

---

06 March 2014

---

Impact Study Group

---

# Basel III monitoring exercise

---

Results based on data as of 30 June 2013

# Contents

---

## Basel III monitoring exercise

List of figures	3
Abbreviations	4
Executive summary	5
<b>1. General remarks</b>	<b>10</b>
1.1 Sample of participating banks	11
1.2 Methodology	12
1.3 Interpretation of results	13
1.4 Data quality	14
<b>2. Overall impact on regulatory capital ratios and estimated capital shortfall</b>	<b>15</b>
2.1 Capital ratios	15
2.2 Capital shortfall	19
2.3 Impact of Basel III on banks' capital buffer	21
<b>3. Impact of the new capital rules</b>	<b>23</b>
3.1 Definition of capital	23
3.2 Impact of capital deductions on CET1	24
<b>4. Changes in risk-weighted assets</b>	<b>25</b>
4.1 Overall results	25
4.2 Impact of the rules on counterparty credit risk (CVA only)	26
<b>5. Leverage ratio</b>	<b>28</b>
<b>6. Liquidity</b>	<b>34</b>
6.1 Liquidity coverage ratio	34
6.2 Net Stable Funding Ratio	38

## List of figures

---

Figure 1: Distribution of CET1, T1 and total capital ratio per bank group (for conventions please refer to section 1.2)	16
Figure 2: Distribution of Basel III CET1 ratios, Group 1 banks	17
Figure 3: Distribution of Basel III CET1 ratios, Group 2 banks	17
Figure 4: Change in CET1 ratios over time	18
Figure 5: Components of leverage ratio versus RWA over time, Group 1	19
Figure 6: Change in capital shortfall by type of capital under Basel III	20
Figure 7: Components of the total impact measure (TIM)	22
Figure 8: Structure of regulatory capital under the current national regime and Basel III	23
Figure 9: Change of RWA relative to Basel II.5 (for conventions please refer to section 1.2)	26
Figure 10: Distribution of LR by bank group (for conventions please refer to section 1.2)	29
Figure 11: Change in LR by bank group (%)	31
Figure 12: Composition of leverage exposure (%)	32
Figure 13: Relation of RWA to leverage exposure, Group 1	33
Figure 14: Distribution of LCR by bank group (for conventions please refer to section 1.2)	35
Figure 15: Change in LCR by bank group (%)	35
Figure 16: Composition of liquid assets	36

# Abbreviations

---

<b>AQR</b>	Asset Quality Review
<b>BCBS</b>	Basel Committee on Banking Supervision
<b>CCPs</b>	Central counterparties
<b>CET1</b>	Common equity tier 1
<b>CRD</b>	Capital requirements directive
<b>CRR</b>	Capital requirements regulation
<b>CVA</b>	Credit value adjustment
<b>DTA</b>	Deferred tax assets
<b>D-SIB</b>	Domestic systemically important banks
<b>EBA</b>	European Banking Authority
<b>ECB</b>	European Central Bank
<b>G-SIB</b>	Global systemically important banks
<b>ISG</b>	Impact Study Group
<b>LCR</b>	Liquidity coverage ratio
<b>LR</b>	Leverage ratio
<b>MSR</b>	Mortgage servicing rights
<b>NSFR</b>	Net stable funding ratio
<b>RWA</b>	Risk-weighted assets
<b>SSM</b>	Single Supervisory Mechanism

## Executive summary

---

Since the finalisation of the new global regulatory framework ('Basel III') in December 2010<sup>1</sup>, its impact is monitored semi-annually by both the Basel Committee at a global level and the European Banking Authority (EBA) at the European level, using data provided by participating banks on a voluntary and confidential basis.

This report is the fifth publication of the Basel III monitoring exercise and summarises the aggregate results using data as of 30 June 2013.<sup>2</sup> A sample of 174 banks, which submitted data for this exercise, comprises 43 Group 1 banks and 131 Group 2 banks<sup>3</sup>. EU Member States' coverage of their banking system was notably high for Group 1 banks, reaching 100% coverage for many jurisdictions (aggregate coverage in terms of Basel II risk-weighted assets: 94%), while for Group 2 banks it was lower with a larger variation across jurisdictions (aggregate coverage: 31%). Furthermore, the analysis of Group 2 results showed that a significant number of large but non-internationally active banks, i.e. banks that, excluding international activity, have similar characteristics to Group 1 banks, hence the results presented in this report for Group 2 banks may not be as representative as for Group 1 banks.<sup>4</sup>

The monitoring exercise is carried out assuming full implementation of the Basel III framework, i.e. transitional arrangements such as the phase-in of deductions and grandfathering arrangements were not taken into account<sup>5</sup>. Since the new EU directive and regulation had not entered into force at the time of the report's reference date of 30 June 2013, no EU-specific rules were analysed in the report. The results are compared with the current national implementation of the CRD III, which has been in force since year-end 2011.

In addition, it is important to note that the monitoring exercise is based on two assumptions: firstly, on a 'static balance sheet' assumption, i.e. capital elements were only included in the report if the eligibility criteria were fulfilled at the reporting date. Hence the report did not take into account any planned management actions to increase capital or decrease risk-weighted assets. This allows the ceteris paribus identification of changes in banks' capital base, instead of including effects based on subjective assumptions about banks' future profitability and/or behavioural responses. As a consequence, the monitoring results in this report are not

<sup>1</sup> Basel Committee on Banking Supervision, *Basel III: A global framework for more resilient banks and banking systems*, December 2010 and revised June 2011; Basel Committee on Banking Supervision, *Basel III: International framework for liquidity risk measurement, standards and monitoring*, December 2010.

<sup>2</sup> Previous reports are available on the EBA website (<http://www.eba.europa.eu/risk-analysis-and-data/quantitative-impact-study/basel-iii-monitoring-exercise>).

<sup>3</sup> Group 1 banks are banks with Tier 1 capital in excess of EUR 3 billion and internationally active. All other banks are categorised as Group 2 banks. Among the Group 2 banks there are 21 banks that have a Tier 1 capital in excess of EUR 3 billion but are not internationally active.

<sup>4</sup> There are 45 Group 2 banks that have Tier 1 capital in excess of EUR 1.5 billion. These banks account for about 80% of total Group 2 RWA (current definition of RWA) and are classified as 'large Group 2 banks'.

<sup>5</sup> Except for securitisation positions in the trading book that do not belong to the correlation trading portfolio as stated in Annex I, paragraph 16(a) of Directive 2006/49/EC.

comparable to similar industry estimates, as these usually include assumptions on banks' future profitability, planned capital and/or further management actions that may mitigate the impact of Basel III provisions.

The actual capital and liquidity shortfalls that relate to the new requirements by the time Basel III is fully implemented may differ from those shown in this report, if the banking sector adjusts its behaviour to a potentially different economic and regulatory environment. This is particularly the case as the regulatory environment in Europe is currently undergoing a process of change towards a single supervisory mechanism (SSM). As a consequence large and significant banks are currently facing a comprehensive assessment which is carried out by the ECB and national competent authorities in advance of the ECB's new supervisory role.

## Key results

The main results of the monitoring exercise are summarised below. It is worth noting that whenever reference to a previous period is made in the report, this is based on the same sample of banks, unless otherwise specified.<sup>6</sup>

### Impact on regulatory capital ratios and estimated capital shortfall

Assuming full implementation of the Basel III framework as of 30 June 2013 (i.e. without taking into account transitional arrangements), the CET1 capital ratios of Group 1 banks would decline from an average CET1 ratio of 11.9%, under current rules, to an average CET1 ratio of 9.1%, under the new framework. 95% of Group 1 banks would be at or above the 4.5% minimum while 82% of Group 1 banks would be at or above the 7.0% target level (i.e. including the capital conservation buffer). The CET1 capital shortfall for Group 1 banks would be EUR 2.4 billion with respect to the minimum requirement of 4.5%, and EUR 36.3 billion with respect to the target level of 7.0%. The latter shortfall includes, where applicable, the additional regulatory surcharge for global systemically important banks (G-SIB). As a point of reference, the sum of profits after tax prior to distributions across the Group 1 sample in the year prior to 30 June 2013 was EUR 74.9 billion.

Compared to the previous exercise (reporting date end-December 2012), the results show an increase in Group 1 banks' average CET1 ratio of 0.8 percentage points; the corresponding shortfall with respect to the 7% target level (also considering a capital surcharge for G-SIB) dropped from EUR 70.4 billion to EUR 36.3 billion, i.e. by 48.4%.

Group 1 banks' average Tier 1 and total capital ratios would decline from 13.4%, under current rules, to 9.2% under Basel III and from 16.0% to 10.8% respectively. Capital shortfalls corresponding to the minimum ratios (including the capital conservation buffer and the surcharge for global systemically important banks) amount to EUR 103.3 billion (Tier 1 capital) and EUR 164.8 billion (total capital). The aforementioned figures do not include any additional shortfalls that may arise from additional surcharges stemming from any domestic systemically

<sup>6</sup> The consistent sample of banks only includes those banks that reported necessary data for all reporting dates (December 2012 to June 2013), to allow for period-to-period comparisons.

important banks (D-SIB) framework<sup>7</sup>, the countercyclical buffer, the systemic risk buffer, or any other additional Pillar 2 surcharges the supervisor may levy upon the bank. As a consequence, the estimated shortfalls in the present report may understate the actual shortfalls.

For Group 2 banks, the average CET1 ratio would decline from 12.4%, under the current regime, to 8.8% under Basel III. The CET1 shortfall would be approximately EUR 29.1 billion for the target level of 7.0%. The average Tier 1 and total capital ratios of Group 2 banks would decline from 13.0% to 9.3% and from 15.8% to 11.1% respectively.

### Main drivers of changes in banks' capital ratios

For Group 1 banks, the overall impact of Basel III on the CET1 ratio is attributed to both changes in the definition of capital and changes related to the calculation of risk-weighted assets: while CET1 would decrease by 16.4%, compared to the current rules, RWAs would increase by 9.9%, on average. For Group 2 banks, while the change in the definition of capital would result in a decline of CET1 by 21.8%, the new rules would increase the RWAs of Group 2 banks by 10.4%. However, the latter is driven by large Group 2 banks; if those are not taken into account, the average increase in RWA is reduced to 3.6%. Deductions in CET1 of both Group 1 and Group 2 banks are mainly driven by goodwill (13.3% and 7.8% respectively), followed by deductions for other financial companies for both Groups (3.5% and 6.7% respectively).

As to the denominator of regulatory capital ratios, the main driver for Group 1 banks is the introduction of CVA capital charges which would result in an average RWA increase of 4.2%, followed by changes attributable to the items that fall below the 10%/15% thresholds (3.5%). For Group 2 banks, the main driver would be the transition from Basel II 50/50 deductions to a 1250% risk weight (5.1%), followed by changes attributable to the items that fall below the 10%/15% thresholds (2.5%).

While the CET1 ratio of Group 2 banks only slightly increases by 0.1 percentage points to 8.2% in comparison to the previous period, the CET1 ratio of Group 1 banks increases from 8.3% to 9.1%. This increase is driven by reductions in risk-weighted assets while the CET1 capital remains nearly unchanged.

Section 2.3 analyses the total impact of the Basel III framework on the capital buffer a bank holds above the minimum ratio<sup>8</sup> and considers the contribution of each of the four underlying drivers separately, i.e. the changes in the definition of capital, deductions, RWAs and the minimum ratio. Estimates in this regard show that the capital buffer above the regulatory minimum would be lower by 6.4 percentage points for Group 1 and 6.1 percentage points for Group 2 under Basel III than under the current regime. For both Group 1 and Group 2, the increased minimum requirements account for about 40% of the total impact of the Basel III framework on this capital

<sup>7</sup> In addition, countries may have a D-SIB regime under which the capital charge for an existing G-SIB may be overruled by a higher D-SIB charge.

<sup>8</sup> The total impact includes the reduction by 2.5 percentage points, which is the difference between the Basel III minimum ratio of 4.5% and the implicit minimum ratio for CET1 of 2% under the current rules.

buffer. A significant average impact of 17% and 21% for Group 1 banks is attributed to the changes in RWAs and capital deductions respectively (Group 2: 19% and 31% respectively). At the current reporting date, the impact of the new definition of capital is only of lesser importance for the reduction in the banks' capital buffer, amounting, on average, to 6% for Group 1 banks and to 9% for Group 2 banks. The contribution of the G-SIB surcharge amounts to 16% for Group 1 banks.

### Leverage ratio

The changes in Basel III leverage ratio framework, published by the BCBS in January 2014<sup>9</sup>, are not reflected in June 2013 data, which form the basis for the following analyses. Data necessary to calculate the leverage ratio under the new definition will be collected starting from the next round of data collection exercise, i.e. 31 December 2013. Therefore, the calculations regarding the leverage ratio are still based on the consultation paper published in June 2013<sup>10</sup>. The leverage ratios would have increased had the new changes from January 2014 been taken into account.

Compared to the previous period, the average leverage ratios did not change significantly. Assuming full implementation of Basel III, Group 1 banks would have an average Basel III Tier 1 leverage ratio (LR) of slightly below 3.0%, while the leverage ratio of Group 2 banks would be 3.6%. Two thirds of participating Group 1 banks and 76% of Group 2 banks would have met the 3% target level as of June 2013. Assuming all banks already meet an 8.5% Basel III capital ratio, an additional capital shortfall of EUR 50.3 billion for Group 1 banks and of EUR 13.9 billion for Group 2 banks remains to meet the LR requirement. The LR is currently subject to an observation period which includes a review clause aimed at addressing any unintended consequences prior to its implementation on 1 January 2018.

### Liquidity standards

The current report has taken into account the recent developments on the definition and adequacy of the liquidity coverage ratio (LCR)<sup>11</sup>. The LCR will be introduced on 1 January 2015. The minimum requirement will be set at 60% and rise in equal annual steps to reach 100% in 2019.

As of June 2013, the average LCR is 104% and 132% for Group 1 and Group 2 banks respectively. Two thirds of all the banks already meet the final 100% requirement, while 14% are still below 60%. The total shortfall to be closed by 2019 amounts to EUR 262 billion. However, this represents a conservative proxy of the actual shortfall of banks as it does not reflect the surplus of the banks already meeting the full 100% requirement and does not include any assumptions on the reallocation of liquidity between banks and within the system as such.

<sup>9</sup> Basel Committee on Banking Supervision, Basel III leverage ratio framework and disclosure requirements, January 2014 (<http://www.bis.org/publ/bcbs270.pdf>).

<sup>10</sup> Basel Committee on Banking Supervision, Revised Basel III leverage ratio framework and disclosure requirements, June 2013 (<http://www.bis.org/publ/bcbs251.pdf>).

<sup>11</sup> Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013 ([www.bis.org/publ/bcbs238.pdf](http://www.bis.org/publ/bcbs238.pdf)).



The split between level 1 and level 2 assets within the high-quality liquid assets (HQLA) remains in line with the previous period, namely the level 1 assets comprising more than 80% of the liquidity buffer. Therefore, the caps on level 2 assets appear to have no large impact on an aggregate level, although they are important at individual level for a subset of participating banks.

For the purposes of the current Basel III monitoring exercise, data on NSFR was collected and processed on the basis of the original NSFR definition issued in December 2010<sup>12</sup>. In January 2014, the Basel Committee on Banking Supervision (BCBS) published a new consultative paper<sup>13</sup> proposing revisions to the definition of NSFR. The NSFR calculation based on the old definition would deviate from the new NSFR definition. However, since the new NSFR framework has not been finalised, the EBA decided to not present any results on NSFR in the June 2013 monitoring exercise report. The exclusion of the NSFR part from the EBA's Basel III monitoring exercise aligns with the BCBS's practice of not presenting, in its pertinent publications, the results based on the old NSFR definition.

---

<sup>12</sup> Basel Committee on Banking Supervision, Basel III: International framework for liquidity risk measurement, standards and monitoring, December 2010 ([www.bis.org/publ/bcbs188.pdf](http://www.bis.org/publ/bcbs188.pdf)).

<sup>13</sup> Basel Committee on Banking Supervision, Basel III: the Net Stable Funding Ratio – consultative document, January 2014 ([www.bis.org/publ/bcbs271.pdf](http://www.bis.org/publ/bcbs271.pdf)).

# 1. General remarks

---

Since the beginning of 2011, the impact of the new capital and liquidity standards ('Basel III') is monitored and evaluated by the European Banking Authority (EBA) on a semi-annual basis. The exercise is based on the Basel III reform package as the CRR and CRD IV, together the European equivalent of the Basel III framework, are not yet implemented. The results of this report may be further affected by the **final calibration of the Basel III rules at the European level**, i.e. the rules that will be defined by the Commission through delegated acts over the next years.

This report is the fifth publication of the Basel III monitoring exercise<sup>14</sup> and presents the results of the latest monitoring exercise based on consolidated data of European banks as of 30 June 2013. It provides an impact assessment of the following aspects:

- Changes to banks' capital ratios under Basel III and estimates of any capital shortfalls. In addition, estimates of capital surcharges for G-SIB are included, where applicable.
- Changes to the definition of capital that result from the new capital standard (CET1), a reallocation of regulatory adjustments to CET1 and changes to the eligibility criteria for Tier 1 and total capital.
- Changes in the calculation of risk-weighted assets due to changes in the definition of capital and counterparty credit risk requirements.
- The introduction of a leverage ratio.
- The introduction of the LCR.

The related policy documents are:

- *Basel III: A global framework for more resilient banks and banking systems* and the Committee's 13 January 2011 press release on loss absorbency at the point of non-viability;<sup>15</sup>
- *Basel III: International framework for liquidity risk measurement, standards and monitoring*;<sup>16</sup>
- *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*<sup>17</sup>; and

<sup>14</sup> Previous reports are available on the website of the EBA (<http://www.eba.europa.eu/risk-analysis-and-data/quantitative-impact-study/basel-iii-monitoring-exercise>).

<sup>15</sup> Basel Committee on Banking Supervision, *Basel III: A global framework for more resilient banks and banking systems*, December 2010 and revised June 2011, and the Committee's press release of 13 January 2011 on loss absorbency at the point of non-viability.

<sup>16</sup> Basel Committee on Banking Supervision, *Basel III: International framework for liquidity risk measurement, standards and monitoring*, December 2010.

- *Global systemically important banks: Assessment methodology and the additional loss absorbency requirement.*<sup>18</sup>

## 1.1 Sample of participating banks

The report includes an analysis of data submitted by 43 Group 1 banks from 14 countries and 131 Group 2 banks from 17 countries. Table 1 shows the distribution of participation by jurisdiction. Group 1 banks are those that have Tier 1 capital in excess of EUR 3 billion and are internationally active. All other banks are defined as Group 2 banks.

Coverage of the banking sector is high, reaching 100% of Group 1 banks in some countries (aggregate coverage in terms of Basel II risk-weighted assets: 94%). Coverage of Group 2 banks is lower and varies across countries (aggregate coverage: 31%). Furthermore, the analysis of Group 2 results is driven by a significant number of large but non-internationally active banks, i.e. banks that, excluding international activity, have similar characteristics to Group 1 banks. Hence the results presented in this report for Group 2 banks may not be as representative as the results for Group 1 banks.<sup>19</sup>

The separation between large and small Group 2 banks has been carried out according to a Tier 1 capital threshold of EUR 1.5 billion. Group 2 banks with a Tier 1 capital of less than EUR 1.5 billion have been classified as small while the ones with Tier 1 capital greater than or equal to EUR 1.5 billion have been classified as large.

Not all banks provided data relating to all parts of the Basel III framework. Accordingly, a small number of banks are excluded from individual sections of the Basel III monitoring analysis due to incomplete data. In all sections, comparisons with previous periods are based on a consistent sample of banks, i.e. including only those banks that reported necessary data for all reporting dates to allow for period-to-period comparisons.

**Table 1: Number of banks submitting data for the monitoring exercise**

	Group 1	Group 2
Austria	3	6
Belgium	1	2
Denmark	1	3
Finland	-	14

<sup>17</sup> Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013.

<sup>18</sup> Basel Committee on Banking Supervision, *Globally systemically important banks: Assessment methodology and the additional loss absorbency requirement*, November 2011.

<sup>19</sup> There are 45 Group 2 banks that have Tier 1 capital in excess of EUR 1.5 billion. These banks account for about 80% of the total RWA (current definition of RWA) of Group 2.

	Group 1	Group 2
France	5	5
Germany	8	40
Hungary	1	2
Ireland	3	1
Italy	2	11
Luxembourg	-	1
Malta	-	4
Netherlands	3	16
Norway	1	7
Poland	-	5
Portugal	3	3
Spain	2	4
Sweden	4	-
United Kingdom	6	7
<b>Total</b>	<b>43</b>	<b>131</b>

## 1.2 Methodology

### ‘Composite bank’ weighting scheme

Average amounts in this document have been calculated by creating a composite bank at a total sample level, which implies that the total sample averages are weighted. For example, the average CET1 capital ratio is the sum of all banks’ CET1 capital for the total sample divided by the sum of all banks’ risk-weighted assets for the total sample. Similarly, the average Tier 1 LR is the sum of all banks’ Tier 1 capital for the total sample divided by the sum of all banks’ LR exposures for the total sample.

### Box plots illustrate the distribution of results

To ensure data confidentiality, most charts show box plots which provide an indication of the distribution of the results among participating banks. Box plots are defined as follows:

Thick red line:	Respective minimum requirement
Dashed lines:	Respective minima plus the capital conservation buffer (capital)
Thin red line:	Median value (50% of the observations are below this value, 50% are above this value)
‘x’:	Mean (weighted average)
Blue box:	25 <sup>th</sup> and 75 <sup>th</sup> percentile values. A percentile is the value of a variable below which a certain per cent of observations falls. For example, the 25 <sup>th</sup> percentile is the value below which 25 per cent of the observations are found.
Black vertical lines (‘whiskers’):	The upper end-point represents the 95 <sup>th</sup> percentile value, while the lower end-point represents the 5 <sup>th</sup> percentile value.

### 1.3 Interpretation of results

The impact assessment was carried out by comparing the capital positions of banks under Basel III to the current regulatory framework CRD III (including revised rules on market risk exposures) which has been consistently implemented in European countries since end-December 2011. With the exception of transitional arrangements for non-correlation trading securitisation positions in the trading book,<sup>20</sup> results are calculated assuming **full implementation of Basel III**, i.e. without considering transitional arrangements related to the phase-in of deductions and grandfathering arrangements. This implies that 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. As such, these amounts underestimate the amount of Tier 1 capital and total capital held by a bank as they do not give any recognition for non-qualifying instruments that are actually phased out over a nine-year horizon.

The treatment of deductions and non-qualifying capital instruments under the assumption of full implementation of Basel III also affects figures reported in the section on LR. The potential underestimation of Tier 1 capital will become less of an issue as the implementation date of the **LR approaches**. In particular, in the course of 2014, the capital amounts based on the capital requirements in place on the Basel III implementation monitoring reporting date will reflect the amount of non-qualifying capital instruments included in capital at that time. These amounts will, therefore, be more representative of the capital held by banks at the implementation date of the LR (for more details see Section 5).

In addition, it is important to note that the monitoring exercise is based on **static balance sheet assumptions**, i.e. capital elements are only included if the eligibility criteria were met at the reporting date. Planned bank measures to increase capital or decrease risk-weighted assets are not taken into account. This allows for identifying **effective** changes in bank capital instead of identifying changes which are simply based on changes in underlying modeling assumptions. As a consequence, monitoring results are not comparable to industry estimates, as the latter usually include assumptions on banks' future profitability, planned capital and/or management actions that mitigate the impact of Basel III.

One of the core elements of the new Basel III capital definition is the introduction of CET1, which is not defined under the current regulatory regime (CRD III). To allow comparisons between the current regulatory regime and Basel III, CET1 elements according to the current regulatory framework are defined as those elements of current Tier 1 capital which are not subject to a limit under the national implementation of Basel II.

---

<sup>20</sup>

For non-correlation trading securitisations in the trading book, capital charges are calculated as the larger of the capital charge for net long or net short positions. After 31 December 2013, the charge for these positions will change to the sum of capital charges for net long and net short positions.

## 1.4 Data quality

For this monitoring exercise, participating banks submitted comprehensive and detailed non-public data on a voluntary and best-efforts basis. National supervisors worked closely with banks to ensure data quality, completeness and consistency with the reporting instructions. Banks are included in the sample for each of the analyses below only as far as they have provided data of sufficient quality to complete the analysis.

For the liquidity elements, data quality has been significantly improved amid the experience gained from the work on the Basel III monitoring exercise. Nevertheless, some differences in banks' reported liquidity risk positions could be attributed to differing interpretations of the rules. Most notably individual banks appear to be using different methodologies to identify operational wholesale deposits and exclusions of liquid assets due to failure to meet the operational requirements.

## 2. Overall impact on regulatory capital ratios and estimated capital shortfall

### 2.1 Capital ratios

One of the core intentions of the Basel III framework is to increase the resilience of the banking sector by strengthening both the quantity and quality of regulatory capital. Therefore, higher quantitative minimum requirements, stricter rules for the definition of capital and for the calculation of risk-weighted assets have to be met. As the Basel III monitoring exercise assumes full implementation of Basel III (without accounting for any transitional arrangements<sup>21</sup>), it compares capital ratios under current rules with the capital ratios that banks would exhibit if the Basel III rules were fully implemented at the reporting date.

In this context, it is important to describe the implications of fully implementing Basel III on the monitoring results. The Basel III capital figures of this exercise presume that all common equity deductions are fully phased-in while all non-qualifying capital instruments are fully phased-out. These amounts may therefore underestimate the amount of Tier 1 capital and total capital held by banks, as they do not give any recognition for non-qualifying instruments to be phased out during the transitional period.

Table 2 shows the overall change in CET1, Tier 1 and total capital ratios if Basel III were fully implemented as of 30 June 2013.

For Group 1 banks, the impact on the average CET1 ratio is a reduction from 12.0%, under current rules, to 9.1% under Basel III (a decline of 2.9 percentage points) while the average Tier 1 and total capital ratio would decline from 13.4% to 9.2% and from 16.0% to 10.8% respectively.

**Table 2: Capital ratios, all banks by country, in per cent**

	Number of banks	CET1 Current	CET1 Basel III	Tier1 Current	Tier1 Basel III	TC Current	TC Basel III
<b>Group 1</b>	<b>41</b>	<b>12.0</b>	<b>9.1</b>	<b>13.4</b>	<b>9.2</b>	<b>16.0</b>	<b>10.8</b>
<b>Group 2</b>	<b>126</b>	<b>12.4</b>	<b>8.8</b>	<b>13.0</b>	<b>9.3</b>	<b>15.8</b>	<b>11.1</b>
Large Group 2	45	12.7	8.6	13.3	9.2	16.0	11.0
Small Group 2	81	10.9	9.7	11.8	9.8	14.7	12.1

The reduction in CET1 ratios is driven by both a new definition of capital (numerator) and increases in risk-weighted assets (denominator). However, for Group 1 banks, the main driver is capital with CET1 declining by 16.4% while RWA increases by 9.9%, on average. Banks heavily engaged in activities subject to counterparty credit risk tend to show the largest denominator

<sup>21</sup>

For details on the transitional arrangements, see paragraphs 94 and 95 of the Basel III framework

effects as these activities attract substantially higher capital charges under the new framework. For Group 2 banks, while the change in the definition of capital results in a CET1 decline of 21.8%, the new rules on RWA affect Group 2 banks by 10.4%. This relatively high increase for Group 2 banks is driven by a small number of large Group 2 banks. If those large Group 2 banks are excluded from the sample, the average increase in RWA is 3.6%.

Figure 1 provides an indication of the distribution of capital ratios among participating banks. It includes the relevant regulatory minimum requirement (thick red line), the weighted average (depicted as ‘x’) and the median (thin red line), i.e. the value separating the higher half of a sample from the lower half (this means that 50% of all observations are below and 50% are above this value). Dashed lines indicate the minima plus the capital conservation buffer. For further information on the methodology see Section 2.2.

**Figure 1: Distribution of CET1, T1 and total capital ratio per bank group (for conventions please refer to section 1.2)**

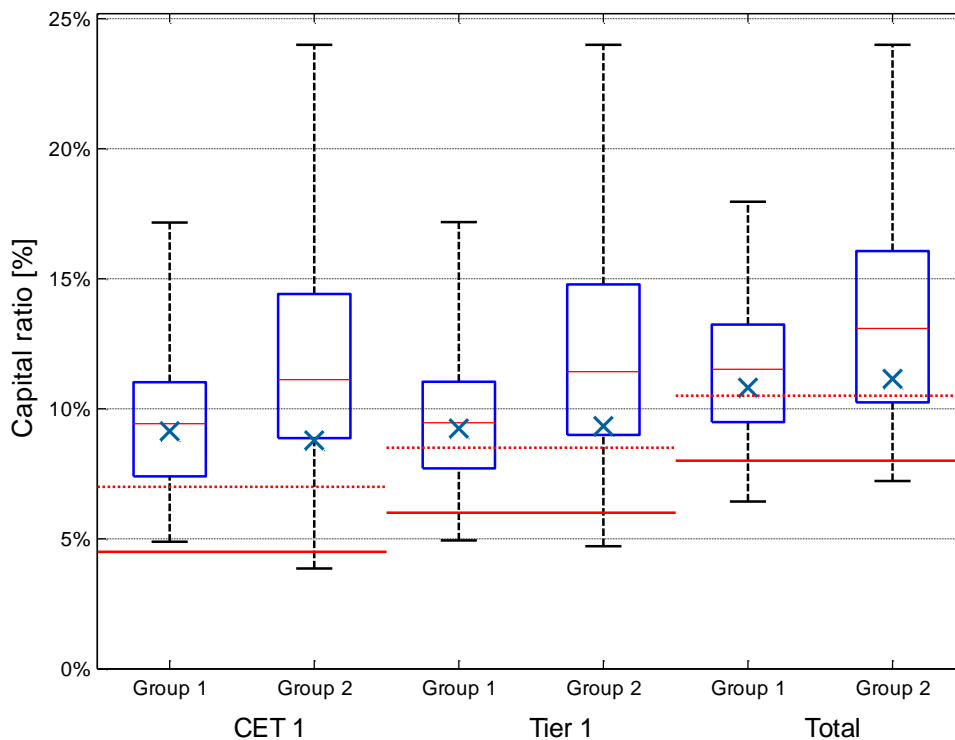
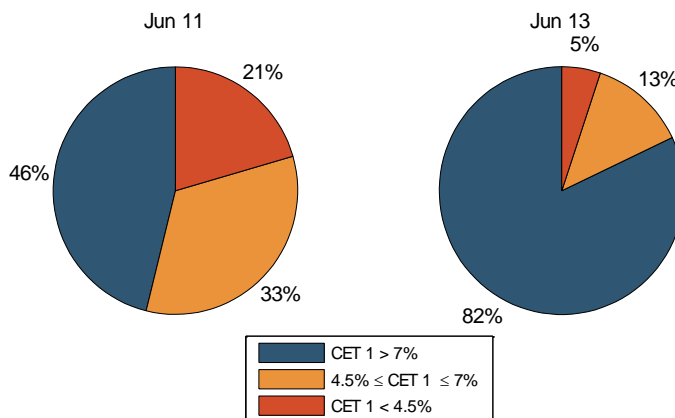


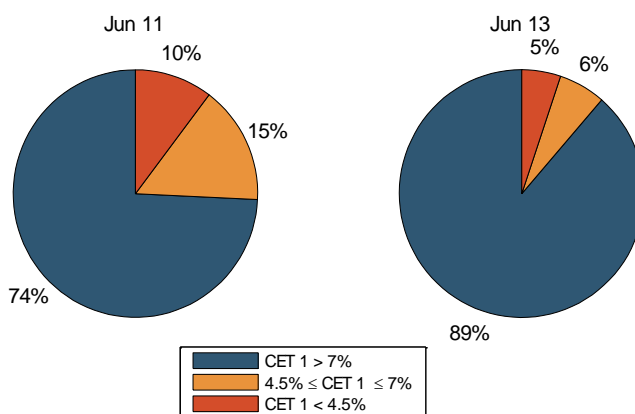
Figure 2 shows that of the banks in the Group 1 sample, 95% show a CET1 ratio under Basel III that is at least equal to the 4.5% minimum capital requirement and 82% show a CET1 ratio above the 7.0% target ratio (i.e., the minimum capital requirement plus the capital conservation buffer) as of end-June 2013. Since the last monitoring exercise (i.e. reporting date as of December 2012) there has been a further shift towards more CET1 capital: the number of Group 1 banks above the 7% ratio increased by 10 percentage points since December 2012 and by 36 percentage points since June 2011.



**Figure 2: Distribution of Basel III CET1 ratios, Group 1 banks**



**Figure 3: Distribution of Basel III CET1 ratios, Group 2 banks**



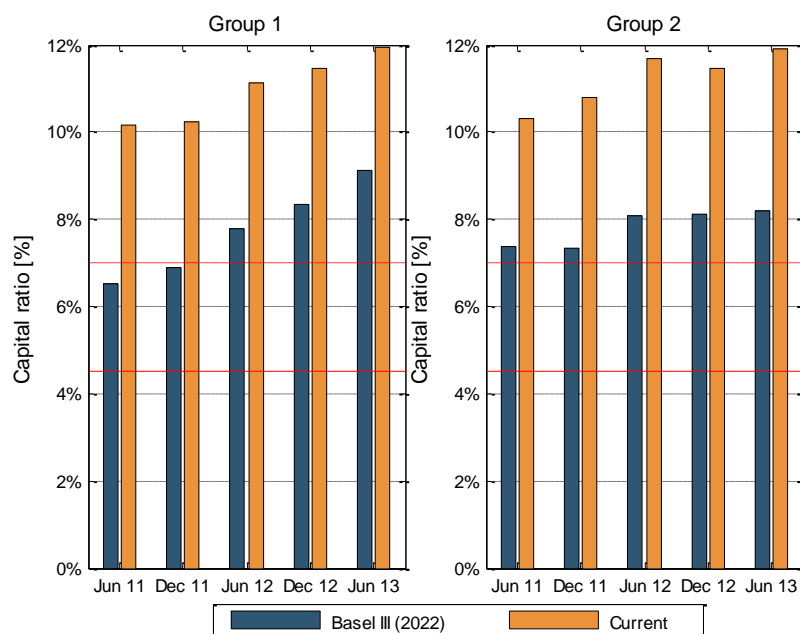
For Group 2 banks, the percentage of banks above the 7% ratio was observed at almost the same level as in December 2012, while increasing by 15 percentage points since June 2011. Within this sample, 95% report a CET1 ratio greater than or equal to 4.5%, while 89% achieve the target of 7.0%.

As shown in Figure 4, the comparison of the consistent sample of banks to the previous exercise (i.e. only banks which were included at both reporting dates) shows an increase in the average Group 1 banks’ CET1 ratio of 0.8 percentage points while the Group 2 banks’ CET1 ratio increased by 0.1 percentage points. Especially Group 1 banks have steadily increased their capital ratio over time. The increase over the last periods implies that banks already try to meet market expectations well in advance of the full implementation of Basel III.

This trend to reach compliance with the requirements of the fully implemented Basel III well in advance of the full implementation date is very likely to continue throughout the next year as the regulatory environment in Europe is currently undergoing a process of change towards a SSM. As a consequence, large and significant banks are currently facing a comprehensive assessment,

carried out by the ECB and national competent authorities in advance of the ECB’s new supervisory role. This assessment will consist of a supervisory risk assessment to review key risks, an AQR to enhance transparency and review the quality of assets and a stress test to examine the resilience of banks to stress.<sup>22</sup>

**Figure 4: Change in CET1 ratios over time**

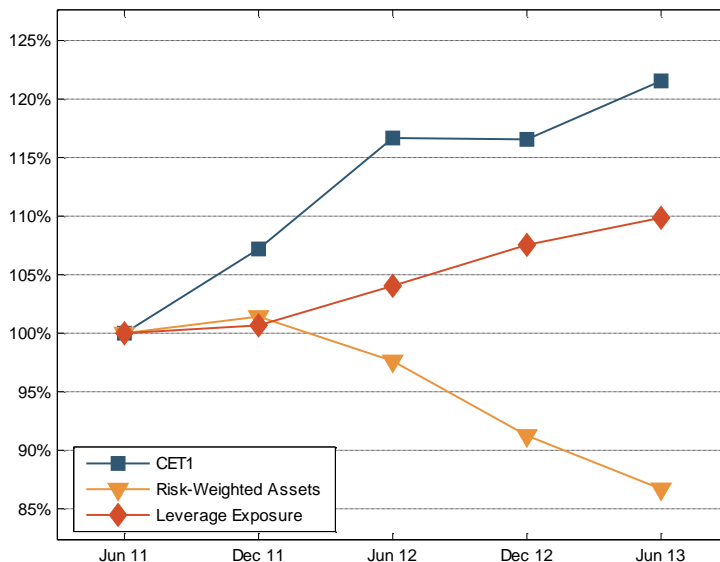


The change in RWA and CET1 in Figure 5 explains the increase in the average CET1 ratio for Group 1 banks: while CET1 increased significantly in comparison to the previous period, RWA decreased noticeably from December 2012 to June 2013. While RWA decreased, Figure 5 indicates a rise in the aggregated LR exposure which is partly driven by a moderate build-up of exposures but also by changes in the calculation methodology.<sup>23</sup>

<sup>22</sup> See the ECB press release of 23 October 2013 (<http://www.ecb.europa.eu/press/pr/date/2013/html/pr131023.en.html>).

<sup>23</sup> The definition of the leverage ratio exposure measure changed during the observation period. The two most relevant changes are the revised method for the calculation of exposures in securities financing transactions (SFTs) and the expansion of the consolidation scope of the leverage ratio exposure measure. Both changes result in an increase of the exposure measure as of the reporting date of December 2012.

**Figure 5: Components of leverage ratio versus RWA over time, Group 1**



## 2.2 Capital shortfall

Table 3 provides estimates of the additional amount of capital that Group 1 and Group 2 banks would need in addition to capital already held at the reporting date (30 June 2013) to meet the target CET1, Tier 1 and total capital ratios under Basel III. The estimates assume fully phased-in target requirements and deductions as of June 2013. Please note that the capital shortfall is calculated as the difference between capital requirements and eligible capital at bank level and represents the incremental capital needs assuming capital requirements for successively higher quality capital layers have been met.

For Group 1 banks, the CET1 capital shortfall is EUR 2.4 billion at a minimum requirement of 4.5% and EUR 36.3 billion at a target level of 7.0%<sup>24</sup>. With respect to the Tier 1 and total capital ratios, the capital shortfall amounts to EUR 6.8 billion and EUR 16.9 billion respectively. While ten out of 14 G-SIB included in this Basel III monitoring exercise already fulfil the 7% CET1 target ratio, including additional surcharges for G-SIB, these surcharges are a binding constraint on three of the 14 G-SIB.<sup>25</sup>

For Group 2 banks, the CET1 capital shortfall is EUR 13.3 billion at a minimum requirement of 4.5% and EUR 29.1 billion at a target level of 7.0%. The Tier 1 and total capital shortfall calculated relative to the 4.5% minimum amount to EUR 16.6 billion and EUR 24.8 billion respectively.

<sup>24</sup> The calculation method applied in this report may overstate the actual shortfall for those banks affected by the 10% and 15% threshold deductions because the decline in deductions due to higher thresholds is not taken into account.

<sup>25</sup> The capital surcharge for global systemically important banks (G-SIB) is ‘binding’ if a bank’s shortfall is solely caused by the additional G-SIB surcharge (i.e. the bank is compliant with the CET1 target ratio of 7%, but it does not fulfill the target ratio of 7% including the G-SIB surcharge).

**Table 3: Capital shortfall, all banks by country, in EUR billion**

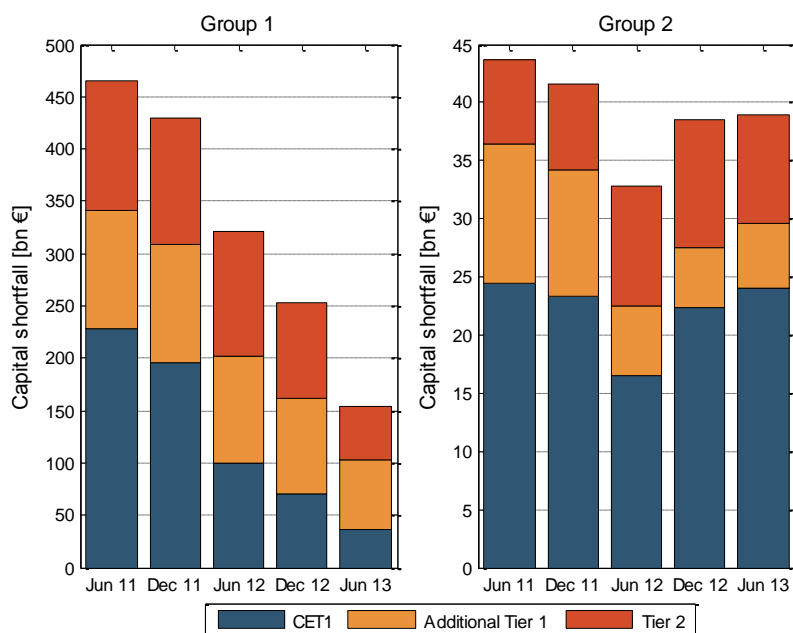
	Number of banks	Minimum			Minimum plus buffers*		
		CET1 4.5%	Tier1 6%	Total 8%	CET1 7%	Tier1 8.5%	Total 10.5%
<b>Group 1</b>	<b>41</b>	<b>2.4</b>	<b>6.8</b>	<b>16.9</b>	<b>36.3</b>	<b>103.3</b>	<b>164.8</b>
<b>Group 2</b>	<b>126</b>	<b>13.3</b>	<b>16.6</b>	<b>24.8</b>	<b>29.1</b>	<b>35.8</b>	<b>46.7</b>
Large Group 2	45	12.1	14.5	22.7	26.0	31.1	41.4
Small Group 2	81	1.1	2.1	2.1	3.1	4.6	5.3

\*including the capital conservation buffer (CCB) of 2.5% and the bank-specific buffer for G-SIB (G-SIB buffer)

As shown in Figure 6, Group 1 banks have been continuously reducing the shortfall over the last two years. Group 1 banks have covered almost two thirds of the initial shortfall. However, this downward trend does not necessarily imply that the ‘actual shortfall’ of Group 1 banks will decline to zero for the reporting date as of December 2013 and onwards, since there are several additional requirements, such as additional bank-specific Pillar II buffers, which are not considered in this analysis.

For Group 2 banks, there is no downward trend in the shortfall over the last two six-month periods although it has decreased in relation to the initial one as at June 2011. This result is driven however by one bank which acquired another bank during the observation period which was not included in the monitoring sample before. If this bank is excluded from the Group 2 sample, the CET1 shortfall decreases by more than 50% between June 2011 and June 2013.

**Figure 6: Change in capital shortfall by type of capital under Basel III**



Compared to the previous exercise (reporting date: December 2012), the results show an increase in Group 1 banks' average CET1 ratio of 0.8 percentage points; the corresponding shortfall with respect to the 7% target level (also considering the capital surcharge for G-SIB) decreased from EUR 70.4 billion to EUR 36.3 billion, i.e. by 48.4% (see blue bar in the left hand side of Figure 6).

## 2.3 Impact of Basel III on banks' capital buffer

The Basel III framework impacts the banks' capital buffer in different ways due to:

- the new definition of eligible capital;
- changes in capital deductions;
- changes in RWA;
- raising the minimum solvency ratio;
- the inclusion of the G-SIB surcharge.

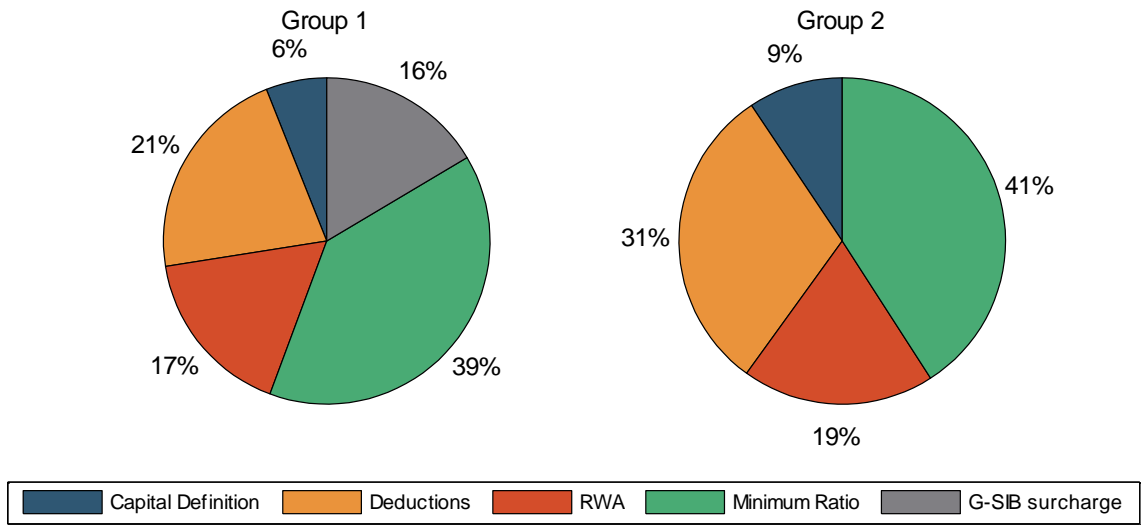
The total impact of the Basel III framework equals the difference between the capital buffer above the minimum capital ratio that a bank holds under Basel III and the respective buffer under the current regime. This total impact is broken down into its components, i.e. the changes in the definition of capital, deductions, RWA and the minimum ratio. This breakdown allows an additive decomposition of the changes induced by each of the capital ratio components, which are analysed separately in subsequent sections.

Results are given only for the capital ratio based on the CET1 capital definition. Therefore, the capital buffer already shrinks by 2.5 percentage points due to the difference between the Basel III minimum ratio of 4.5% and the implicit minimum ratio for CET1 of 2% under current rules<sup>26</sup>. Including this reduction, the capital buffer under Basel III is 6.4 percentage points (Group 1) or 6.1 percentage points (Group 2) lower than the capital buffer under the current regime. Figure 7 shows that, for both Group 1 and Group 2, the increased minimum requirement accounts for about 40% of the total impact of the Basel III framework on the capital buffer. For Group 1, the second largest impact can be attributed to the capital deductions, followed by changes in RWA and the G-SIB surcharge. At the current reporting date, the new definition of capital explains less than 10% of the total reduction in the banks' capital buffer.

---

<sup>26</sup> The analysis is based on CET1 capital. Basically, Basel II did not provide a definition for CET1. Therefore, the monitoring uses a definition for CET1 which is very similar to that under the Basel III framework.

Figure 7: Components of the total impact measure (TIM)



## 3. Impact of the new capital rules

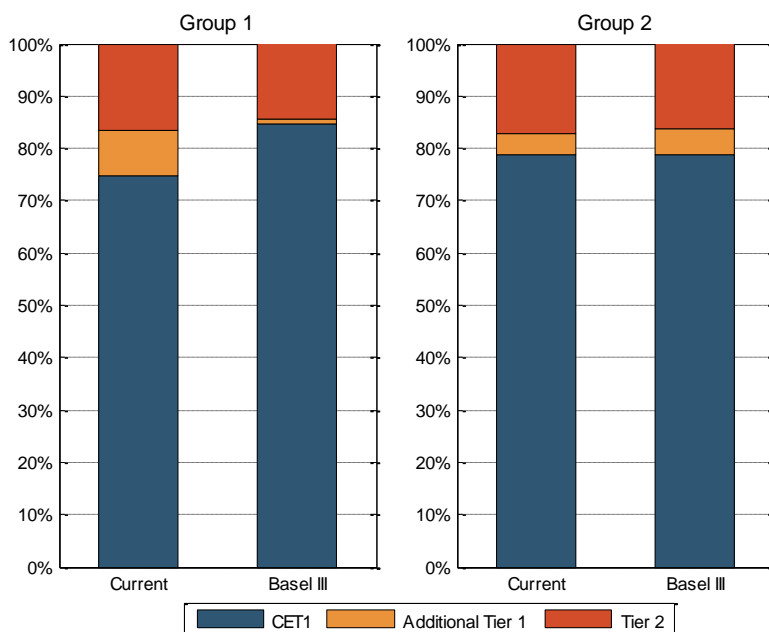
### 3.1 Definition of capital

Figure 8 shows the composition of total capital for Group 1 and Group 2 banks under the current national regime and after full implementation of Basel III.

For Group 1 banks, the share of Basel III CET1 to total capital is 85%. Additional Tier 1 and Tier 2 capital amounts to 1% and 14% of the total capital of Group 1 banks respectively. Within the Group 1 sample, 39% of the banks hold Basel III CET1 capital representing 90% or more of Basel III total capital. In the Group 2 sample, banks hold a somewhat lower share of CET1 at 79% with correspondingly higher shares of additional Tier 1 capital (5%) and Tier 2 capital (16%).

As shown in Figure 8, the level of CET1 capital for Group 1 banks will increase by almost the same amount by which the level of additional Tier 1 capital declines. The level of Tier 2 capital will remain approximately the same. As to Group 2 banks the relevant figures will remain approximately the same, apart from a slight increase in additional Tier 1 capital and the respective decrease of equal magnitude in the Tier 2 capital.

**Figure 8: Structure of regulatory capital under the current national regime and Basel III**



Under the new definition of capital there are additional and stricter conditions to be met for capital instruments to be considered as Tier 1 or Tier 2 capital, thus generally the amounts of Tier 1 and total capital for both Group 1 and Group 2 banks decrease sharply.

The CET1 of Group 1 banks shows a decrease of about 16%, while Tier 1 and total capital decrease by 24% and 26% respectively. This indicates that the effect of subtracting all deductions from CET1 is less of a constraint than the new conditions that additional Tier 1 and Tier 2 capital have to meet.

Group 2 banks with a decrease of about 22% are generally more constrained in relation to CET1 than Group 1 banks, while the decrease in Tier 1 and total capital is lower. The notable decrease in CET1 is driven by the large Group 2 banks whose CET1 decreases by more than 24%, while the decrease for small Group 2 banks is only 8.5%. There is a similar but smaller effect on Tier 1 and total capital.

**Table 4: Relative percentage change in CET1, Tier 1 and total capital**

	Number of banks	CET1	Tier 1	Total capital
<b>Group 1</b>	<b>41</b>	<b>-16.1</b>	<b>-24.0</b>	<b>-25.9</b>
<b>Group 2</b>	<b>126</b>	<b>-21.8</b>	<b>-21.0</b>	<b>-21.9</b>
Large Group 2	45	-24.3	-22.3	-23.3
Small Group 2	81	-8.5	-14.1	-14.9

### 3.2 Impact of capital deductions on CET1

As noted above, reductions in capital ratios under the Basel III framework are partly attributed to capital deductions previously not applied to the CET1 capital. Table 5 shows the impact of the various categories on the gross CET1 capital (i.e., CET1 before applying deductions) of Group 1 and Group 2 banks.

**Table 5: CET1 deductions as a percentage of gross CET1**

	Number of banks	Goodwill	Intangibles	DTA	Financials	MSR	DTA above threshold	Excess above 15%	Other	Total
<b>Group 1</b>	<b>41</b>	<b>-13.3</b>	<b>-3.4</b>	<b>-3.5</b>	<b>-3.5</b>	<b>0.0</b>	<b>-1.0</b>	<b>-1.6</b>	<b>-3.6</b>	<b>-29.8</b>
<b>Group 2</b>	<b>126</b>	<b>-7.8</b>	<b>-2.7</b>	<b>-3.0</b>	<b>-6.7</b>	<b>0.0</b>	<b>-3.7</b>	<b>-2.1</b>	<b>-4.0</b>	<b>-29.9</b>
Large Group 2	45	-8.6	-2.7	-3.4	-7.3	0.0	-4.1	-2.4	-4.2	-32.7
Small Group 2	81	-3.8	-2.2	-0.7	-3.4	0.0	-1.2	-0.5	-2.9	-14.8

In aggregate, deductions reduce gross CET1 of Group 1 banks by 29.8% with goodwill being the most important driver (13.3%), followed by the change in the treatment of DTA and holdings of capital of other financial companies (3.5% each). For Group 2 banks, average results show that the overall CET1 deduction of 29.9% is mainly attributed to goodwill, followed closely by holdings of capital of other financial companies (6.7%). However, it should be noted that these results are driven by large Group 2 banks (defined as those with Tier 1 capital in excess of EUR 1.5 billion). Without taking these banks in Group 2 into account, the overall decline of gross CET1 due to deductions would be reduced to 14.8%.



## 4. Changes in risk-weighted assets

---

Reductions in capital ratios under Basel III are also attributed to increases in risk-weighted assets as shown in Figure 9. This effect is decomposed in Table 6 in the following three categories:

- Definition of capital:** here we distinguish three effects, the column heading '50/50' measures the increase in risk-weighted assets applied to positions which are currently deducted under the Basel II framework and are risk-weighted at 1250% under Basel III (e.g. securitisation exposures, equity exposures under the PD/LGD approach, significant investments in commercial entities). The column 'Other' includes the effect of lower risk-weighted assets for exposures that are currently included in risk-weighted assets but receive a deduction treatment under Basel III. The negative sign indicates that this effect reduces the RWA. This relief in RWA is mainly technical since it is compensated by deductions from capital. The column heading 'Threshold' measures the increase in risk-weighted assets for exposures that fall below the 10% and 15% limits for CET1 deduction.
- Credit Value Adjustment (CVA):** this column measures the new capital charge for credit valuation adjustments. The effects of capital charges for exposures to CCPs are not included.
- Other:** this column measures the higher capital charge that results from increasing the asset correlation parameter for exposures of large financial institutions under the IRB approaches to credit risk. In addition, the higher haircuts for credits collateralised by securitisations are taken into account.

### 4.1 Overall results

Due to the introduction of Basel III, risk-weighted assets for Group 1 banks increase overall by 9.9%. The capital charges for CVA account for 4.2% of the overall increase in RWA, followed by changes due to an increase in risk weights for exposures that fall below the 10% and 15% limits for CET1 deduction (+3.5%) and the change for positions which are risk-weighted by 1250% under Basel III (+2.3%). Other positions contribute to 1.9% of the overall increase in RWA.

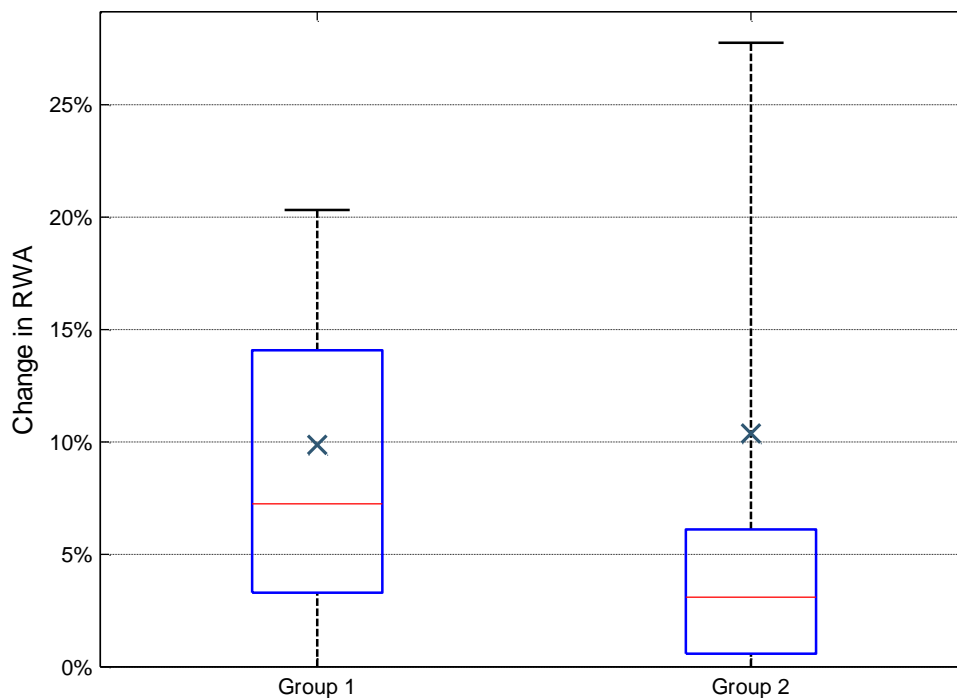
For Group 2 banks, aggregate RWA shows an overall increase of 10.4%. This relatively high increase for Group 2 banks is driven by a small number of large Group 2 banks. If those banks are excluded from the sample, the average increase in RWA is 3.6%. As expected, CVA capital charges increase RWA only by 2.4%, as Group 2 tends to be less exposed to counterparty credit risk. The change of the Basel II 50/50 deductions to a 1250% risk weight treatment causes the most significant increase in RWA (5.1%), while the increase attributable to items that fall below the 10%/15% thresholds account for 2.5% of the overall increase in RWA.

**Table 6: Changes in RWA per country, all banks (%)**

	Number of banks	RWA Share	Total	Definition of capital			CVA	Other*
				50/50	threshold	other		
<b>Group 1</b>	<b>41</b>	<b>100.0</b>	<b>9.9</b>	<b>2.3</b>	<b>3.5</b>	<b>-2.0</b>	<b>4.2</b>	<b>1.9</b>
<b>Group 2</b>	<b>126</b>	<b>100.0</b>	<b>10.4</b>	<b>5.1</b>	<b>2.5</b>	<b>-0.7</b>	<b>2.4</b>	<b>1.1</b>
Large Group 2	45	81.9	11.9	6.2	2.7	-0.8	2.6	1.1
Small Group 2	81	18.1	3.6	0.3	1.6	-0.4	1.4	0.7

\* 'Other' includes increases in RWA due to a higher asset correlation and higher haircuts for collateral.

**Figure 9: Change of RWA relative to Basel II.5 (for conventions please refer to section 1.2)**



## 4.2 Impact of the rules on counterparty credit risk (CVA only)

CVA risk capital charges lead to a 4.2% increase in total RWA for the sample of Group 1 banks (6.0% in the previous report), of which 2.2% is attributed to the application of the standardised method and 2.1% to the application of advanced methods. The impact on Group 2 banks is a 2.6% increase in RWA over a subsample of 92 banks (3.1% in the previous report), totally attributable to the standardised method. Further details on CVA amounts are provided in Table 7.

**Table 7: Changes in RWA for CVA (%)**

	Number of banks	CVA vs credit RWA	Credit Stand. method	Credit Adv. method	CVA vs total RWA	Total Stand. method	Total Adv. method
<b>Group 1</b>	<b>41</b>	<b>5.1</b>	<b>2.6</b>	<b>2.5</b>	<b>4.2</b>	<b>2.2</b>	<b>2.1</b>
<b>Group 2</b>	<b>92</b>	<b>2.9</b>	<b>2.9</b>	<b>0.0</b>	<b>2.6</b>	<b>2.6</b>	<b>0.0</b>
Large Group 2	43	3.1	3.1	0.0	2.7	2.7	0.0
Small Group 2	49	2.0	2.0	0.0	1.8	1.8	0.0

## 5. Leverage ratio

---

The changes in the Basel III LR framework, published by BCBS in January 2014<sup>27</sup>, are not reflected in the June 2013 data, which form the basis for the following analyses. Data necessary to calculate the LR under the new definition will be collected starting from the next round of the data collection, i.e. 31 December 2013. Therefore, the calculations regarding the LR are still based on the June 2013<sup>28</sup> consultation paper. The LR are expected to increase if the new changes from January 2014 are taken into account.

A simple, transparent, non-risk based LR has been introduced in the Basel III framework in order to act as a supplementary measure to the risk-based capital requirements. It is primarily intended to restrict the build-up of leverage in the banking sector and to complement the risk-based capital requirements with a non-risk-based ‘backstop’ measure. Furthermore, the LR should provide an extra layer of protection against model risk and measurement error.

To interpret the results of the leverage ratio section, it is important to understand the terminology used to describe a bank’s leverage. Generally, when a bank is referred to as having more leverage, or being more leveraged, this refers to a multiple of exposures to capital (i.e. 50 times) as opposed to a ratio (i.e. 2.0%). Therefore, a bank with a high level of leverage will have a low leverage ratio.

Forty-one Group 1 and 125 Group 2 banks have provided sufficient data to calculate the leverage ratio according to the Basel III framework.

It is important to recognise that the monitoring results may underestimate the amount of capital that will actually be held by the bank over the next few years, as the Basel III capital figures reported in this monitoring exercise assume that all common equity deductions are fully phased-in and all non-qualifying capital instruments are fully phased-out. Thus, these assumptions, ceteris paribus, underestimate the amount of Tier 1 capital and total capital held by banks under current rules, as they do not allow for any recognition of non-qualifying instruments which are actually phased-out over a nine-year horizon. In this exercise, CET1, Tier 1 capital and total capital could be very similar if all (or most of) the banks’ additional Tier 1 and Tier 2 instruments are considered as non-qualifying under Basel III. As the implementation date of the leverage ratio approaches, this will become less of an issue.

Figure 10 gives an indication of the distribution of the results across participating banks. The thick red line shows the calibration target of 3% while the thin red lines represent the 50<sup>th</sup> percentile<sup>29</sup>

<sup>27</sup> Basel Committee on Banking Supervision, Basel III leverage ratio framework and disclosure requirements, January 2014 (<http://www.bis.org/publ/bcbs270.pdf>).

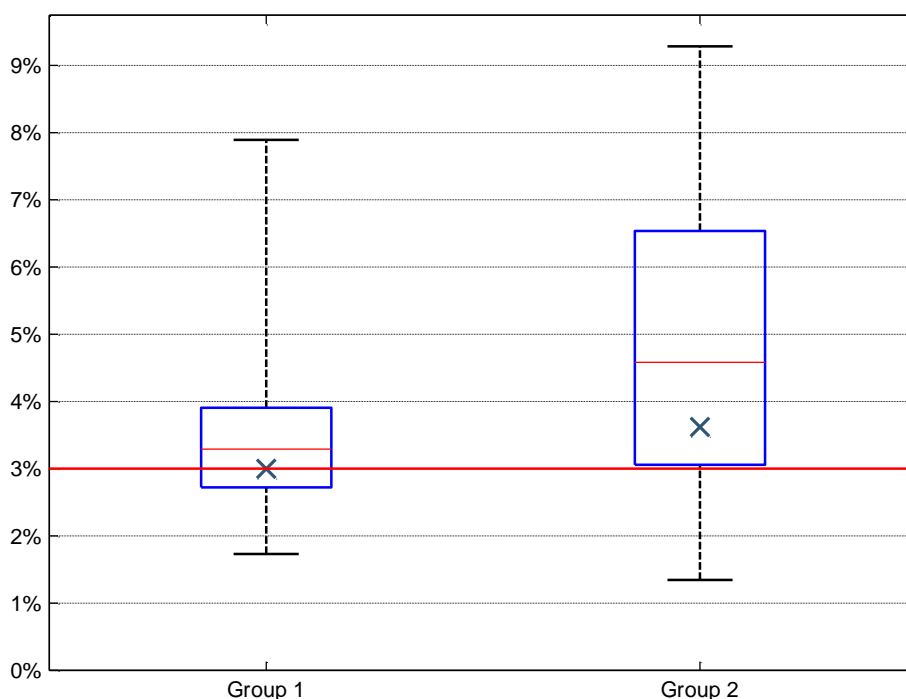
<sup>28</sup> Basel Committee on Banking Supervision, Revised Basel III leverage ratio framework and disclosure requirements, June 2013 (<http://www.bis.org/publ/bcbs251.pdf>).

<sup>29</sup> A percentile is the value of a variable below which a certain per cent of observations fall. For example, the 25<sup>th</sup> percentile is the value below which 25 per cent of the observations may be found.

(the 'median'), i.e. 50% of all observations are below and 50% are above this value. The weighted average is shown as 'x'. For further information on the methodology see Section 1.2.

The distribution and summary statistics of the LR for Group 2 banks remained fairly unchanged compared to the previous report. It should be noted that the distribution of leverage ratios among Group 2 banks exhibited higher dispersion than among Group 1, following the same pattern as in the previous report. This could be explained by the fact that the Group 2 sample is more heterogeneous since it consists of a larger number of banks covering a broad range of business models.

**Figure 10: Distribution of LR by bank group (for conventions please refer to section 1.2)**



Assuming full implementation of Basel III, the average Basel III Tier 1 LR would be 3.0% for Group 1 banks (a small increase compared to the 2.9% reported six months ago) and 3.6% for Group 2 banks (remained unchanged since previous reporting date). A total of 65.9% of Group 1 banks and 76.0% of Group 2 banks would fulfil a Basel III leverage ratio of 3.0%. The shortfalls of Tier 1 capital due to the LR would amount to EUR 100.5 billion for Group 1 and EUR 27.3 billion for Group 2 respectively.

Assuming the implementation of a LR under the current definition of capital, the average LR would be 3.9% and 4.6% for Group 1 and Group 2 banks respectively. The shortfall of Tier 1 capital caused by a current LR of 3.0% would amount to EUR 17.5 billion for Group 1 banks and EUR 9.5 billion for Group 2 banks.

**Table 8: LR and capital shortfall under current rules and Basel III**

	Number of banks	LR under current rules	Hypothetical shortfall from 3% threshold in EUR billion	LR under Basel III	Hypothetical shortfall from 3% threshold in EUR billion
<b>Group 1</b>	<b>41</b>	<b>3.9</b>	<b>17.5</b>	<b>3.0</b>	<b>100.5</b>
<b>Group 2</b>	<b>125</b>	<b>4.6</b>	<b>9.5</b>	<b>3.6</b>	<b>27.3</b>
Large Group 2	45	4.7	4.8	3.7	20.1
Small Group 2	80	3.8	4.7	3.2	7.2

To allow for comparisons over time, Figure 11 is based on the consistent sample of banks which is available over the entire observation period. The consistent sample comprises fewer banks than the current period's sample. For this reason, the results in the figure below may differ from the results shown in the table above. It is notable that the revisions of the BCBS definition of LR as of June 2013 are already incorporated in the data as of this reporting date.<sup>30</sup> Those revisions should generally lead to a slight increase of exposure (*ceteris paribus*).

Figure 11 shows the change of the LR over the last two years. Group 2 banks have generally met the LR over the whole period and the levels have fluctuated around 3.4%. The average LR for Group 1 banks is lower; it increased until June 2012 but remained at or slightly below the 3% target since then.

<sup>30</sup> BCBS: *Revised Basel III leverage ratio framework and disclosure requirements*, June 2013, <http://www.bis.org/publ/bcbs251.pdf>

**Figure 11: Change in LR by bank group (%)**

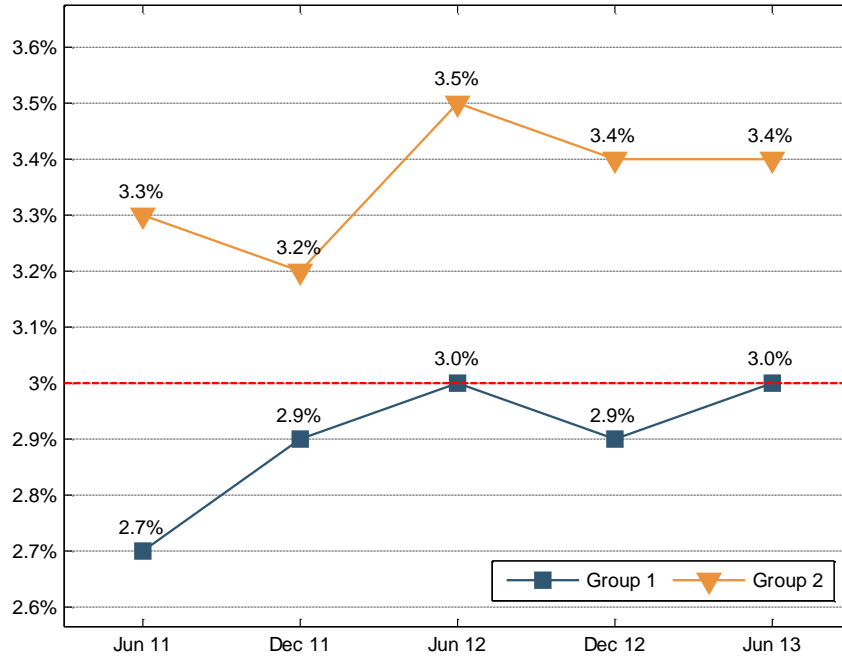


Figure 12 illustrates the composition of the LR exposure for Group 1 and Group 2 banks. It shows that the derivative exposure (also considering the net potential future exposure of off-balance-sheet derivatives) and securities financing transactions amount to 21% of the total leverage exposure for Group 1 banks, but only to 7% of the total leverage exposure for Group 2 banks.

**Figure 12: Composition of leverage exposure (%)**

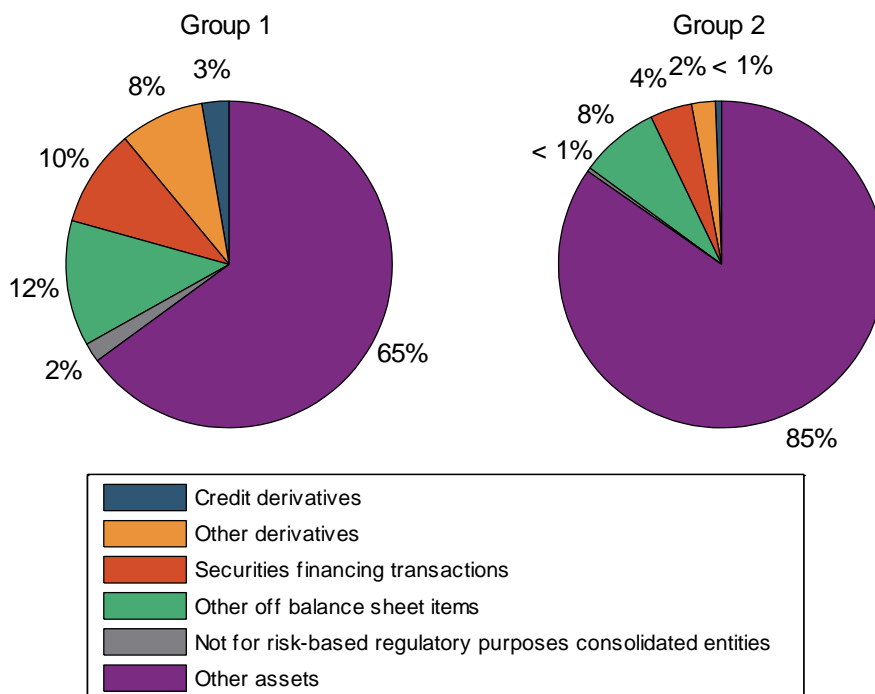


Table 9 shows the average Basel III leverage ratio under the assumption that banks have already fulfilled the risk-based capital requirements for the Tier 1 ratio of 6.0% and 8.5% respectively. Furthermore, based on this assumption the table also shows the additional Tier 1 capital shortfall that banks would still need to just meet the target level of 3.0% for the LR.

Assuming that banks with a risk-based Tier 1 ratio below 8.5% would have raised capital to meet the target ratio of 8.5%, 24% of Group 1 and 17% of Group 2 banks would show a LR below the 3% target level. The additional shortfall of Tier 1 capital would amount to EUR 50.3 billion for Group 1 banks and EUR 13.9 billion for Group 2 banks respectively.

**Table 9: Additional shortfall of Tier 1 capital as a result of the LR requirement**

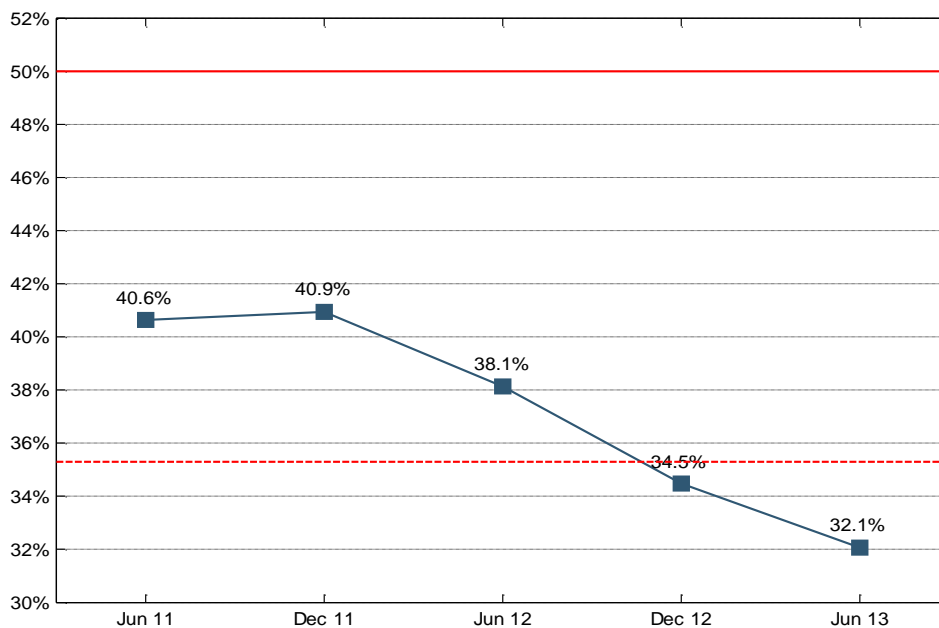
	Number of banks	6% Tier 1		8.5% Tier 1	
		LR (%)	Shortfall in EUR bn	LR (%)	Shortfall in EUR bn
<b>Group 1</b>	<b>41</b>	<b>3.0</b>	<b>93.7</b>	<b>3.3</b>	<b>50.3</b>
<b>Group 2</b>	<b>125</b>	<b>3.9</b>	<b>16.0</b>	<b>4.3</b>	<b>13.9</b>
Large Group 2	45	4.1	10.4	4.5	9.1
Small Group 2	80	3.4	5.6	3.7	4.8

The implementation of a LR should not detract any positive incentives of the risk-based approaches. Therefore, the interaction of the LR with risk-based factors is monitored carefully.



Figure 13 shows the development of RWA relative to leverage exposure on average. This ratio is constantly decreasing since the reporting date of December 2011, which is caused by both a decrease in RWA and an increase in exposure (see also Figure 5). The red lines (50% and 35.3% respectively) represent the relation between RWA and leverage exposure at which the risk-based Tier 1 capital requirement (i.e. 6.0% and 8.5% of RWA respectively) is equal to the Tier 1 capital requirement caused by the 3% LR.<sup>31</sup> The ratio below each red line implies that the LR tends to be the binding constraint rather than the risk-based Tier 1 capital ratio. This has been the case since December 2012 for the Tier 1 capital target ratio of 8.5%. However, this observation can be partly attributed to changes in the exposure definition for the LR that came into effect as of December 2012. One way of monitoring the change in the LR definition is to consider exposure amounts which are not directly impacted by these changes. If we consider the banking book positions instead of total assets and credit RWA instead of total RWA we find that after December 2012 the decreasing trend in the ratio of RWA to leverage exposure is no longer as strong as in Figure 13. Therefore, Figure 13 does not necessarily imply that average risk weights in the lending business are decreasing as suggested by the downward sloping curve in the last two periods.

**Figure 13: Relation of RWA to leverage exposure, Group 1**



<sup>31</sup> The LR of 3% and the risk-based target ratio of 8.5% for Tier 1 capital result in the same capital requirement as if a bank's RWA amounted to 35.3% of leverage exposure, which derives as the quotient of 3/8.5. The same methodology applies for the 6% minimum requirement.

## 6. Liquidity

---

### 6.1 Liquidity coverage ratio

One of the new minimum standards is a 30-day LCR which is intended to promote short-term resilience to potential liquidity disruptions. The LCR requires banks to have sufficient high-quality liquid assets to withstand a stressed 30-day funding scenario. The LCR defines the minimum stock of unencumbered, high-quality liquid assets that must be available to cover the net outflow expected to occur in a severe stress scenario. Cash inflows are subject to a cap of 75% of total outflows. Consequently, a minimum of 25% of cash outflows have to be covered by liquid assets. According to recent revisions of the LCR<sup>32</sup>, the minimum requirement will be set at 60% in 2015 and rise in equal annual steps to reach 100% in 2019.

As of June 2013, the average LCR is 104% and 132% for Group 1 and Group 2 banks respectively. Compared to the previous period and assuming a consistent sample of banks, the LCR of Group 1 banks decreased by 5 percentage points to 104%, whereas the weighted average ratio of Group 2 banks increased from 127% to 133%.

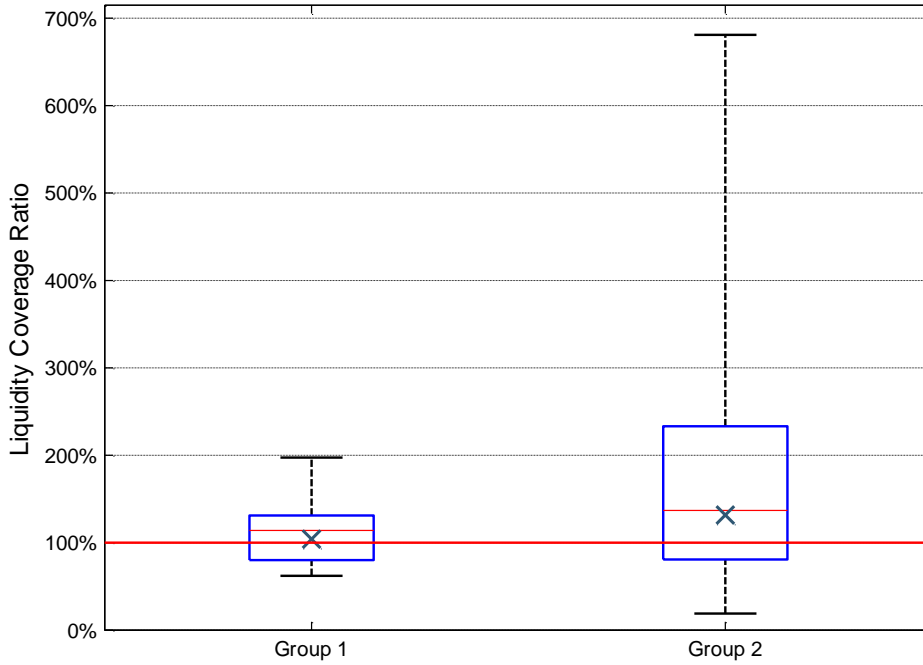
Twenty-four of the 41 banks (58.5%) in Group 1 already meet the 100% requirement, while only one bank is still below 60%. The banks in Group 2 are more concentrated either above 100% or below 60%. More specifically, 88 out of the 127 Group 2 banks (69.3%) reached an LCR of at least 100%, while 23 (18.1%) need to improve their liquidity positions to reach the minimum requirement of 60% set for 2015.

The total LCR shortfall is EUR 262 billion (of which EUR 217 billion correspond to Group 1 and EUR 45 billion to Group 2), which represents 0.8% of total assets (EUR 31.7 trillion). The shortfall considered here is the sum of the differences between the net outflows and the stock of HQLA for all the banks with an LCR that falls below the threshold of 100%, not reflecting the surplus of the banks already meeting the full 100% requirement. As a consequence, the reported shortfall amount represents a conservative proxy of the actual shortfall of banks as it does not include any assumptions on the reallocation of liquidity between individual banks or within the system as such.

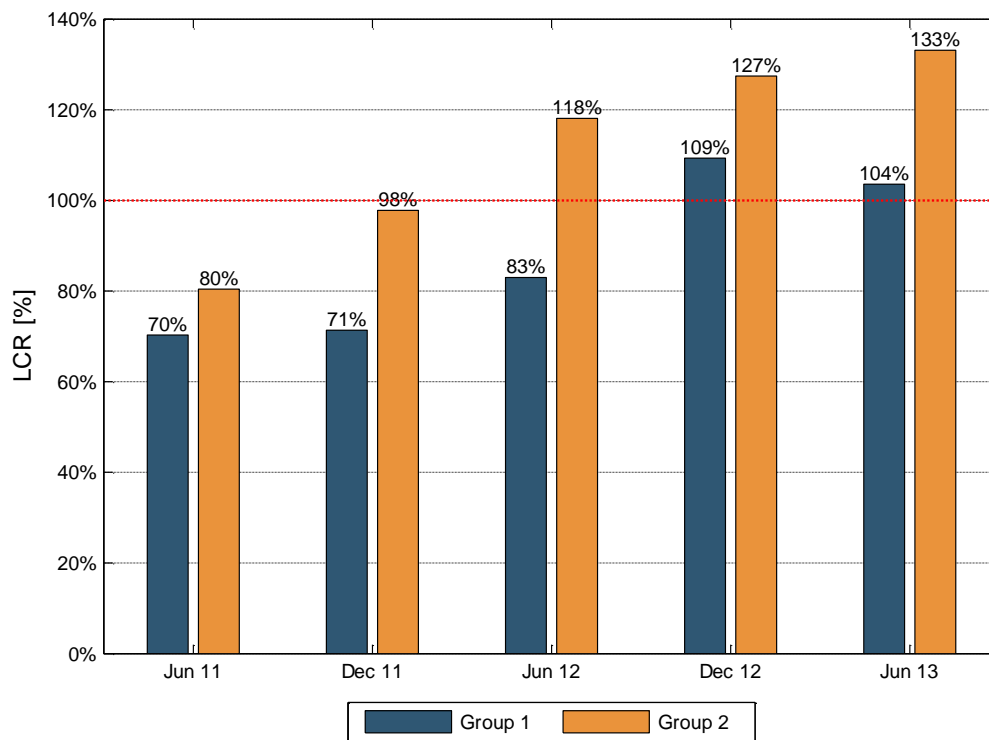
Figures 14 and 15 provide an overview of the LCR by group, and its change over time. They illustrate that the Group 2 sample is more heterogeneous, with LCR varying within much broader bounds; also, while in the previous rounds the LCR of the two groups moved up together, in the last monitoring round they diverged, with the group of large, internationally active banks taking a downward turn.

<sup>32</sup> Basel Committee on Banking Supervision, Basel III: *The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013 ([www.bis.org/publ/bcbs238.pdf](http://www.bis.org/publ/bcbs238.pdf)).

**Figure 14: Distribution of LCR by bank group (for conventions please refer to section 1.2)**



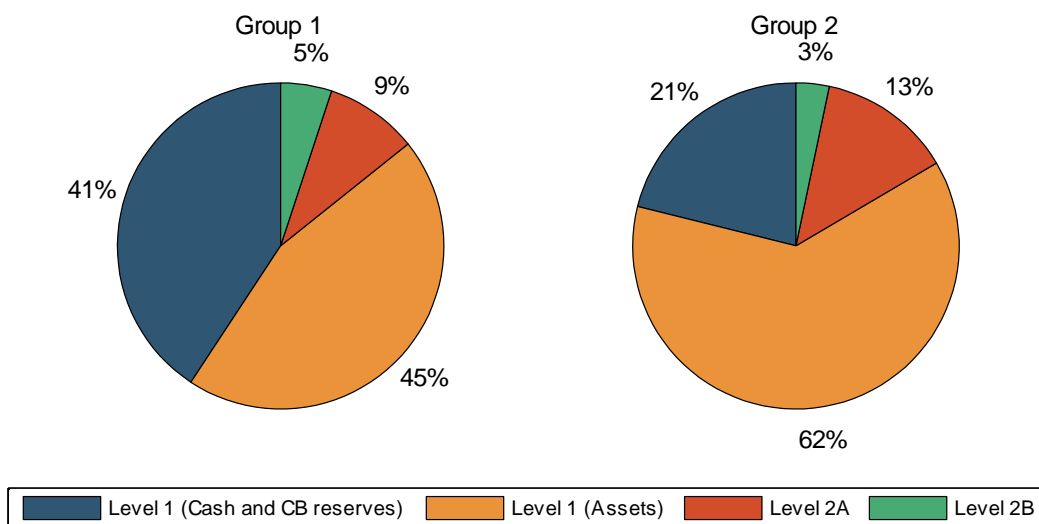
**Figure 15: Change in LCR by bank group (%)**



The split between Level 1 and Level 2 assets remained mainly the same as in the previous monitoring round, with 86% (Group 1) and 84% (Group 2) of the HQLA stock being represented by Level 1 assets (Figure 16). However, we observe a shift from cash and CB reserves towards other Level 1 assets such as bonds issued by sovereigns, central banks and public sector entities. This effect is partially caused by maturing long-term refinancing operations of the European Central Bank, which were implemented to provide liquidity during the financial crisis and are gradually reaching expiry.

One bank in Group 1 and 33 banks in Group 2 are affected by the cap on Level 2A or 2B assets, totalling EUR 40 billion of capped assets (Table 10). In total, had the Level 2 assets not been capped, seven banks that currently have an LCR below 100% would have passed this threshold. Moreover, seven banks would jump from below 60% to above 60%, while three of them would jump from below 60% to above 100%.

**Figure 16: Composition of liquid assets**



**Table 10: Impact of the cap on liquid assets**

	Cap on Level 2A assets		Cap on Level 2B assets		Shortfall of banks where Level 2A or Level 2B cap applies EUR bn
	# of banks where Level 2A cap applies	Reduction of Level 2A assets due to cap EUR bn	# of banks where Level 2B cap applies	Reduction of Level 2B assets due to cap EUR bn	
<b>Group 1</b>	<b>1</b>	<b>14.8</b>	<b>0</b>	<b>0.0</b>	<b>7.8</b>
<b>Group 2</b>	<b>26</b>	<b>24.4</b>	<b>11</b>	<b>0.5</b>	<b>16.3</b>
Large Group 2	7	19.8	2	0.2	14.5
Small Group 2	19	4.6	9	0.3	1.8

The structure of the outflows and inflows (presented in Table 11) is broadly in line with the one observed in December 2012. Both inflows and outflows as percentage of balance-sheet liabilities increased for Group 1 banks and decreased for Group 2 banks. This deepening gap between the two groups could be the result of larger banks relying more on the market for funding as opposed to both the previous round and to smaller banks, while the smaller banks rely more on retail funding, relative to their total liabilities. A total of EUR 9 billion inflows have been capped for two Group 1 banks and EUR 7 billion for 18 Group 2 banks.

**Table 11: LCR outflows and inflows (post-factor) as a percentage of balance-sheet liabilities**

	Group 1	Group 2
Number of banks	41	127
Unsecured retail and small business customers	1.7	1.8
Unsecured non-financial corporates	2.7	1.1
Unsecured sovereign, central bank, public sector entities and other counterparties	0.7	0.4
Unsecured financial institutions and other legal entities	5.2	3.3
Other unsecured wholesale funding incl. unsecured debt issuance	1.2	1.2
Secured funding and collateral swaps	2.0	0.8
Collateral, securitisations and own debt	0.3	0.2
Credit and liquidity facilities	1.4	0.5
Other contractual and contingent cash outflows including derivative payables	2.2	1.6
<b>Total outflows</b>	<b>17.3</b>	<b>10.8</b>
Secured lending	1.6	0.5
Retail and small business customers, non-financial corporates and other entities	1.5	1.1
Financial institutions	1.8	1.5
Other cash inflows including derivative receivables	0.4	0.3
<b>Total inflows before applying the 75% cap</b>	<b>5.2</b>	<b>3.4</b>
<b>Total inflows after applying the 75% cap</b>	<b>5.2</b>	<b>3.2</b>

## 6.2 Net Stable Funding Ratio

The second liquidity standard introduced by the Basel III is the Net Stable Funding Ratio (NSFR), a longer-term structural ratio to address liquidity mismatches and provide incentives for banks to use stable sources to fund their activities. For the purposes of the current Basel III monitoring exercise, data on NSFR was collected and processed on the basis of the original NSFR definition issued in December 2010<sup>33</sup>. In January 2014, the Basel Committee on Banking Supervision (BCBS) published a new consultative paper<sup>34</sup> proposing revisions to the definition of NSFR. Since the results based on old NSFR definition would deviate from the results based on the new NSFR definition, and given that the new NSFR framework has not been finalised, the EBA decided to not present any results on NSFR in the June 2013 monitoring exercise report. The exclusion of the NSFR part from the EBA's Basel III monitoring exercise aligns with the BCBS's practice of not presenting, in its pertinent publications, the results based on the old NSFR definition.

<sup>33</sup> Basel Committee on Banking Supervision, Basel III: International framework for liquidity risk measurement, standards and monitoring, December 2010 ([www.bis.org/publ/bcbs188.pdf](http://www.bis.org/publ/bcbs188.pdf)).

<sup>34</sup> Basel Committee on Banking Supervision, Basel III: the Net Stable Funding Ratio – consultative document, January 2014 ([www.bis.org/publ/bcbs271.pdf](http://www.bis.org/publ/bcbs271.pdf)).