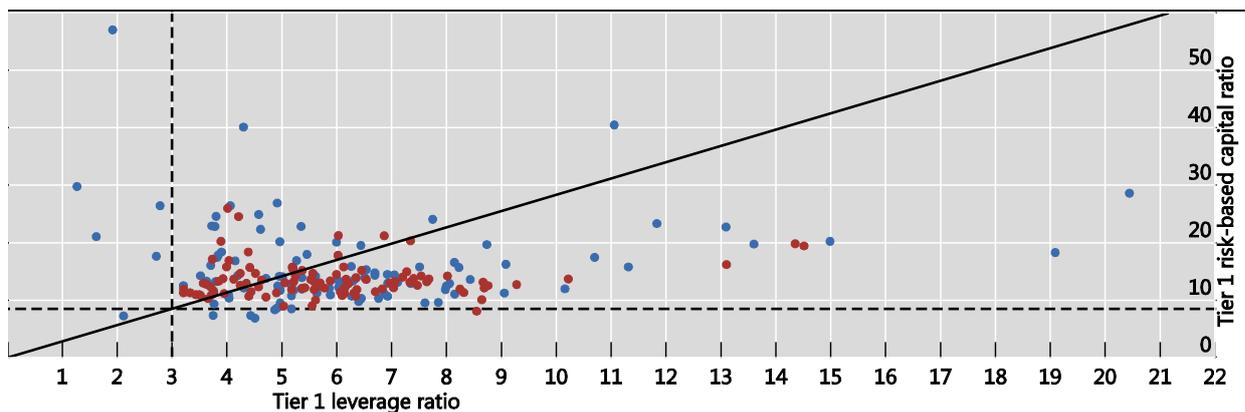
Graph 15 below shows the interaction between the fully phased-in Basel III Tier 1 leverage ratios (horizontal axis) and the fully phased-in Basel III Tier 1 risk-weighted capital ratios (vertical axis). Ratios of Group 1 banks are marked with red dots and those of Group 2 banks with blue dots. The dashed horizontal line represents a Tier 1 target risk-based capital ratio of 8.5%,<sup>22</sup> 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  $8.5\%/3\% \approx 2.83$  between RWA 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).<sup>23</sup> 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

Graph 15



Source: Basel Committee on Banking Supervision.

As shown in Graph 15, six 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 68 banks out of 204, including 33 Group 1 and 35 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 US GAAP, respectively Japanese GAAP have raised level playing field concerns across banks. IFRS gives entities the option to apply trade or settlement date accounting for

<sup>22</sup> Calculated as the sum of a 6.0% Tier 1 minimum capital ratio plus 2.5% capital conservation buffer.

<sup>23</sup> Note that the effect of the G-SIB surcharge is not taken into account here. As the G-SIB surcharges only apply to the risk-based requirement, the relevant proportion between RWA and total leverage ratio exposure that determines whether the Basel III leverage ratio is constraining or not and hence the slope of the diagonal line would be different by bank.

regular purchases or sales of financial assets.<sup>24</sup> 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 172 valid submissions on the treatment of pending settlement transactions.<sup>25</sup> Table 6 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.

	Settlement date accounting	Trade date accounting without netting	Trade date accounting with netting <sup>1</sup>
Group 1	22	43	19
Group 2	59	26	3
Total	81	69	22

<sup>1</sup> Eight out of the 22 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.

Source: Basel Committee on Banking Supervision.

## 2.7 Combined shortfall amounts

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

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 these banks show no more shortfall at *minimum* level.

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 virtually zero. The CET1 shortfall amounts are driven purely by the risk-based capital requirements, since there is no minimum CET1 Basel III leverage ratio requirement.<sup>26</sup>

<sup>24</sup> 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.

<sup>25</sup> 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).

<sup>26</sup> 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 €2.9 billion (from zero to €2.9 billion and from €1.0 billion to €3.9 billion, respectively).

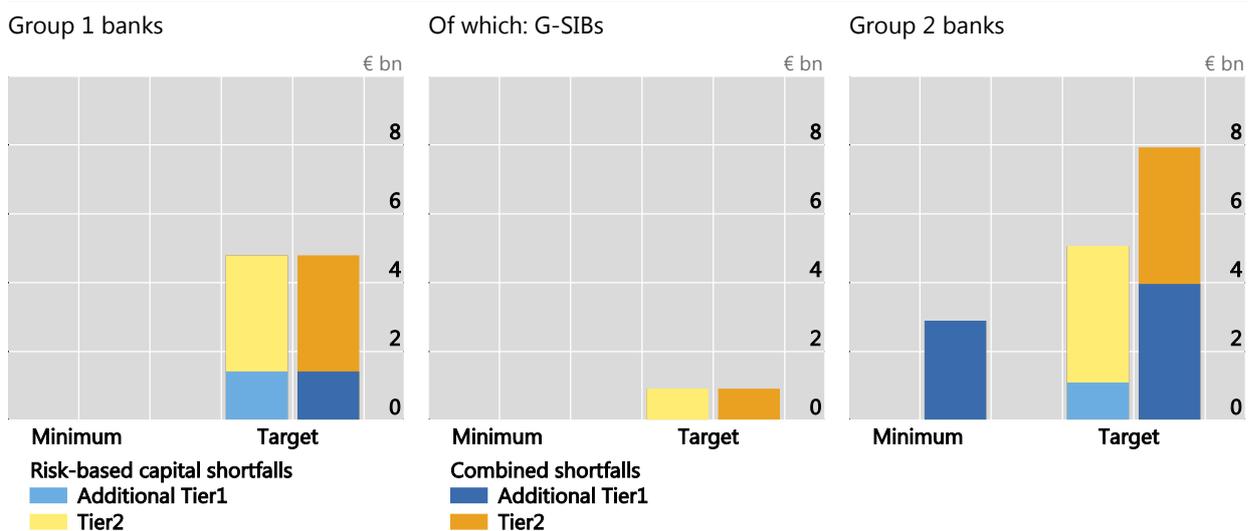
If the Basel III Tier 1 leverage ratio is included in the calculation, Tier 2 capital shortfalls for the total capital targets are unchanged (ie the orange bars are equivalent to the yellow bars). This is explained by the fact that banks would have to raise additional Tier 1 capital to meet the Basel III Tier 1 leverage ratio requirement did not have any 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 which are purely driven by the €1.4 billion risk-based Tier 1 and €3.4 billion Tier 2 capital shortfalls. However, it increases the total capital shortfall for Group 2 banks by €2.9 billion at the minimum level and at the target level (from zero to €2.9 billion and from €5.0 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



Group 1 banks do not have any shortfalls at the minimum levels. Furthermore, there are virtually no CET1 shortfalls for any bank group at the minimum or target level. Therefore, the related bars are not shown in the graphs.

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

## 2.8 Total loss-absorbing capacity requirements for G-SIBs

The Committee also collected data on additional total loss-absorbing capacity (TLAC) for G-SIBs. Of the 26 G-SIBs which will initially be subject to these requirements,<sup>27</sup> 25 participated in the exercise. Overall,

<sup>27</sup> Four G-SIBs are headquartered in an emerging market economy and will only have to comply with the minimum TLAC requirement starting in 2025. See Financial Stability Board, *Total Loss-Absorbing Capacity (TLAC): Principles and Term Sheet*, 9 November 2015, [www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet](http://www.fsb.org/2015/11/total-loss-absorbing-capacity-tlac-principles-and-term-sheet).

applying the 2019 minimum requirements, nine of the 25 G-SIBs in the sample have an incremental<sup>28</sup> TLAC shortfall of up to 7.2% of RWA, totalling €131.4 billion (see Graph 17).<sup>29</sup> Applying the 2022 minimum requirements, 18 of the 25 G-SIBs in the sample have an incremental shortfall of up to 9.9% of RWA, totalling €318.2 billion.

The incremental shortfalls to the 2019 requirements were 9.0% of RWA and €216.3 billion, and the incremental shortfalls to the 2022 requirements were 11.4% of RWA or €416.2 billion at the end-December 2015 reporting date. Therefore, the incremental shortfalls have already decreased significantly (by almost 40% relative to the 2019 minimum requirements and by almost 25% relative to the 2022 minimum requirements) from those reported six months earlier for the end-2015 reporting date.

## Distribution of incremental TLAC surplus and shortfall<sup>1</sup>

Fully phased-in Basel III

Graph 17



<sup>1</sup> Surplus is indicated as positive and shortfall as negative.

Source: Basel Committee on Banking Supervision.

## 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 minus 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 set at 70% in 2016 and will continue to rise in equal annual steps of 10 percentage points to reach 100% in 2019.

<sup>28</sup> The shortfall is incremental to any risk-based and leverage ratio shortfall discussed above.

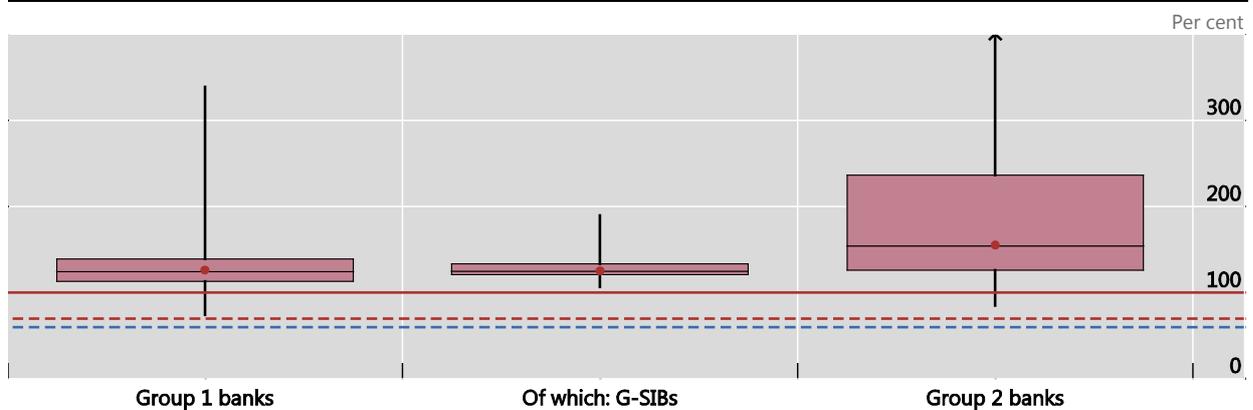
<sup>29</sup> Since deductions related to banks' holdings of TLAC instruments are not considered in this exercise, estimated shortfalls could be viewed as representing a lower bound for the actual shortfall amounts.

Overall, 91 Group 1 and 68 Group 2 banks provided sufficient data in the end-June 2016 Basel III monitoring exercise to calculate the LCR according to the revised standard.<sup>30</sup> The weighted average LCR was 126.2% for Group 1 banks and 155.4% for Group 2 banks (see Graph 18 and Table A.19), which compare to average LCRs of 125.2% and 148.1% 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 18 below also gives an indication of the distribution of banks' liquidity positions. Some 87.9% of all Group 1 banks and 94.1% of Group 2 banks in the Basel III monitoring sample already meet or exceed the final LCR minimum requirement of 100%, while all of Group 1 and Group 2 banks have LCRs that are at or above the 70% minimum requirement applicable as of January 2016. These results compare to 85.6% and 82.9% of Group 1 and Group 2 banks, respectively, that met the 100% minimum requirement and 97.8% of Group 1 banks and 98.6% of Group 2 banks that met the 60% minimum requirement applicable as of end-June 2015.

Liquidity Coverage Ratio<sup>1</sup>

Graph 18



<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile 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 dots represent weighted averages. The horizontal lines represent the 60% minimum (2015, blue dashed line), the 70% minimum (2016, red dashed line) and the 100% minimum (2019, red solid line).

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

Basel III monitoring results show a shortfall (ie the difference between high-quality liquid assets and net cash outflows) at a 100% minimum requirement of €26.6 billion for Group 1 banks (which represents less than 0.01% of the €58.9 trillion total assets of the Group 1 sample) and €3.1 billion for Group 2 banks (which represents less than 0.01% of the €4.5 trillion total assets of the Group 2 sample) as of end-June 2016. This compares to a shortfall of €55.5 billion and €9.9 billion 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 the relevant minimum requirement of 70% the aggregate shortfall was zero for Group 1 and Group 2 banks at end-June 2016 compared to shortfalls of €21.8 billion for Group 1 banks and €1.0 billion for Group 2 banks at end-December 2015 where the applicable minimum requirement was 60%.

The key components of outflows and inflows are shown in Table 7. 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

<sup>30</sup> As with the end-June and end-December 2015 reporting periods, LCR analysis for the end-June 2016 reporting period reflects a sample that excludes all banks from one jurisdiction due to data quality limitations.

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 7
Category	Group 1	of which: G-SIBs	Group 2
<b>Outflows to...</b>			
Unsecured retail and small business customers	2.4	2.5	2.7
Unsecured non-financial corporates	4.8	5.2	1.8
Unsecured sovereign, central bank, public sector entities (PSEs) and multilateral development banks (MDBs)	1.0	1.1	1.0
Unsecured financial institutions and other legal entities	5.6	5.6	2.2
Other unsecured wholesale funding incl. unsecured debt issuance	1.2	1.1	0.5
Secured funding and collateral swaps	1.6	2.0	0.2
Collateral, securitisations and own debt	0.7	0.7	0.6
Credit and liquidity facilities	1.9	2.0	0.8
Other contractual and contingent cash outflows including derivative payables	3.0	3.3	1.9
<b>Total outflows<sup>1</sup></b>	<b>21.7</b>	<b>23.1</b>	<b>11.1</b>
<b>Inflows from...</b>			
Financial institutions	2.2	2.1	1.3
Retail and small business customers, non-financial corporates, central banks and other entities	1.5	1.5	1.0
Secured lending and collateral swaps	1.8	2.2	0.3
Other cash inflows including derivative receivables	1.0	1.1	0.5
<b>Total inflows<sup>1,2</sup></b>	<b>6.5</b>	<b>6.8</b>	<b>2.8</b>

<sup>1</sup> May contain rounding differences. <sup>2</sup> 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-June 2016, no Group 1 and six Group 2 banks reported inflows that exceeded the 75% cap. Of these six Group 2 banks, all exhibit LCR ratios well above the minimum requirement of 100%.

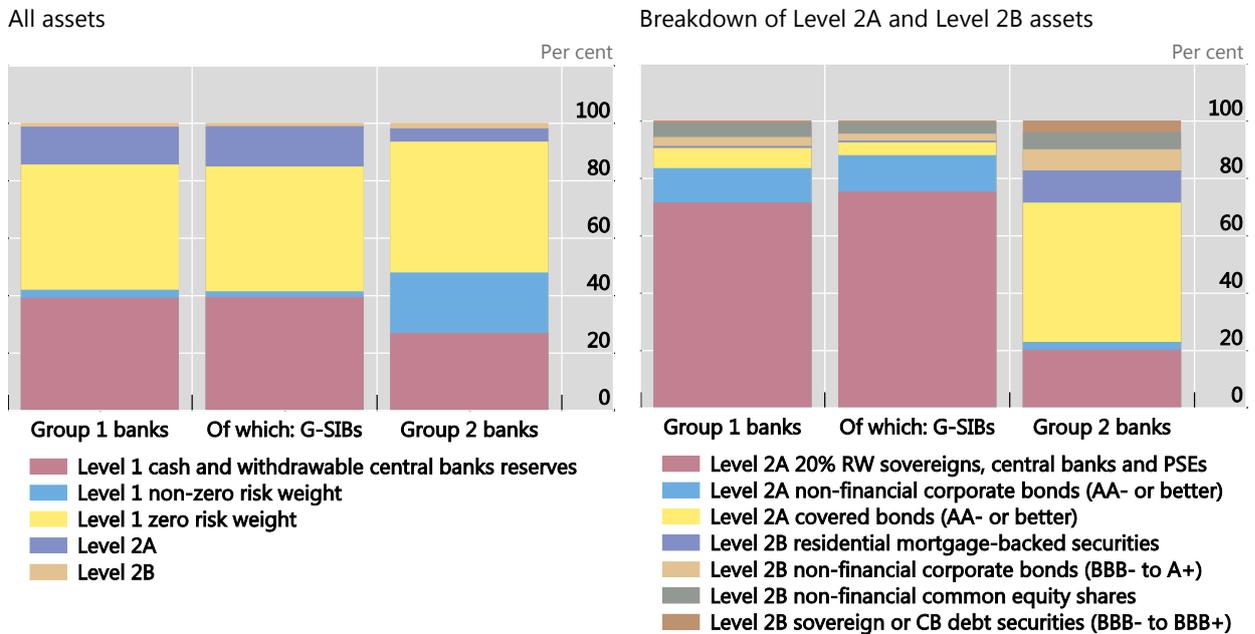
## Composition of high-quality liquid assets

The composition of high-quality liquid assets (measured after application of the LCR haircuts) currently held at banks is depicted in Graph 19. 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 82.7% 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 72.4% 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 21.0% of eligible liquid assets compared to an additional 2.8% for Group 1 banks). Within the Level 2A asset class, the majority of holdings for Group 1 banks comprises 20% risk-weighted securities issued or guaranteed by sovereigns, central banks or public sector entities, while the majority of holdings for Group 2 banks comprises 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 19



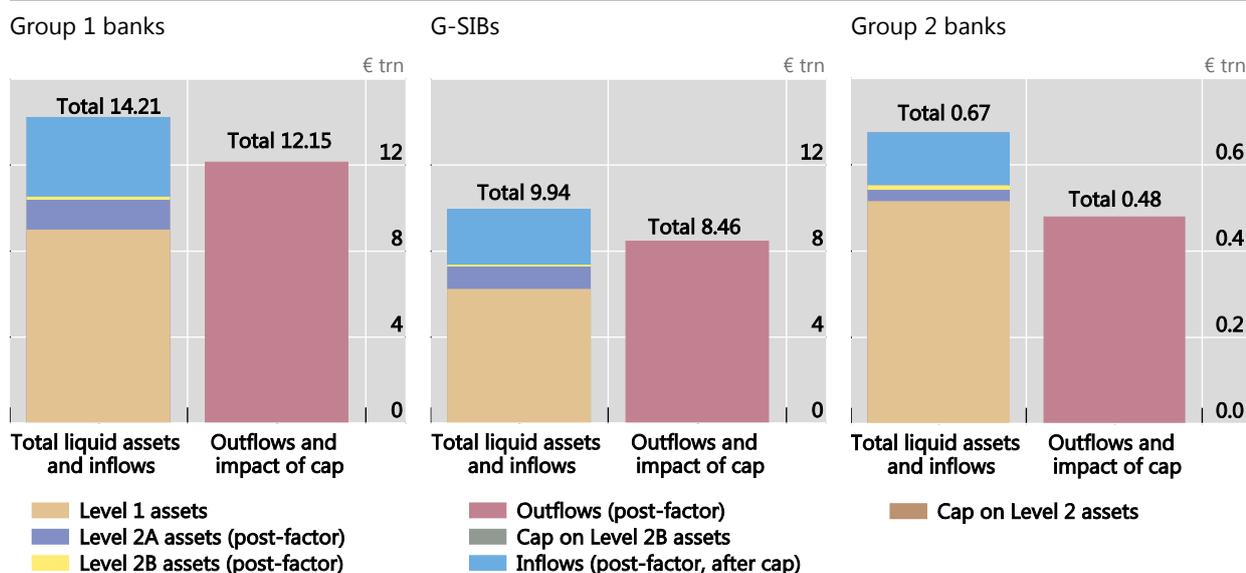
Source: Basel Committee on Banking Supervision. See also Table A.20 and Table A.21.

### Caps on Level 2B and Level 2 assets

Due to the 15% Level 2B cap and the 40% overall Level 2 cap, €19.8 billion of Level 2 assets are excluded from high-quality liquid assets. In total, seven banks are constrained, of which three banks are constrained only by the Level 2B cap and four banks are constrained only by the Level 2 cap. No bank is constrained by both caps. Of the seven 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 20 combines the above LCR components by comparing liquidity resources (pool of high-quality liquid assets and inflows) to outflows. Note that the €2.06 trillion Group 1 gross surplus shown in the graph differs from the €26.6 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.



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

### 3.2 Net Stable Funding Ratio

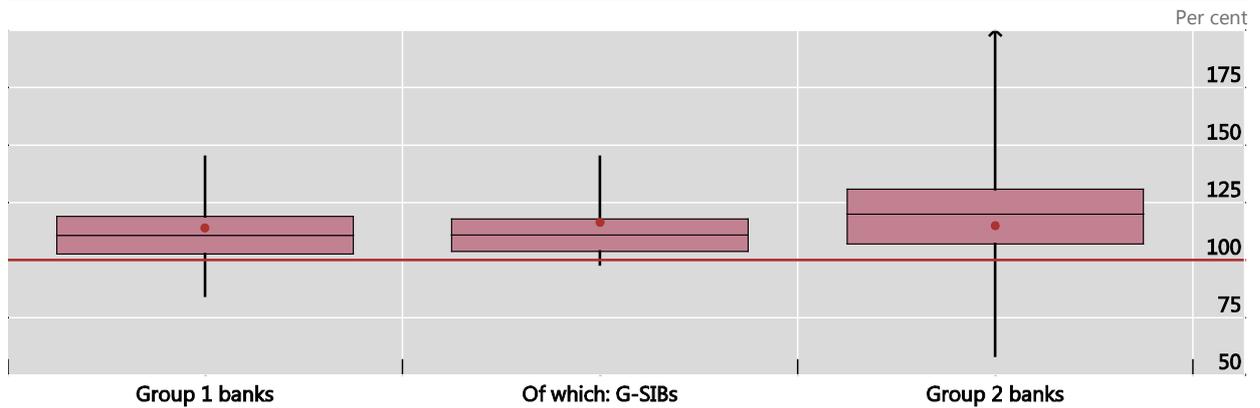
The second liquidity standard introduced by the Basel III reforms is the Net Stable Funding Ratio (NSFR), a longer-term structural ratio designed to reduce funding risk over a longer time horizon by requiring banks to fund their activities with sufficiently stable sources of funding in order to mitigate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

Overall, 94 Group 1 and 100 Group 2 banks provided sufficient data in the end-June 2016 Basel III monitoring exercise to calculate the revised NSFR according to the standard issued by the Committee in October 2014. Some 84.0% of Group 1 banks and 86.0% of Group 2 banks already meet or exceed the 100% minimum NSFR requirement, with 97.9% of Group 1 banks and 96.0% of Group 2 banks at an NSFR of 90% or higher as of end-June 2016. This compares to 79.6% of Group 1 banks and 87.0% of Group 2 banks which met or exceeded the 100% minimum standard and 95.9% of Group 1 banks and 97.2% of Group 2 banks that had an NSFR 90% or higher in the end-December 2015 period.

The weighted average NSFR was 114.0% for Group 1 banks and 114.9% for Group 2 banks at end-June 2016 compared to 113.7% and 115.9% respectively, at end-December 2015. Graph 21 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. Finally, the dots represent weighted averages.

## Net stable funding ratio<sup>1</sup>

Graph 21



<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample. The dots represent weighted averages. NSFRs above 200% are not shown in the graph.

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

Banks in the sample had a shortfall of stable funding<sup>31</sup> at the 100% requirement of €143.4 billion at end-June 2016 compared to €257 billion at end-December 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 94 Group 1 banks in the sample, the shortfall, as described above, is €108.6 billion at end-June 2016 compared to €234.5 billion at end-December 2015. For the 101 Group 2 banks in the sample, the shortfall, as described above, is €34.8 billion at end-June 2016 compared to €22.5 billion at end-December 2015.

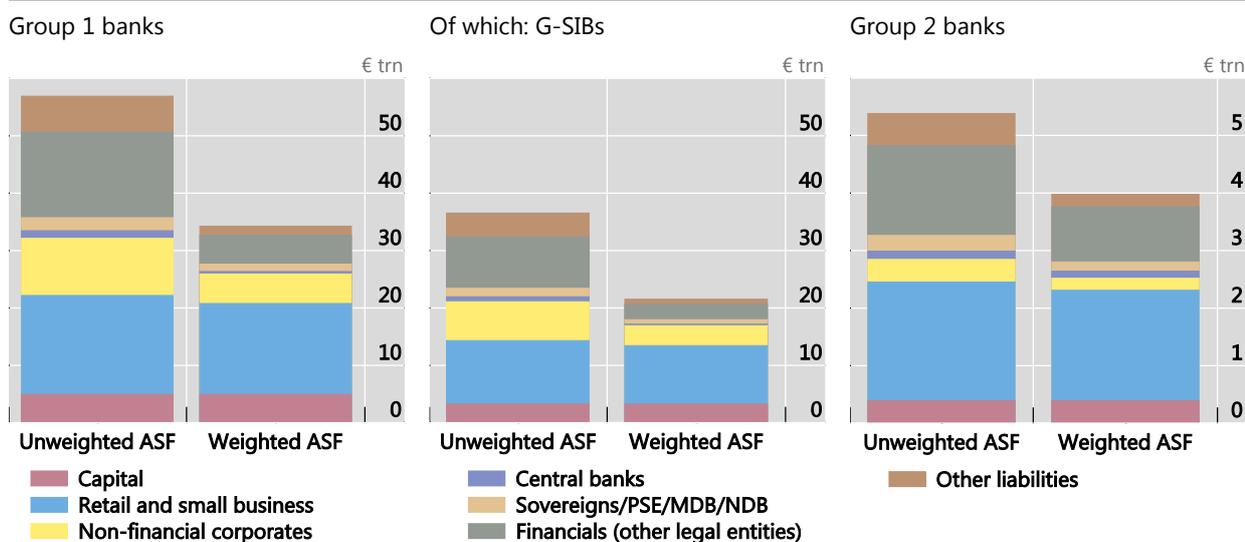
### Stable funding sources

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 (46.4%) and Group 2 banks (47.5%). To a lesser degree, banks in the sample utilised funding from financial counterparties, which represented roughly 14.9% of total weighted available stable funding for Group 1 banks and 25.0% 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 (14.9%) relative to Group 2 banks (5.0%). Operational deposits, which the NSFR treats similarly regardless of counterparty, accounted for 8.7% of total weighted available stable funding for Group 1 banks and 2.2% for Group 2 banks.

<sup>31</sup> 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 22



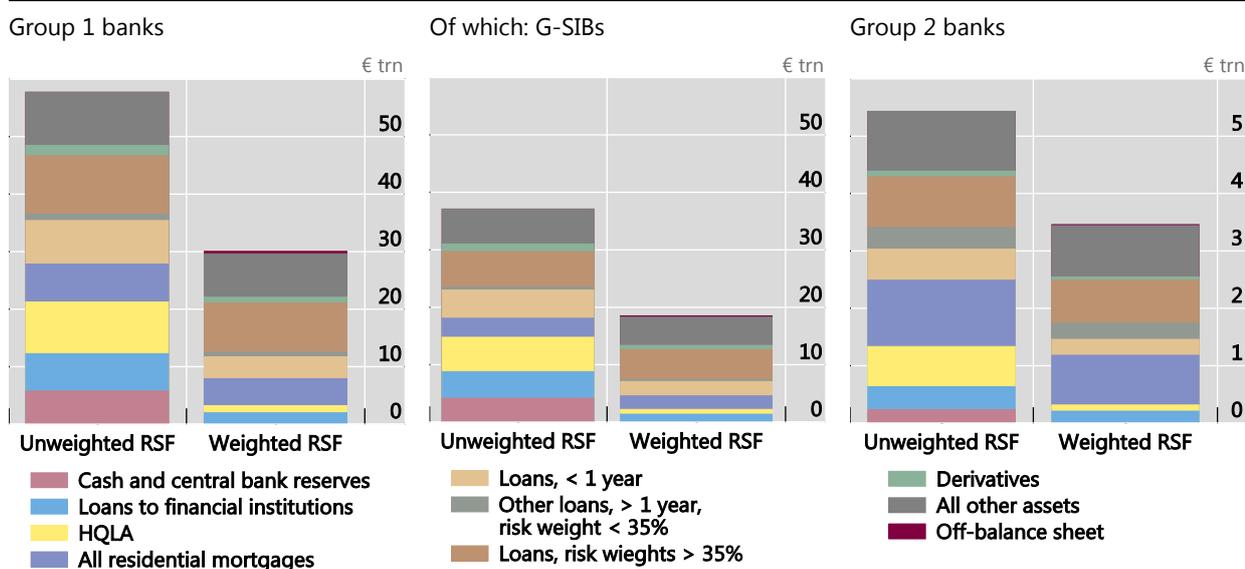
Source: Basel Committee on Banking Supervision. See also Table A.23.

## 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 (46.7% for Group 1 banks and 54.9% for Group 2 banks). By comparison, HQLA securities represented 4.1% of the total stable funding requirement for Group 1 banks and 3.0% for Group 2 banks. Assets encumbered for more than six months represented 11.2% 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 23



Source: Basel Committee on Banking Supervision. See also Table A.24.

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

Graph 24 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.<sup>32</sup> Given the different samples of banks, results for the end-December 2015 and end-June 2016 periods may differ from the ones in Sections 3.1 and 3.2.

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 in earlier periods. The weighted average LCR for these banks was 126.5% at end-June 2016. The ratio was 125.5% and 123.8% at end-December 2015 and end-June 2015, respectively, compared to 116.7% and 121.3% at end-June 2013 and end-December 2012, respectively. 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, the weighted average LCR of 151.6% for these banks at end-June 2016 represents the highest ratio since the end-December 2012 reporting period. Additionally, the overall level of ratios for Group 2 banks remains higher than the level observed for Group 1 banks.

The graph also displays NSFRs since end-December 2012.<sup>33</sup> 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 was 113.9% at end-June 2016, 113.9% and 112.0% at end-December 2015 and end-June 2015, respectively, compared to 100.0% and 99.6% at end-June 2013 and end-December 2012. Although Group 2 banks that have reported NSFR data for each of the reporting periods since end-December 2012 show a ratio at end-June 2016 which is lower than the one in end-December 2015, ratios have been increasing from end-December 2012 to end-December 2015. The weighted average NSFR for these banks was 116.6% at end-June 2016, 117.4% at end-December 2015 and 115.8% at end-June 2015, compared to 102.1% and 100.4% at end-June 2013 and end-December 2012.

The aggregate shortfall at the 100% LCR minimum requirement was €24.0 billion for Group 1 banks and €3.1 billion for Group 2 banks at end-June 2016. This compares to shortfalls of €54.2 billion for Group 1 banks and €8.6 billion for Group 2 banks at end-December 2015. While the shortfall observed for both bank groups increased slightly between end-June 2015 and end-December 2015 reporting periods, shortfalls observed in the current reporting period strongly decreased (by €27.6 billion for Group 1 banks and by €5.5 billion for Group 2 banks, respectively).

The aggregate shortfall for Group 1 and Group 2 banks that do not meet the 100% 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 €108.6 billion for Group 1 banks and €14.1 billion for Group 2 banks at end-June 2016. This compares to shortfalls of €183.4 billion for Group 1 banks and €8.6 billion for Group 2 banks at end-December 2015, shortfalls of €343.9 billion and €27.3 billion at end-June 2015 and €1669.1 billion and €155.6 billion at end-December 2012.

Graph 25 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 liquidity resources (ie 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 €2.11 trillion and €0.15 trillion for Group 1 and

<sup>32</sup> Data for Graph 24 reflects only those banks reporting LCR and NSFR data for each reporting period since end-December 2012. LCR and NSFR samples are different.

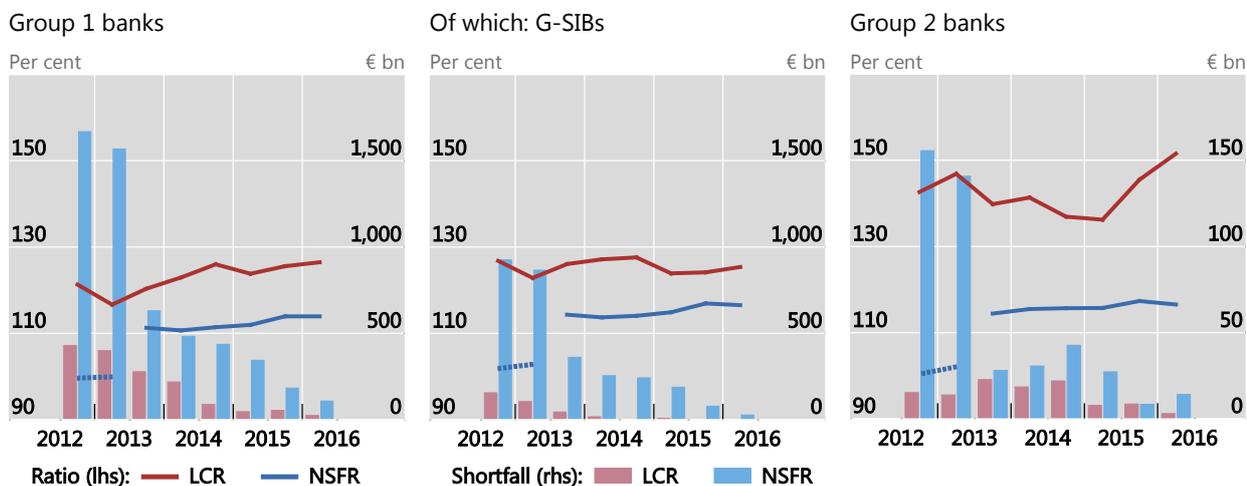
<sup>33</sup> This graph depicts the NSFR as calculated under different versions of the NSFR framework (released in December 2010, January 2014 and October 2014, respectively). Calculations performed according to the final standard approved by the Committee in October 2014 start with the end-December 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](http://www.bis.org/bcbs/publ/d295.htm).

Group 2 banks, respectively, at end-June 2016, which is the largest difference across all reporting periods since end-December 2012.

### LCR, NSFR and shortfall at a 100% minimum requirement

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

Graph 24



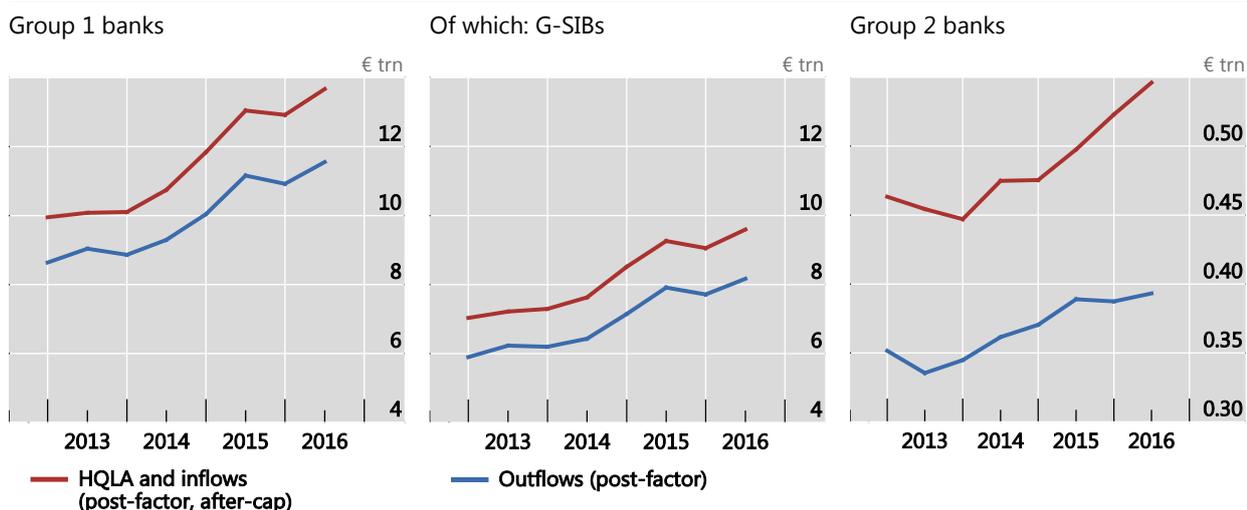
Consistent sample across periods. For the LCR analysis, Group 1 includes 82 banks, G-SIBs include 25 banks and Group 2 includes 54 banks. For the NSFR analysis, Group 1 includes 87 banks, G-SIBs include 26 banks and Group 2 includes 70 banks. As described in the text, the NSFR time series depicts data reflecting NSFR standard released in December 2010, January 2014 and October 2015.

Source: Basel Committee on Banking Supervision. See also Table A.25.

### High quality liquid assets and inflows versus outflows over time

Consistent sample of banks<sup>1</sup>, exchange rates as at the reporting dates

Graph 25



<sup>1</sup> Consistent sample across periods. Group 1 includes 82 banks, G-SIBs include 25 banks and Group 2 includes 54 banks.

Source: Basel Committee on Banking Supervision. See also Table A.26.

## Impact of the revised minimum capital requirements for market risk

This special feature analyses the impact of the revised minimum capital requirements for market risk for both the end-December 2015 and end-June 2016 reporting dates. The final revised market risk standard was published by the Committee in January 2016.

A total of 56 banks from 16 countries, of which 45 Group 1 banks and 11 Group 2 banks, have provided data on the revised minimum requirements for market risk at the end-2015 reporting date (see Table A.27). Half a year later, a significantly larger number of 89 banks from 22 countries, of which 58 Group 1 and 31 Group 2 banks, participated in the exercise (see Table A.28).

As of end-December 2015, the percentage increase of market risk minimum required capital (MRC) due to the revised market risk standard was significant, with a weighted average overall increase of 52.3%, 50.9% and 52.2% in market risk MRC for Group 1 banks, G-SIBs and Group 2 banks, respectively. As of end-June 2016, the percentage increase was higher, with a weighted average overall increase of 67.2%, 75.9% and 87.4% of current market risk MRC for Group 1 banks, G-SIBs and Group 2 banks, respectively. The left panels of Graph 1 and Graph 2 show a wide dispersion of the isolated impact of the revised market risk standard relative to current market risk MRC. The standardised approach for market risk appears to be a main driver of the large increases. Banks that reported an increase in market risk capital requirements above 100% applied the standardised approach to all or most of their trading book positions. Conversely, banks that reported decreases in MRC used the revised market risk standards' internal model approach (IMA) for most or all of their positions.

It should be noted, though, that all analyses are based on participating banks' judgement regarding which of their trading desks will be eligible for the IMA. The ultimate determination of a bank's eligibility to use the IMA for specific trading desks will depend on both the bank's ability to model those trading desks and supervisory approval. Given at the reporting date banks had not yet implemented the revised standard, they may have reported data based on the standardised approach for desks which will become subject to the IMA. Therefore, it is likely that the actual impact will be lower than the current estimates. Moreover, evidence from previous reforms to the market risk capital framework has shown that banks have progressively changed their overall trading book positions as a response to changes in capital requirements.

A significant change in market risk MRC does not necessarily result in an equivalent effect on overall MRC, because the impact on overall MRC also depends on the share of market risk MRC relative to overall MRC. The impact on total MRC for Group 1 banks and G-SIBs is indeed more muted, with weighted averages of 3.2% and 3.0%, respectively, at end-December 2015, and weighted averages of 3.1% and 3.4%, respectively, at end-June 2016. Both the weighted average 2.0% increase in overall MRC for Group 2 banks at the end-December 2015 reporting date and the weighted average 2.6% increase at the end-June 2016 reporting date are slightly lower than the respective increases seen for Group 1 banks. As

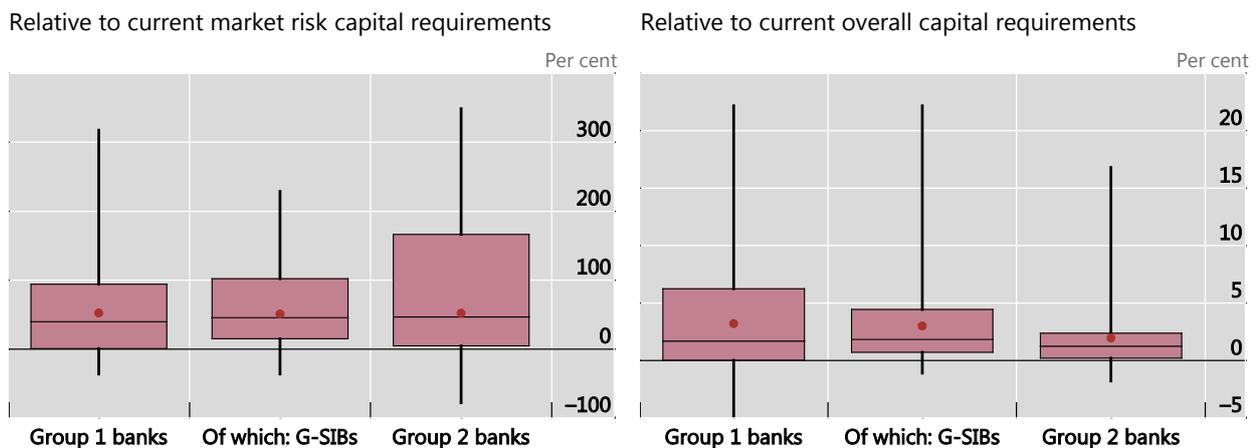
the sample size for Group 2 banks was relatively small for the end-December 2015 and end-June 2016 exercises at 11 and 31 banks, respectively, these results should be interpreted with caution.

The right panels of Graph 1 and Graph 2 show a wide dispersion of the impact of the revised minimum capital requirements for market risk on *overall* MRC but in a different proportion and pattern than the impact relative to current market risk MRC. Generally, banks with less material trading book positions have in some instances reported significant increases in market risk capital requirements, but the relative impact of those changes on overall MRC may be relatively small. This means that banks with small trading books do not disproportionately influence the results relative to current overall MRC.

### Impact of revised minimum capital requirements for market risk on MRC<sup>1</sup>

End-December 2015 reporting date

Graph 1



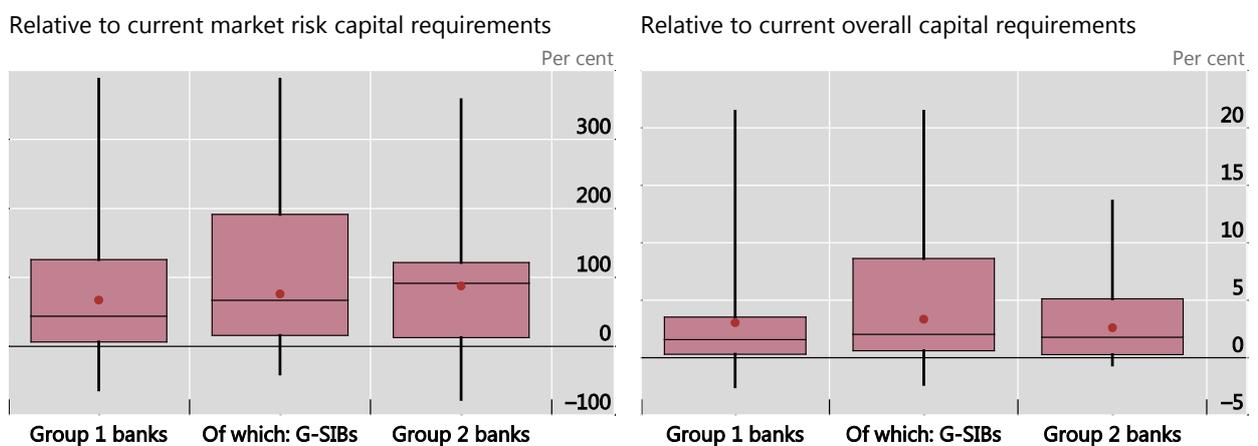
<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample. The dots represent weighted averages.

Source: Basel Committee on Banking Supervision. See also Table A.29.

### Impact of revised minimum capital requirements for market risk on MRC<sup>1</sup>

End-June 2016 reporting date

Graph 2



<sup>1</sup> The median value is represented by a horizontal line, with 50% of the values falling in the 25th to 75th percentile range shown by the box. The upper and lower end points of the thin vertical lines show the range of the entire sample. The dots represent weighted averages.

Source: Basel Committee on Banking Supervision. See also Table A.30.

## Results of the survey on the interaction of regulatory instruments

### Background

The Research Task Force (RTF)<sup>45</sup> of the Committee added a worksheet to the Quantitative Impact Study (QIS) to collect new information on the role of multiple regulatory constraints in the Basel III framework.

The additional worksheet contains 23 questions which provide an indication of (i) the perceived degrees of coherence and complexity of the Basel III framework; (ii) whether, over time, the interaction of multiple regulatory requirements has made regulatory rules the main driver of capital allocation and pricing; and (iii) the role of buffers, both voluntary and required, as well as planning periods for assigning balance sheet capacity. The survey is also designed to provide a better understanding of the qualitative importance of different requirements and the ways in which individual banks might adjust to new regulatory constraints to help inform supervisors, regulators, and policymakers about the consequences of such constraints on the overall system.

As banks answered this survey for the first time, some caveats apply to the results. For example, banks might have interpreted questions in more than one way or purposely avoided answering some of the questions. After the next round of the survey we expect to be able to draw more definitive conclusions.

### Sample

Overall 160 banks, of which 80 Group 1 banks, completed at least part of the survey template before the due date and were included in the current analysis.

### Definitions

Table 1 reports key definitions from the survey.

<sup>45</sup> The RTF conducts special projects for the Committee (or for its other task forces or groups) that require research expertise, that will benefit substantially from international input, and that have received otherwise inadequate attention. The RTF also acts as a liaison for facilitating communication between economists working on supervisory and financial stability issues at member institutions and the academic sector.

## Definitions

Table 1

Management buffer	Defined as a bank's internally targeted surplus over the sum of Pillar 1 requirement, regulatory buffers and Pillar 2 requirement in "normal times" (ie baseline scenario for stress tests).
Basel III leverage ratio	Assumed to be calibrated at 3%, with an additional G-SIB surcharge.
Management target leverage ratio	Defined as the regulatory leverage ratio plus a bank's management buffer.
Management target risk-based capital ratio	Defined as the sum of the minimum level of Pillar 1 capital requirements, the capital conservation buffers, G-SIB surcharges where applicable, and a bank's management buffer.

## Key results

To differentiate regulatory capital requirement from the internally targeted capital requirement, we asked banks to estimate their management buffer at the consolidated level. Over two-thirds of survey respondents reported having a management buffer between 0 and 300 basis points. The remaining banks' buffer was as high as 500 basis points or higher. Banks cited financial market conditions, systemic risk and return-on-equity maximisation as the most important factors affecting the size of their management buffer.

Adjusting to new regulatory constraints requires further capital and liquidity planning – a task that could be daunting within a short period of time. However, more than three quarters of the banks reported being at least somewhat confident in their ability to assign balance sheet space efficiently to various lines of business. The average planning period required for an efficient balance sheet allocation is up to three months for almost a quarter of respondents, three to six months for almost a third of respondents and more than six months for the remaining banks.

In the presence of a target capital shortfall, ie if the target risk-based capital ratio or the target leverage ratio exceeds currently available regulatory capital, banks' liquidity conditions, as measured by the Liquidity Coverage Ratio (LCR), affect their funding and lending decisions to some or to a considerable extent. The Basel III leverage ratio and stress test results, on the contrary, do not affect the relative importance of a bank's target risk-based capital ratio for two-thirds of the respondents. Together, these results hint at the relative "bindingness" of different regulatory constraints in the Basel III framework.

Finally, to tackle the challenges of meeting all regulatory requirements at once, we asked banks to rank the most important challenges that they face. The most cited challenges were regulatory uncertainty, the complexity of the regulatory framework and the difficulty to meet requirements simultaneously (which is, arguably, another indication of regulatory complexity). The subsample of Group 1 banks expressed the same grievances.

## Outlook

Based on the responses received and the feedback provided by participating banks and member jurisdictions, the RTF has circulated a revised version of the survey as part of the Basel III monitoring exercise on end-December 2016 data. Responses will be analysed later in 2017.

## 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	7	7	7	0	7	33	33	33	0	30
Hong Kong SAR	0	0	0	0	0	0	0	0	0	0
India	5	5	5	5	4	5	5	5	4	5
Indonesia	0	0	0	0	0	2	2	2	2	2
Italy	2	2	2	2	2	13	13	13	13	12
Japan	14	14	14	14	14	5	5	5	5	5
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	5	7
Netherlands	3	3	3	3	3	9	9	9	9	9
Russia	1	1	1	1	1	0	0	0	0	0
Saudi Arabia	3	3	3	3	2	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	5	5	2	2	2
Switzerland	2	2	2	2	2	4	4	4	3	3
Turkey	3	3	3	3	3	0	0	0	0	0
United Kingdom	5	5	5	4	4	5	5	3	4	4
United States	13	13	13	12	10	0	0	0	0	0
Total	100	100	100	91	94	110	110	104	68	100
of which: G-SIBs	30									

Source: Basel Committee on Banking Supervision.

## Transitional 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	23.3	25.8	29.2	17.1	19.8	25.2	49.2	57.0	57.0
75th percentile	14.0	15.2	18.4	13.5	15.0	18.3	18.0	18.3	19.5
Median	12.5	13.4	15.7	12.2	14.0	17.0	13.8	14.0	16.4
25th percentile	11.4	12.2	14.1	11.3	12.7	14.6	11.8	12.0	14.0
Min	7.8	7.8	11.0	10.0	10.7	11.7	6.8	7.3	9.5
Weighted average	12.2	13.4	15.8	12.1	13.4	15.8	13.8	14.2	16.4

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	23.8	26.0	29.3	16.8	18.4	22.3	49.2	57.0	57.0
75th percentile	13.8	14.3	16.8	13.0	14.1	17.1	18.3	18.3	19.7
Median	12.1	13.0	14.5	11.8	13.1	15.0	13.9	14.1	15.6
25th percentile	10.9	11.6	13.1	10.9	12.0	13.5	11.4	11.9	13.0
Min	8.1	8.1	9.6	9.4	10.7	10.9	6.9	6.9	8.2
Weighted average	11.9	12.9	14.6	11.8	12.9	14.7	13.4	13.8	15.4

Source: Basel Committee on Banking Supervision.

## Transitional CET1, Tier 1 and total capital ratios

In per cent, consistent sample of banks<sup>2</sup>

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	11.9	14.6	10.9	12.0	14.5	11.2	11.8	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	15.4
H2 2015	12.2	13.3	15.9	12.1	13.4	16.0	12.5	13.1	15.4
H1 2016	12.2	13.4	15.9	12.1	13.4	15.8	12.7	13.3	15.6

<sup>1</sup> 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. <sup>2</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 65 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<sup>1</sup>

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	8.7	6.7	7.0	8.3	7.5	7.9	9.8
H2 2011	7.7	8.0	9.2	7.3	7.6	8.9	7.6	8.1	9.9
H1 2012	8.5	8.8	9.9	8.2	8.5	9.7	8.2	8.9	10.4
H2 2012	9.2	9.4	10.7	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	10.4
H2 2013	10.2	10.5	11.9	10.0	10.4	11.8	9.5	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	13.9
H2 2015	11.8	12.6	14.4	11.7	12.7	14.5	12.2	12.6	14.1
H1 2016	11.9	12.9	14.7	11.8	12.9	14.7	12.4	12.9	14.5

<sup>1</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 65 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<sup>1</sup>

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
H1 2016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

<sup>1</sup> 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, 100 in H1 2015 and H2 2015, and 99 in H1 2016; 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, 111 in H2 2015 and 105 in H1 2016).

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<sup>1</sup>

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
H1 2016	0.0	1.4	3.4	0.0	0.0	0.9	0.0	1.0	4.0

<sup>1</sup> 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, 100 in H1 2015 and H2 2015 and 99 in H1 2016; 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, 111 in H2 2015 and 105 in H1 2016).

Source: Basel Committee on Banking Supervision.

## Level of capital after full phasing in of Basel III

In billions of euros, consistent sample of banks<sup>1</sup>, exchange rates as of 30 June 2016

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	2,092	86	385	1,445	74	289	123	7	31
H2 2011	2,215	77	381	1,524	62	281	126	8	32
H1 2012	2,411	71	344	1,670	58	255	132	12	25
H2 2012	2,546	67	357	1,764	51	259	132	9	23
H1 2013	2,672	69	388	1,848	52	290	134	10	26
H2 2013	2,859	87	396	1,981	68	278	153	10	28
H1 2014	3,031	131	390	2,098	104	253	175	4	28
H2 2014	3,167	178	444	2,200	147	310	176	5	23
H1 2015	3,335	221	488	2,310	181	345	192	6	23
H2 2015	3,454	258	520	2,381	210	370	197	6	24
H1 2016	3,557	286	538	2,452	225	365	200	7	27

<sup>1</sup> Group 1 includes 90 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

## Profits, dividends and CET1 capital raised externally

In billions of euros, consistent sample of banks<sup>1</sup>, exchange rates as of 30 June 2016

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	144.0	59.0	36.2	90.9	41.9	14.1	6.8	1.5	5.4
H2 2011	115.3	32.9	25.2	78.7	16.8	10.2	1.3	1.4	7.3
H1 2012	138.9	60.6	28.6	88.3	41.4	21.0	5.1	1.4	1.6
H2 2012	167.1	29.4	30.2	104.6	12.4	15.4	1.8	1.3	5.2
H1 2013	172.5	78.5	25.0	112.3	54.8	13.8	5.9	1.6	1.0
H2 2013	142.1	29.2	31.6	90.9	12.1	14.5	5.1	1.3	2.3
H1 2014	155.3	87.9	34.1	92.7	64.3	18.9	8.0	1.9	5.0
H2 2014	189.0	43.8	15.3	121.4	18.8	6.7	4.6	1.2	3.6
H1 2015	217.1	90.6	21.0	146.7	61.7	12.0	9.2	2.4	2.1
H2 2015	203.9	47.3	20.4	133.2	21.3	11.1	10.6	1.5	1.2
H1 2016	189.2	94.0	12.4	129.4	64.4	7.9	4.3	2.5	4.0

<sup>1</sup> Group 1 includes 88 banks, G-SIB includes 29 banks and Group 2 includes 65 banks.

Source: Basel Committee on Banking Supervision.

## Structure of regulatory capital under transitional Basel III rules<sup>1</sup>

In per cent, consistent sample of banks<sup>2</sup>

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	70.7	6.5	22.7
H2 2011	73.0	8.9	18.2	71.1	10.9	18.1	72.6	5.8	21.7
H1 2012	75.0	7.9	17.1	73.6	9.8	16.6	74.4	4.1	21.5
H2 2012	75.3	7.4	17.3	74.3	9.2	16.5	74.2	4.0	21.8
H1 2013	74.9	7.1	18.0	75.4	7.4	17.2	74.9	3.8	21.3
H2 2013	75.6	6.8	17.5	76.0	7.1	17.0	75.4	3.4	21.2
H1 2014	76.8	5.6	17.7	76.8	5.9	17.3	77.5	2.9	19.6
H2 2014	76.4	6.2	17.4	76.1	6.8	17.1	78.5	3.3	18.2
H1 2015	76.7	6.6	16.6	76.3	7.4	16.3	80.1	3.4	16.5
H2 2015	76.7	7.2	16.2	76.1	8.1	15.8	80.8	3.7	15.5
H1 2016	76.9	7.4	15.7	76.7	8.3	15.0	81.5	3.6	14.9

<sup>1</sup> 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. <sup>2</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

## Structure of regulatory capital under fully phased-in Basel III

In per cent, consistent sample of banks<sup>1</sup>

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	82.3	3.2	14.5	80.7	4.0	15.3	76.7	4.1	19.2
H2 2011	83.4	2.8	13.8	82.3	3.3	14.4	76.5	4.7	18.7
H1 2012	85.7	2.4	11.8	84.7	2.9	12.4	78.8	6.7	14.5
H2 2012	86.2	2.1	11.7	85.5	2.3	12.1	80.8	5.4	13.8
H1 2013	85.6	2.1	12.3	84.6	2.2	13.1	79.0	5.9	15.2
H2 2013	85.6	2.4	11.9	85.3	2.7	11.9	79.9	5.4	14.7
H1 2014	85.2	3.6	11.2	85.5	4.1	10.4	84.1	2.2	13.7
H2 2014	83.6	4.6	11.8	82.9	5.4	11.7	86.3	2.7	11.1
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	86.3	2.8	10.8
H1 2016	81.2	6.5	12.3	80.6	7.4	12.0	85.5	3.1	11.4

<sup>1</sup> Group 1 includes 89 banks, G-SIB includes 30 banks and Group 2 includes 67 banks.

Source: Basel Committee on Banking Supervision.

## CET1 regulatory adjustments

Consistent sample of Group 1 banks, in per cent of CET1 capital prior to adjustments

Table A.12

	Number of banks	Goodwill	Intangibles	DTA <sup>1</sup>	Financials	DTA above threshold	Excess above 15% <sup>2</sup>	Other <sup>3</sup>	Total
H1 2011	89	-15.3	-3.7	-3.3	-2.9	-1.8	-2.1	-3.1	-32.0
H2 2011	89	-14.0	-3.5	-2.8	-1.9	-1.6	-1.6	-3.8	-29.1
H1 2012	89	-13.3	-3.3	-2.5	-1.7	-1.1	-1.3	-3.4	-26.6
H2 2012	89	-12.4	-3.1	-2.6	-2.3	-1.2	-1.1	-2.8	-25.5
H1 2013	89	-12.0	-2.9	-2.7	-2.4	-1.0	-0.9	-2.1	-23.9
H2 2013	89	-11.2	-2.7	-2.4	-1.3	-0.5	-0.4	-1.5	-20.0
H1 2014	89	-10.8	-2.6	-2.2	-1.3	-0.4	-0.2	-1.4	-18.9
H2 2014	89	-10.3	-2.5	-2.0	-0.9	-0.4	-0.2	-1.8	-18.2
H1 2015	89	-10.0	-2.4	-1.9	-0.7	-0.3	-0.1	-1.7	-17.3
H2 2015	89	-9.5	-2.3	-1.8	-0.7	-0.3	-0.1	-1.8	-16.8
H1 2016	89	-9.3	-2.3	-1.7	-0.7	-0.2	-0.1	-2.2	-16.8

<sup>1</sup> 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). <sup>2</sup> 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. <sup>3</sup> 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

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

Table A.13

	Number of banks	Goodwill	Intangibles	DTA <sup>1</sup>	Financials	DTA above threshold	Excess above 15% <sup>2</sup>	Other <sup>3</sup>	Total
H1 2011	66	-14.6	-3.5	-0.3	-3.8	-4.1	-2.1	-4.3	-32.7
H2 2011	66	-9.0	-3.4	-0.4	-4.1	-2.0	-1.3	-4.2	-24.5
H1 2012	66	-8.2	-3.0	-0.3	-4.0	-2.2	-1.3	-4.2	-23.2
H2 2012	66	-7.5	-3.0	-0.8	-4.3	-2.1	-1.1	-4.1	-23.0
H1 2013	66	-7.4	-3.0	-1.1	-4.4	-1.6	-1.1	-4.6	-23.1
H2 2013	66	-5.9	-3.1	-0.7	-3.7	-0.4	-0.6	-5.1	-19.4
H1 2014	66	-5.1	-2.9	-0.6	-2.3	0.0	-0.3	-2.0	-13.3
H2 2014	66	-4.2	-3.0	-0.9	-3.0	-0.3	-0.4	-2.4	-14.3
H1 2015	66	-3.9	-2.8	-0.8	-2.8	-0.2	-0.5	-2.0	-12.9
H2 2015	66	-3.9	-2.8	-1.0	-2.9	-0.1	-0.1	-2.2	-13.0
H1 2016	66	-3.8	-3.1	-1.2	-2.3	0.0	-0.1	-2.2	-12.7

<sup>1</sup> 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). <sup>2</sup> 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. <sup>3</sup> 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	14.5	14.5	7.8	7.5	20.2	20.4
75th percentile	7.0	7.0	6.4	6.3	7.1	7.1
Median	5.7	5.6	5.4	5.1	5.7	5.6
25th percentile	4.8	4.3	4.6	4.3	4.6	4.4
Min	3.7	3.2	3.8	3.2	1.3	1.3
Weighted average	5.8	5.6	5.8	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	3.8
H1 2012	3.7	3.6	4.0
H2 2012	3.7	3.6	3.8
H1 2013	4.0	3.8	4.0
H2 2013	4.5	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	5.5
H2 2015	5.5	5.6	5.5
H1 2016	5.5	5.6	5.6

Source: Basel Committee on Banking Supervision.

## Tier 1 capital, RWA, leverage ratio exposure and accounting total assets

Consistent sample of banks, exchange rates as of 30 June 2016

Table A.16

	H1 2011	H2 2011	H1 2012	H2 2012	H1 2013	H2 2013	H1 2014	H2 2014	H1 2015	H2 2015	H1 2016
<i>Group 1 banks</i>											
Tier 1 capital	100.0	105.2	113.9	119.9	125.9	135.2	145.1	153.5	163.5	170.4	176.4
Risk-weighted assets	100.0	98.5	97.0	95.1	96.6	96.2	96.5	97.9	100.2	100.9	102.6
Leverage total exposure	100.0	102.9	106.4	110.8	108.7	105.0	107.6	107.2	109.9	108.4	111.7
Accounting total assets	100.0	102.9	106.7	105.9	106.9	105.5	109.5	111.9	114.5	113.4	119.1
<i>Of which: G-SIBs</i>											
Tier 1 capital	100.0	104.4	113.8	119.5	125.1	134.9	144.9	154.5	164.4	170.6	176.2
Risk-weighted assets	100.0	97.0	94.7	91.7	92.9	92.0	92.5	93.6	95.1	95.1	96.9
Leverage total exposure	100.0	103.0	106.3	110.9	100.1	104.5	106.2	105.3	107.0	104.2	107.6
Accounting total assets	100.0	102.8	106.3	104.8	105.2	103.0	106.5	108.9	110.7	108.3	114.4
<i>Group 2 banks</i>											
Tier 1 capital	100.0	102.8	110.2	108.4	110.6	125.2	140.6	139.7	152.6	155.8	159.3
Risk-weighted assets	100.0	101.7	99.7	100.1	100.0	97.9	97.9	96.0	97.3	97.7	97.5
Leverage total exposure	100.0	103.0	105.2	106.5	102.5	99.6	101.3	100.5	103.0	103.1	104.8
Accounting total assets	100.0	102.9	104.3	104.2	105.5	103.0	104.5	104.9	106.6	106.2	108.4

H1 2011 = 100.

Source: Basel Committee on Banking Supervision.

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

Group 1 banks, in per cent

Table A.17

		Target Tier 1 ratio binding (<8.5% + G-SIB surcharge)?		Total	Total after capital raising to meet <b>target</b> Tier 1 ratio
		Yes	No		
Leverage ratio binding (<3%)?	Yes	0.0	0.0	0.0	0.0
	No	1.0	99.0	100.0	100.0
	Total	1.0	99.0	100.0	100.0

Source: Basel Committee on Banking Supervision.

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

Group 2 banks, in per cent

Table A.18

		Target Tier 1 ratio binding (<8.5%)?		Total	Total after capital raising to meet <b>target</b> Tier 1 ratio
		Yes	No		
Leverage ratio binding (<3%)?	Yes	1.0	4.9	5.8	5.8
	No	3.9	90.3	94.2	94.2
	Total	4.9	95.1	100.0	100.0

Source: Basel Committee on Banking Supervision.

Liquidity coverage ratio and net stable funding ratio

In per cent

Table A.19

	Liquidity coverage ratio			Net stable funding ratio		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Max	338.9	189.9	1,420.2	145.0	145.0	367.9
75th percentile	139.3	133.3	236.3	118.9	117.9	130.9
Median	124.3	124.8	154.2	110.8	110.9	119.9
25th percentile	112.9	121.1	126.1	102.7	103.9	106.9
Min	74.1	106.9	85.2	84.4	98.2	58.3
Weighted average	126.2	125.2	155.4	114.0	116.4	114.9

Source: Basel Committee on Banking Supervision.

## Composition of holdings of eligible liquid assets

Table A.20

	Group 1 banks	Of which: G-SIBs	Group 2 banks
Level 1 cash and withdrawable central banks reserves	39.1	39.3	26.8
Level 1 non-zero risk weight	2.8	1.9	21.0
Level 1 zero risk weight	43.6	43.4	45.6
Level 2A	13.1	14.2	4.7
Level 2B	1.4	1.2	1.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Basel Committee on Banking Supervision.

## Composition of holdings of Level 2A and 2B assets

Table A.21

	Group 1 banks	Of which: G-SIBs	Group 2 banks
Level 2A 20% risk weight sovereigns, central banks and PSEs	71.5	75.2	20.2
Level 2A non-financial corporate bonds (AA- or better)	11.9	12.7	2.7
Level 2A covered bonds (AA- or better)	7.1	4.5	48.5
Level 2B residential mortgage-backed securities	0.6	0.5	11.3
Level 2B non-financial corporate bonds (BBB- to A+)	3.1	2.4	7.4
Level 2B non-financial common equity shares	5.0	4.1	5.9
Level 2B sovereign or central bank debt securities (BBB- to BBB+)	0.7	0.5	4.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: Basel Committee on Banking Supervision.

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

In trillions of euros

Table A.22

	Group 1	Of which: G-SIBs	Group 2
<b>Total liquid assets and inflows</b>			
Level 1 assets	8.98	6.22	0.52
Level 2A assets (post-factor)	1.38	1.04	0.03
Level 2B assets (post-factor)	0.14	0.08	0.01
Inflows (post-factor, after cap)	3.70	2.60	0.12
<b>Total</b>	<b>14.21</b>	<b>9.94</b>	<b>0.67</b>
<b>Outflows and impact of cap</b>			
Outflows (post-factor)	12.13	8.46	0.48
Cap on Level 2 assets	0.02	0.00	0.00
Cap on Level 2B assets	0.00	0.00	0.00
<b>Total</b>	<b>12.15</b>	<b>8.46</b>	<b>0.48</b>

Source: Basel Committee on Banking Supervision.

## Aggregate available stable funding (ASF) by counterparty

In trillions of euros

Table A.23

	Group 1 banks		Of which: G-SIBs		Group 2 banks	
	Unweighted	Weighted	Unweighted	Weighted	Unweighted	Weighted
Capital	5.0	5.0	3.3	3.3	0.4	0.4
Retail and small business	17.2	15.9	11.1	10.2	2.1	1.9
Non-financial corporates	9.9	5.1	6.8	3.5	0.4	0.2
Central banks	1.4	0.4	0.9	0.3	0.1	0.1
Sovereigns/PSEs/MDBs/NDBs	2.3	1.3	1.5	0.8	0.3	0.2
Financials (other legal entities)	14.9	5.1	8.9	2.7	1.6	1.0
Other liabilities	6.2	1.6	4.2	0.9	0.6	0.2
<b>Total</b>	<b>56.9</b>	<b>34.3</b>	<b>36.5</b>	<b>21.5</b>	<b>5.4</b>	<b>4.0</b>

Source: Basel Committee on Banking Supervision.

## Aggregate required stable funding (RSF) by category

In trillions of euros

Table A.24

	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	5.8	0.0	4.2	0.0	0.2	0.0
Loans to financial institutions	6.5	2.0	4.6	1.4	0.4	0.2
HQLA	9.0	1.2	6.0	0.8	0.7	0.1
All residential mortgages	6.6	4.7	3.4	2.4	1.2	0.9
Loans, < 1 year	7.6	3.8	4.9	2.5	0.5	0.3
Other loans, > 1 year, risk weight < 35%	1.1	0.8	0.5	0.4	0.4	0.3
Loans, risk weights > 35%	10.2	8.6	6.2	5.2	0.9	0.8
Derivative	1.8	1.0	1.3	0.7	0.1	0.1
All other assets	9.2	7.6	6.1	4.9	1.0	0.9
Off balance sheet		0.4		0.2		0.0
<b>Total</b>	<b>57.7</b>	<b>30.1</b>	<b>37.1</b>	<b>18.5</b>	<b>5.4</b>	<b>3.5</b>

Source: Basel Committee on Banking Supervision.

## LCR, NSFR and shortfalls at a 100% minimum requirement

Consistent sample of banks<sup>1</sup>, exchange rates as at the reporting dates

Table A.25

	Group 1 banks		Of which: G-SIBs		Group 2 banks	
	Ratio (%)	Shortfall (€ bn)	Ratio (%)	Shortfall (€ bn)	Ratio (%)	Shortfall (€ bn)
<i>LCR</i>						
H2 2012	121.3	429.4	126.8	156.5	142.7	15.3
H1 2013	116.7	400.0	122.8	104.8	146.9	13.9
H2 2013	120.4	278.4	126.0	44.4	139.8	22.8
H1 2014	123.0	219.6	127.1	16.3	141.4	18.5
H2 2014	126.0	88.5	127.6	0.0	136.9	22.1
H1 2015	123.8	47.0	123.9	5.7	136.3	7.9
H2 2015	125.5	54.2	124.1	0.0	145.5	8.6
H1 2016	126.5	24.0	125.4	0.0	151.6	3.1
<i>NSFR</i>						
H2 2012	99.6	1,669.1	101.8	926.4	100.4	155.6
H1 2013	100.0	1,568.9	102.8	866.3	102.1	140.8
H2 2013	111.3	631.4	114.3	361.8	114.4	28.2
H1 2014	110.7	483.2	113.7	254.1	115.5	30.7
H2 2014	111.4	436.2	114.1	241.8	115.7	42.8
H1 2015	112.0	343.9	114.9	187.6	115.8	27.3
H2 2015	113.9	183.4	116.9	78.2	117.4	8.6
H1 2016	113.9	108.6	116.5	27.3	116.6	14.1

<sup>1</sup> Consistent sample across periods; for LCR, Group 1 includes 82 banks, G-SIBs include 25 banks and Group 2 includes 54 banks; for NSFR, Group 1 includes 87 banks, G-SIBs include 26 banks and Group 2 includes 70 banks.

Source: Basel Committee on Banking Supervision.

## High quality liquid assets and inflows versus outflows over time

Consistent sample of banks<sup>1</sup>; exchange rates as at the reporting dates, in trillions of euro

Table A.26

	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	9.95	8.64	7.04	5.90	0.46	0.35
H1 2013	10.08	9.04	7.22	6.23	0.45	0.34
H2 2013	10.10	8.86	7.29	6.20	0.45	0.34
H1 2014	10.74	9.30	7.63	6.43	0.47	0.36
H2 2014	11.84	10.04	8.52	7.15	0.48	0.37
H1 2015	13.05	11.16	9.26	7.91	0.50	0.39
H2 2015	12.92	10.92	9.06	7.71	0.52	0.39
H1 2016	13.67	11.55	9.59	8.17	0.55	0.39

<sup>1</sup> Consistent sample across periods. Group 1 includes 82 banks, G-SIBs include 25 banks and Group 2 includes 54 banks.

Source: Basel Committee on Banking Supervision.

## Number of banks for which data on the revised minimum capital requirements for market risk have been provided

End-December 2015 reporting date

Table A.27

	Total	Group 1 banks	Group 2 banks
Australia	1	1	0
Belgium	2	1	1
Canada	2	2	0
France	6	5	1
Germany	7	4	3
Italy	6	2	4
Japan	7	7	0
Netherlands	3	2	1
Saudi Arabia	2	2	0
Singapore	3	3	0
South Africa	2	2	0
Spain	2	1	1
Sweden	3	3	0
Switzerland	1	1	0
United Kingdom	3	3	0
United States	6	6	0
<b>Total</b>	<b>56</b>	<b>45</b>	<b>11</b>

Source: Basel Committee on Banking Supervision.

Number of banks for which data on the revised minimum capital requirements for market risk have been provided

End-June 2016 reporting date

Table A.28

	Total	Group 1 banks	Group 2 banks
Australia	2	2	0
Belgium	2	1	1
Brazil	2	2	0
Canada	4	4	0
China	3	3	0
France	7	5	2
Germany	9	3	6
India	7	2	5
Italy	6	2	4
Japan	7	7	0
Korea	5	4	1
Mexico	5	0	5
Netherlands	3	2	1
Russia	0	0	0
Saudi Arabia	1	1	0
Singapore	3	3	0
South Africa	2	1	1
Spain	5	1	4
Sweden	4	4	0
Switzerland	3	2	1
United Kingdom	3	3	0
United States	6	6	0
<b>Total</b>	<b>89</b>	<b>58</b>	<b>31</b>

Source: Basel Committee on Banking Supervision.

## Impact of revised minimum capital requirements for market risk on MRC

End-December 2015 reporting date, in per cent

Table A.29

	Change relative to total current market risk MRC			Change relative to total current MRC		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Max	317.4	228.7	349.0	22.2	22.2	16.8
95th percentile	173.7	178.1	262.6	14.7	17.3	12.3
75th percentile	94.2	102.3	166.4	6.2	4.4	2.4
Median	39.6	45.3	46.8	1.7	1.8	1.3
25th percentile	0.8	15.0	4.5	0.0	0.7	0.2
5th percentile	-22.7	-23.4	-51.7	-0.9	-0.8	-1.1
Min	-36.2	-36.2	-78.0	-4.8	-1.1	-1.8
Weighted average	52.3	50.9	52.2	3.2	3.0	2.0

Source: Basel Committee on Banking Supervision.

## Impact of revised minimum capital requirements for market risk

End-June 2016 reporting date, in per cent

Table A.30

	Change relative to total current market risk MRC			Change relative to total current MRC		
	Group 1	Of which: G-SIBs	Group 2	Group 1	Of which: G-SIBs	Group 2
Max	387.4	387.4	357.5	21.5	21.5	13.6
95th percentile	227.7	228.3	299.7	14.9	15.7	13.5
75th percentile	125.9	191.5	121.7	3.5	8.6	5.1
Median	43.4	66.9	91.3	1.6	2.0	1.8
25th percentile	6.1	15.7	12.6	0.3	0.6	0.3
5th percentile	-35.4	-27.3	-50.7	-1.4	-0.6	-0.5
Min	-63.5	-40.2	-77.4	-2.5	-2.3	-0.6
Weighted average	67.2	75.9	87.4	3.1	3.4	2.6

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](http://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](http://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](http://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](http://www.bis.org/publ/bcbs243.htm).

*Basel III monitoring report*, September 2013, [www.bis.org/publ/bcbs262.htm](http://www.bis.org/publ/bcbs262.htm).

*Basel III monitoring report*, March 2014, [www.bis.org/publ/bcbs278.htm](http://www.bis.org/publ/bcbs278.htm).

*Basel III monitoring report*, September 2014, [www.bis.org/publ/bcbs289.htm](http://www.bis.org/publ/bcbs289.htm).

*Basel III monitoring report*, March 2015, [www.bis.org/bcbs/publ/d312.htm](http://www.bis.org/bcbs/publ/d312.htm).

*Basel III monitoring report*, September 2015, [www.bis.org/bcbs/publ/d334.htm](http://www.bis.org/bcbs/publ/d334.htm).

*Basel III monitoring report*, March 2016, [www.bis.org/bcbs/publ/d354.htm](http://www.bis.org/bcbs/publ/d354.htm).

*Basel III monitoring report*, September 2016, [www.bis.org/bcbs/publ/d378.htm](http://www.bis.org/bcbs/publ/d378.htm).



## Basel III phase-in arrangements

### Basel III phase-in arrangements

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

	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%
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	5.125%	5.75%	6.375%	7.0%
Phase-in of deductions from CET1 (including amounts exceeding the limit for DTAs, MSRs and financials)	60%	80%	100%	100%
Minimum Tier 1 capital	6.0%	6.0%	6.0%	6.0%
Minimum total capital	8.0%	8.0%	8.0%	8.0%
Minimum total capital plus capital conservation buffer	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	70%	80%	90%	100%
Net stable funding ratio			Introduce minimum standard	