

## Basel III monitoring exercise

Results based on data as of 31 December 2012



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# Results of the Basel III monitoring exercise based on data as of 31 December 2012

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## Abbreviations

CCF	Credit conversion factor
CCPs	Central counterparties
CET1	Common equity tier 1
CRD	Capital requirements directive
CRR	Capital requirements regulation
CVA	Credit value adjustment
DTA	Deferred tax assets
EBA	European Banking Authority
GHOS	Group of Governors and Heads of Supervision
G-SIB	Global systemically important banks
ISG	Impact Study Group
LCR	Liquidity coverage ratio
LR	Leverage ratio
MSR	Mortgage servicing rights
NSFR	Net stable funding ratio
PSE	Public sector entities
RWA	Risk-weighted assets

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## Executive summary

Since the finalisation of the new global regulatory framework (referred to as “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 fourth publication of results of the Basel III monitoring exercise<sup>2</sup> and summarises the aggregate results using data as of 31 December 2012. A sample of 170 banks, which submitted data for this exercise, comprises 42 Group 1 banks and 128 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: 93%), while for Group 2 banks it was lower with a larger variation across jurisdictions (aggregate coverage: 31%). Furthermore, Group 2 bank results were driven by a relatively small number of large but non-internationally active 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**<sup>5</sup>, i.e. transitional arrangements such as the phase-in of deductions and grandfathering arrangements were **not** taken into account<sup>6</sup>. Since the new EU directive and regulation were **not** yet finalised at the time of the report’s reference date of 31 December 2012, 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 identification of effective changes in banks’ capital base alone, instead of including changes based on subjective assumptions about banks’ future profitability or behavioural responses. As a consequence, the monitoring results in this report are not 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.

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<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> The first public report was published in April 2012, based on data as of 30 June 2011. The second public report was published in September 2012, based on data as of 31 December 2011 while the third report was published in March 2013, based on data as of 30 June 2012. See European Banking Authority, *Results of the Basel III monitoring exercise based on data as of 30 June 2012*, March 2013 (<http://www.eba.europa.eu/documents/10180/16145/ISG-Basel-III-monitoring-exercise---Public-Report--Final-.pdf/032c18a8-979f-43b7-96ed-2d279b93c5a2>).

<sup>3</sup> Group 1 banks are those with Tier 1 capital in excess of €3 bn and are internationally active. All other banks are categorised as Group 2 banks.

<sup>4</sup> There are 19 Group 2 banks that have Tier 1 capital in excess of €3 bn. These banks account for 60% of total Group 2 RWA (current definition of RWA).

<sup>5</sup> Except for the rules related to central counterparties. The impact of these rules will be included only in the next reports, given recent finalisation of corresponding regulatory rules by the Basel Committee.

<sup>6</sup> Except for securitisation positions in the trading book that do not belong to the correlation trading portfolio as stated in Annex I, para 16a of Directive 2006/49/EC.

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The actual capital and liquidity shortfalls related 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 monitoring exercise aims at providing 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 global systemically important banks (G-SIBs) are included where applicable;
- Changes to the definition of capital that result from the new capital standard, referred to as common equity Tier 1 (CET1), including modified rules on capital deductions, and changes to the eligibility criteria for Tier 1 and total capital;
- Changes in the calculation of risk-weighted assets (RWA) resulting from changes to the definition of capital and counterparty credit risk requirements;
- The capital conservation buffer;
- The leverage ratio; and
- The liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR).

## Key Results

The main results of the monitoring exercise are summarised below. It is worth noting that whenever the report makes reference to a previous period, this is based on the same sample of banks<sup>7</sup>.

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

Assuming full implementation of the Basel III framework as of 31 December 2012 (i.e. without taking into account transitional arrangements), the CET1 capital ratios of Group 1 banks would decline from an average CET1 ratio of 11.5%, under current rules, to an average CET1 ratio of 8.4%, under the new framework. 98% of Group 1 banks would be at or above the 4.5% minimum while 73% of Group 1 would be at or above the 7.0% target level (ie including the capital conservation buffer). The CET1 capital shortfall for Group 1 banks would be €2.2 bn, with respect to the minimum requirement of 4.5%, and €70.4 bn, 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 first and second half of 2012 was €63.6 bn.

Compared to the previous exercise (reporting date: June 2012), the results show an increase in Group 1 banks' average CET1 ratio of 0.5 percentage points; the corresponding shortfall with respect to the 7% target level (also considering capital surcharge for G-SIBs) decreased from €99.5 bn to €70.4 bn, i.e. by €29.1 bn or 29.3%. For Group 1 banks, this change is partly attributed to the continuous efforts of banks to comply with the requirements of the EU recapitalisation exercise.

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<sup>7</sup> The consistent sample of banks only includes those banks that reported necessary data for all reporting dates (June 2011 to December 2012), to allow for period-to-period comparisons.

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Group 1 banks' average Tier 1 and total capital ratios would decline from 13.0% under current rules to 8.5% under Basel III and from 15.2% to 9.6%, respectively. Capital shortfalls corresponding to the minimum ratios (including the capital conservation buffer and the surcharge for global systemically important banks) amount to €162.5 bn (Tier 1 capital) and €257.5 bn (total capital). The aforementioned figures do not include any additional shortfalls that may arise from additional surcharges stemming from any domestic systemically important banks framework<sup>8</sup>, the countercyclical buffer, the systemic risk buffer, or any other additional Pillar 2 surcharges the supervisor may levy upon the bank. Amid these exclusions, the estimated shortfalls in the present report may understate the actual shortfalls.

For Group 2 banks, the average CET1 ratio would decline from 11.3% under the current regime to 7.9% under Basel III. The respective CET1 shortfall would be approximately €25.9 bn for the target level of 7.0%. The average Tier 1 and total capital ratios of Group 2 banks would decline from 12.0% to 8.5% and from 14.6% to 10.1%, 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 17.6%, compared to current rules, RWAs would increase by 12.8%, on average. For Group 2 banks, while the change in the definition of capital would result in a decline of CET1 by 22.5%, the new rules would increase the RWAs of Group 2 banks by 10.2%. This increase in RWAs for Group 2 banks is driven by a small number of large Group 2 banks.<sup>9</sup> Deductions in CET1 of both Group 1 and Group 2 banks are mainly driven by goodwill (13.5% and 9.0%, respectively), followed by deductions for other financial companies for both Groups (4.6% and 6.8%, respectively).

As to the denominator of regulatory capital ratios, the main driver is the introduction of credit value adjustment (CVA) capital charges which would result in an average RWAs increase of 6.0% for Group 1 and of 2.9% for Group 2 banks. Apart from CVA capital charges, the second source of the increased RWAs, for Group 1 banks, is attributable to the items that fall below the 10%/15% thresholds (3.4%). As Group 2 banks are in general less affected by the revised counterparty credit risk rules due to their different business models, they show a lower increase in overall RWAs (+10.2%) compared to the Group 1 banks. The main contributor to the increase in Group 2 banks is the transition from Basel II 50/50 deductions to a 1250% risk weight. Nevertheless, even within this group, the RWAs increase is impacted by CVA capital charges and to a lesser extent by changes attributable to items that fall below the 10%/15% thresholds.

While the CET1 ratio of Group 2 banks remains at the level of the previous period, the CET1 ratio of Group 1 banks increases from 7.8% to 8.3%. This increase is driven by reductions in risk-weighted assets while the CET1 capital remains unchanged.

Instead of analysing the capital ratio components in isolation, section 2.2 introduces a new measure which analyses the total impact of the Basel III framework on the capital buffer a bank holds above the

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<sup>8</sup> In addition, countries may have a D-SIB regime under which the capital charge for an existing G-SIB bank may be overruled by a higher D-SIB charge.

<sup>9</sup> If those large Group 2 banks are excluded from the sample, the average increase in RWA is 6.7%.

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minimum ratio<sup>10</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. The estimates to this regard show that capital buffer under Basel III would be 5.6 percentage points for Group 1 and 5.9 percentage points for Group 2 lower than the capital buffer under the current regime. For both Group 1 and Group 2, the increased minimum requirements account for more than 40% of the total impact of the Basel III framework on the capital buffer. For Group 1 banks, a significant average impact of 23% and 28% is attributed to the changes in RWAs and capital deductions, respectively. Furthermore, for Group 2 banks, the average impact of 18% and 30% is attributed to the changes in RWA and capital deductions, respectively. At the current reporting date, the impact of the new definition of capital is only of minor importance for the reduction in the banks' capital buffer, amounting, on average, at 4% for Group 1 banks and 9% for Group 2 banks.

### Leverage ratio

Compared to the previous period, the average leverage ratios remained fairly stable. Assuming full implementation of Basel III, Group 1 banks would have an average Basel III Tier 1 leverage ratio (LR) of 2.9%, while Group 2 banks' leverage ratio would be 3.4%. 58% of participating Group 1 and 76% of Group 2 banks would have met the 3% target level as of December 2012. The overall shortfall of those banks which do not fulfil the target level amounts to €106.6 bn for Group 1 and to €26.0 bn for Group 2 banks. The leverage ratio 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 liquidity coverage ratio (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. The current report has taken into account the recent developments on the definition and adequacy of the LCR.<sup>11</sup>

By the end of December 2012, the average LCR of Group 1 banks would have been 109%. The estimated LCR for Group 2 banks shows a continuous increase, over the four ISG monitoring exercises and would be 127.1%, on average, at the end of December 2012. For all banks in the sample, the monitoring results show a shortfall of liquid assets of €225 bn as of year-end.

The NSFR is currently subject to an observation period which includes a review clause to address any unintended consequences prior to their respective implementation dates of 1 January 2018. Group 1 banks reported an average NSFR of 96% (Group 2 banks: 98%). To fulfil the minimum requirement of 100% LCR, banks would need in total additional stable funding of €959 bn in total (Group 1 and Group 2 together). Compared to the previous period, the average NSFR would have remained fairly stable for both Group 1 and Group 2 banks. However, monitoring results showed improved shortfall amounts on aggregate, taking into account only those banks which with an NSFR below 100%. As in previous

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<sup>10</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 current rules.

<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)).

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monitoring exercises, the NSFR showed a substantial dispersion across banks and countries, especially for Group 2 banks.

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## 1. General remarks

In September 2010, the Group of Governors and Heads of Supervision (GHOS), the Basel Committee on Banking Supervision's oversight body, announced a substantial strengthening of existing capital requirements and fully endorsed the agreements reached on 26 July 2010.<sup>12</sup> Since the beginning of 2011, the impact of the new requirements related to these capital reforms and the new liquidity standards is monitored and evaluated by the Basel Committee on Banking Supervision on a semi-annual basis for its member jurisdictions. At European level, this analysis is conducted by the European Banking Authority (EBA), also 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 EU level, i.e. the rules that will be defined by the European Commission through delegated acts in the next years.

This report is the fourth publication of the Basel III monitoring exercise<sup>13</sup> and presents the results of the latest monitoring exercise based on consolidated data of European banks as of 31 December 2012. 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 global systemically important banks (G-SIBs) are included, where applicable;
- Changes to the definition of capital that result from the new capital standard, referred to as common equity Tier 1 (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 to the definition of capital and counterparty credit risk requirements,
- The capital conservation buffer of 2.5%;
- The introduction of a leverage ratio;
- The introduction of the Liquidity Coverage Ratio (LCR); and
- The introduction of the Net Stable Funding Ratio (NSFR).

The related policy documents are:

- *Basel III: A global framework for more resilient banks and banking systems* as well as the Committee's 13 January press release on loss absorbency at the point of non-viability;<sup>14</sup>

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<sup>12</sup> See 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>13</sup> The first public report was published in April 2012, based on data as of 30 June 2011. See European Banking Authority, *Results of the Basel III monitoring exercise as of 30 June 2011*, April 2012 (<http://www.eba.europa.eu/Publications/Quantitative-Impact-Study/Basel-III-monitoring-exercise.aspx>).

<sup>14</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 13 January 2011 press release on loss absorbency at the point of non-viability.

- *Basel III: International framework for liquidity risk measurement, standards and monitoring*,<sup>15</sup>
- *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*<sup>16</sup>, and
- *Global systemically important banks: Assessment methodology and the additional loss absorbency requirement*.<sup>17</sup>

## 1.1 Sample of participating banks

The report includes an analysis of data submitted by 42 Group 1 banks from 14 countries and 128 Group 2 banks from 17 countries. Figure 1 shows the distribution of participation by jurisdiction. Group 1 banks are those that have Tier 1 capital in excess of €3 bn and are internationally active. All other banks are defined as Group 2 banks.

Figure 1: Number of banks submitting data for the monitoring exercise

	Group 1	Group 2
Austria (AT)	3	6
Belgium (BE)	1	2
Denmark (DK)	1	3
Finland (FI)	-	15
France (FR)	5	6
Germany (DE)	7	37
Hungary (HU)	1	2
Ireland (IE)	3	1
Italy (IT)	2	11
Luxembourg (LU)	-	1
Malta (MT)	-	4
Netherlands (NL)	3	16
Norway (NO)	1	5
Poland (PL)	-	5
Portugal (PT)	3	3
Spain (ES)	2	4
Sweden (SE)	4	-
United Kingdom (GB)	6	7
<b>Total</b>	<b>42</b>	<b>128</b>

<sup>15</sup> Basel Committee on Banking Supervision, *Basel III: International framework for liquidity risk measurement, standards and monitoring*, December 2010.

<sup>16</sup> Basel Committee on Banking Supervision, *Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools*, January 2013.

<sup>17</sup> Basel Committee on Banking Supervision, *Globally systemically important banks: Assessment methodology and the additional loss absorbency requirement*, November 2011.

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: 93%). Coverage of Group 2 banks is lower and varies across countries (aggregate coverage: 31%). Group 2 results are driven by a relatively small number of banks sufficiently large to be classified as Group 1 banks, but that have been classified as Group 2 banks by their supervisor because they are not internationally active.

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, ie including only those banks that reported necessary data for all reporting dates to allow for period-to-period comparisons.

## 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 common equity Tier 1 capital ratio is the sum of all banks’ common equity Tier 1 capital for the total sample divided by the sum of all banks’ risk-weighted assets for the total sample. Similarly, the average Tier 1 leverage ratio is the sum of all banks’ Tier 1 capital for the total sample divided by the sum of all banks’ leverage ratio exposures for the total sample.

### Box plots illustrate the distribution of results

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

Thick red line:	Respective minimum capital requirement
Dashed lines:	Respective minima plus the capital conservation buffer (capital) or respective regulatory target level (leverage, liquidity)
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 percent of observations fall. For example, the 25th percentile is the value below which 25 percent of the observations are found.
Black vertical lines (“whiskers”):	The upper end point represents the 95th percentile value, the lower end point the 5th percentile value.

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### 1.3 Interpretation of results

The impact assessment was carried out by comparing banks' capital positions 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>18</sup> results are calculated assuming **full implementation of Basel III**<sup>19</sup>, ie 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 10 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 leverage ratio section. The potential underestimation of Tier 1 capital will become less of an issue as the implementation date of the **leverage ratio 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 leverage ratio (for more details see section 5).

In addition, it is important to note that the monitoring exercise is based on **static balance sheet assumptions**, ie capital elements are only included if the eligibility criteria have been fulfilled 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 modelling 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.

To enable comparisons between the current regulatory regime (CRD III) and Basel III, common equity Tier 1 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 respective national implementation of Basel II.

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<sup>18</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.

<sup>19</sup> Except for the rules related to central counterparties. The impact of these rules will be included in the next reports, given recent finalization of corresponding regulatory rules by the Basel Committee.

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## 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 extensively with banks to ensure data quality, completeness and consistency with the published reporting instructions. Banks are included in the sample for each of the analyses below only to the extent they have provided data of sufficient quality to complete the respective 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 as well as 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>20</sup>), it compares capital ratios under current rules with capital ratios that banks would exhibit if Basel III set of rules was fully implemented at the reporting date.

In this context, it is important to elaborate on the implications that the assumption of full implementation of Basel III has on the monitoring results. The Basel III capital figures reported in this exercise assume that all common equity deductions are fully phased in while all non-qualifying capital instruments are fully phased out. Thus, these amounts may underestimate the amount of Tier 1 capital and total capital held by banks as they do not give any recognition for non-qualifying instruments which are actually phased out over a 10 year horizon.

Figure 2 shows the overall change in common equity Tier 1 (CET1), Tier 1 and total capital ratios if Basel III were fully implemented, as of 31 December 2012.

For Group 1 banks, the impact on the average CET1 ratio is a reduction from 11.5% under current rules to 8.4% under Basel III (a decline of 3.1 percentage points) while the average Tier 1 and total capital ratio would decline from 13.0% to 8.5% and from 15.2% to 9.6% respectively. Group 2 banks' average CET1 ratio is lower than the respective ratio of Group 1 while Group 2 banks' average total capital ratio is higher than the respective ratio of Group 1.

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<sup>20</sup> For details on the transitional arrangements, see paragraphs 94 and 95 of the Basel III framework

Figure 2: Average capital ratios by banking group  
(in percent, unless otherwise stated)

	Number of banks	CET1		Tier 1		Total capital	
		Current	Basel III	Current	Basel III	Current	Basel III
Group 1	40	11.5	8.4	13.0	8.5	15.2	9.6
Group 2	122	11.3	7.9	12.0	8.5	14.6	10.1

The reduction in CET1 ratios is driven both by a new definition of capital (numerator) and by increases in risk-weighted assets (denominator). However, the main driver is capital with CET1 declining by 17.6% while RWA increases by 12.8%, on average of Group 1. Banks engaged heavily in activities subject to counterparty credit risk tend to show the largest denominator 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 decline of CET1 of 22.5%, the new rules on RWA affect Group 2 banks by 10.2%. This relatively high increase for Group 2 banks is driven by a small number of large Group 2 banks.<sup>21</sup>

Figure 3 provides an indication of the distribution of capital ratios among the participating banks. It includes the respective regulatory minimum requirement (thick red line), the weighted average (depicted as “x”) and the median (thin red line), ie the value separating the higher half of a sample from the lower half (that means that 50% of all observations are below this value, 50% are above). Dashed lines indicate the minima plus the capital conservation buffer. For further information on the methodology see section 1.2.

<sup>21</sup> If those large Group 2 banks are excluded from the sample, the average increase in RWA is 6.7%.

Figure 3: Basel III CET1 (left), Tier 1 (middle) and Total (right) capital ratios (in percent)

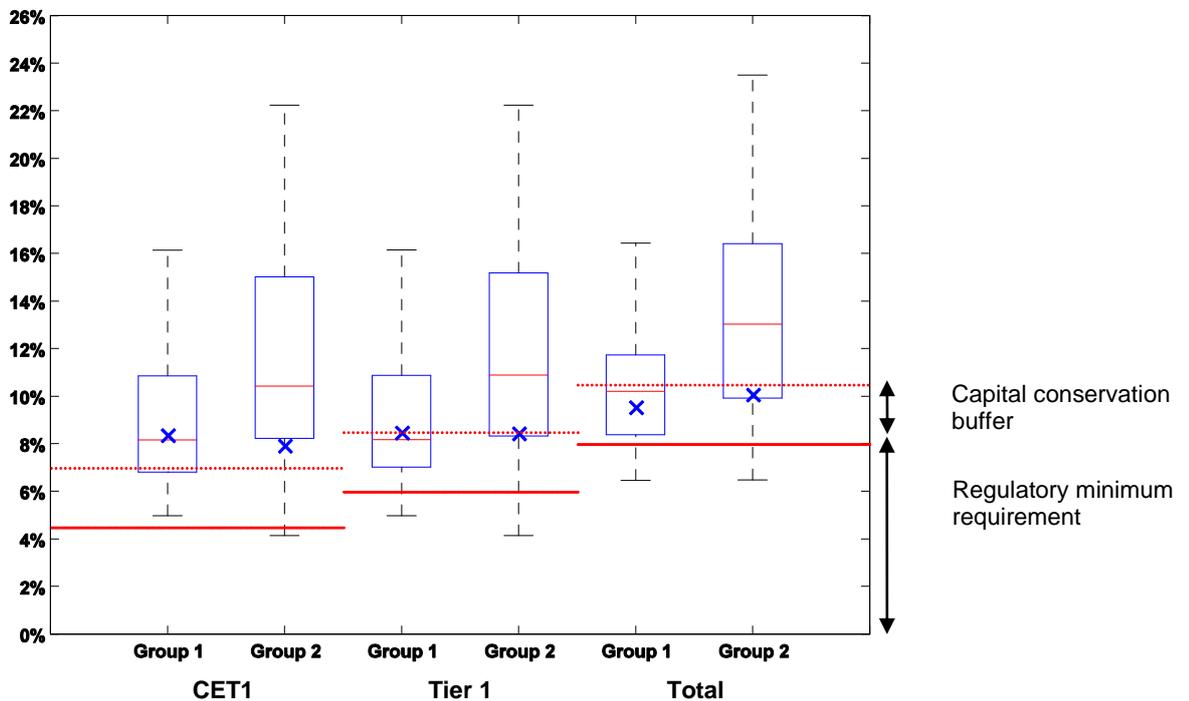
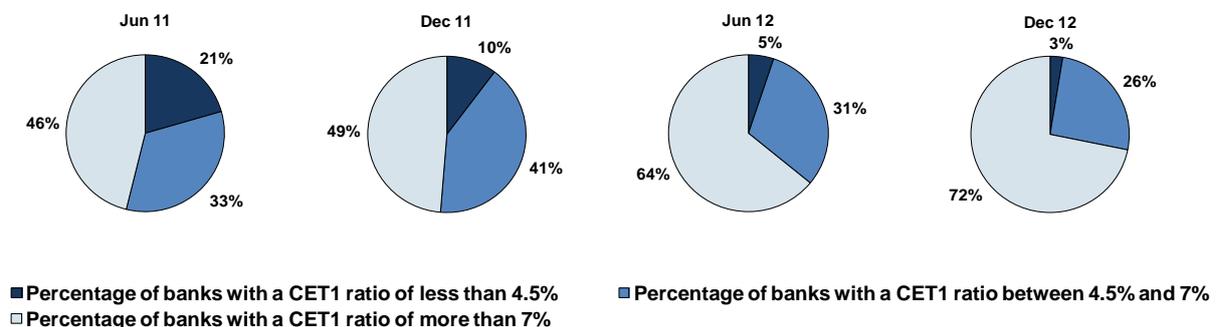


Figure 4 shows that out of the banks in the Group 1 sample, 98% show a CET1 ratio under Basel III that is at least equal to the 4.5% minimum capital requirement and 72% show a CET1 ratio above the 7.0% target ratio (ie, the minimum capital requirement plus the capital conservation buffer) as of end-December 2012. It also indicates that since the last monitoring exercise (ie reporting date as of June 2012) there has been a further shift towards high-quality capital: the number of banks above the 4.5% minimum ratio increased by 2 percentage points since June 2012 and by 18 percentage points since June 2011.

Figure 4: Distribution of Basel III CET1 ratios, Group 1 banks

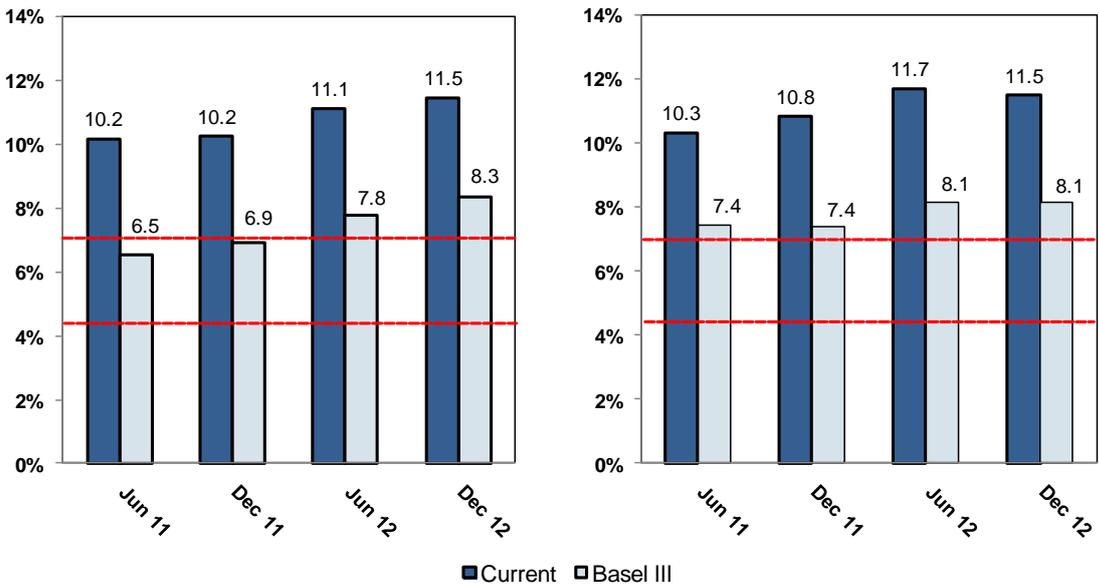


For Group 2 banks the percentage of banks above the 4.5% minimum ratio was observed at almost the same level as in June 2012. Within this sample, 95% report a CET1 ratio equal to or higher than 4.5%; while 84% also achieve the target of 7.0%.

Compared to the previous exercise (reporting date as of June 2012) and based on a consistent sample of banks, the monitoring data show an increase in the average Group 1 banks' CET1 ratio of 0.5 percentage points while for Group 2 banks, the ratio remains unchanged.

Figure 5: Comparison of average CET1 ratios with the previous periods for Group 1 banks (left) and Group 2 banks (right)

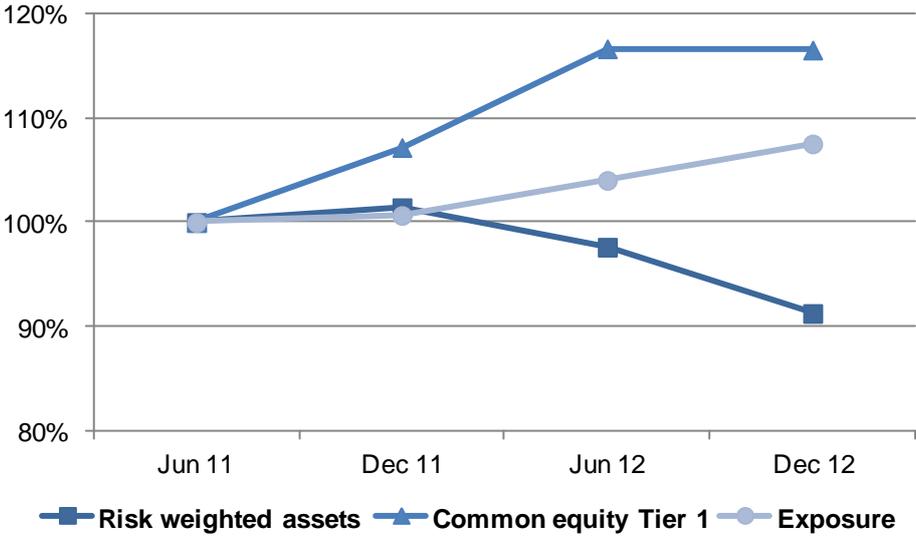
(in percent)



The evolution of RWA and CET1 in Figure 6 explains the increase in the average CET1 ratio for Group 1 banks: while the CET1 has not been significantly increased in percentage terms, the RWA decreased notably from June 2012 to December 2012. While RWA decreased, Figure 6 indicates a rise in the aggregated leverage ratio exposure which is partly driven by a moderate build-up of exposures and changes to the calculation methodology.<sup>22</sup> Importantly, the data for the sample of Group 1 banks do not point to a sector-wide reduction in lending to corporate or retail customers as the aggregated exposures to these borrower types remained roughly unchanged throughout the observation period. In addition, an increase in lending to sovereigns can be observed. Together with decreasing average RWA this implies that banks tend to reduce portfolio risk over time.

<sup>22</sup> The definition of the leverage ratio exposure measure has 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.

Figure 6: Development of CET1, RWA and exposure over time for Group 1 banks



## 2.2 Impact of Basel III on the banks' capital buffer

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

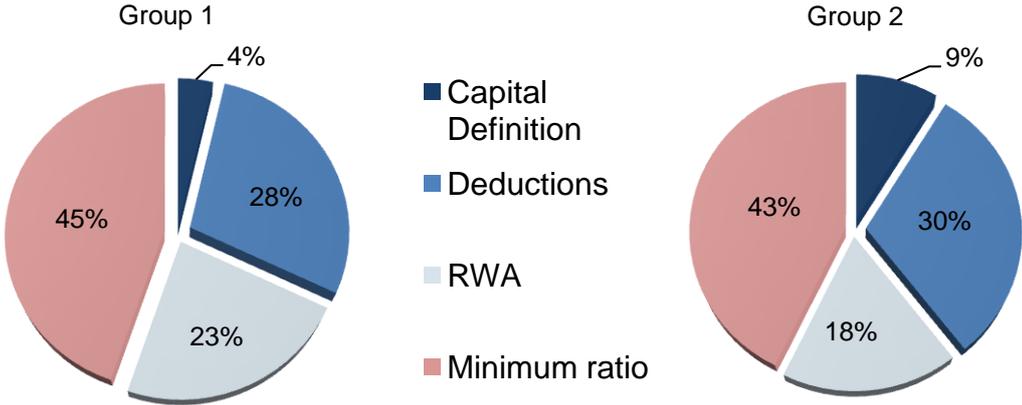
- the new definition of eligible capital
- changes in capital deductions
- changes in risk weighted assets (RWA)
- defining a new required minimum solvency ratio

The total impact of the Basel III framework equals the difference between the capital buffer that a bank holds above the minimum capital ratio under Basel III and the respective buffer under the current regime. In the following, this total impact is broken down into its components, ie the changes in the definition of capital, deductions, RWA and the minimum ratio. This allows comparing the changes induced by each of the capital ratio components, which are analysed in isolation in subsequent sections.

Including 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 current rules<sup>23</sup> the capital buffer under Basel III is 5.6 percentage points (Group 1) or 5.9 percentage points (Group 2) lower than the capital buffer under the current regime. Figure 7 shows that the increased minimum requirement accounts for more than 40% of the total impact of the Basel III framework on the capital buffer for both, Group 1 and Group 2. Further, a significant impact can be attributed to the changes in RWA and capital deduction. At the current reporting date, the impact of the new definition of capital is only of minor importance for the reduction in the banks' capital buffer.

<sup>23</sup> The analysis is based on common equity Tier 1 (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 of the Basel III framework on the banks capital buffer



### 2.3 Composition 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.

Figure 8: Structure of regulatory capital under current national regime and Basel III (in percent)

	Number of banks	CET1		Additional Tier 1		Tier 2	
		Current	Basel III	Current	Basel III	Current	Basel III
Group 1	40	75.5	87.6	10.1	1.1	14.2	11.2
Group 2	122	77.2	78.7	4.6	5.1	18.1	16.1

For Group 1 banks, the share of Basel III CET1 to total capital is 87.6%. Additional Tier 1 and Tier 2 capital amount to 1.1% and 11.2% of the total capital of Group 1 banks, respectively. Within the Group 1 sample, 55% of 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 78.7% with correspondingly higher shares of additional Tier 1 capital (5.1%) and Tier 2 capital (16.1%).

### 2.4 Capital shortfalls

Figure 9 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 (31 December 2012), in order to meet the target CET1, Tier 1 and total capital ratios under Basel III. The estimations assume fully phased-in target requirements and deductions as of December 2012.

For Group 1 banks, the CET1 capital shortfall is €2.2 bn at a minimum requirement of 4.5% and €70.4 bn at a target level of 7.0%. With respect to the Tier 1 and total capital ratios, the capital shortfall amounts to €5.7 bn and €33.3 bn, respectively. While seven out of 14 G-SIBs included in this Basel III monitoring exercise already fulfil the 7% CET1 target ratio including the additional surcharges for global systemically important banks these surcharges are a binding constraint on four of the 14 G-SIBs.<sup>24</sup>

For Group 2 banks, the CET1 capital shortfall is €11.4 bn at a minimum requirement of 4.5% and €25.9 bn at a target level of 7.0%. The Tier 1 and total capital shortfall calculated relative to the 4.5% minimum amount for €14.1 bn and €22.0 bn, respectively.

Figure 9: Estimated overall capital shortfall, Group 1 and Group 2 banks<sup>25</sup>  
(in € bn)

	Group 1 banks	Group 2 banks
Number of banks	40	122
<b>Minimum</b>		
CET1 shortfall – 4.5%	2.2	11.4
Tier 1 shortfall – 6.0%	5.7	14.1
Total capital shortfall – 8.0%	33.0	22.0
<b>Minimum plus capital conservation buffer*</b>		
CET1 shortfall – 7.0%	70.4	25.9
Tier 1 shortfall – 8.5%	162.5	32.6
Total capital shortfall – 10.5%	257.5	45.6
* Including the capital surcharge for global systemically important banks (G-SIBs).		

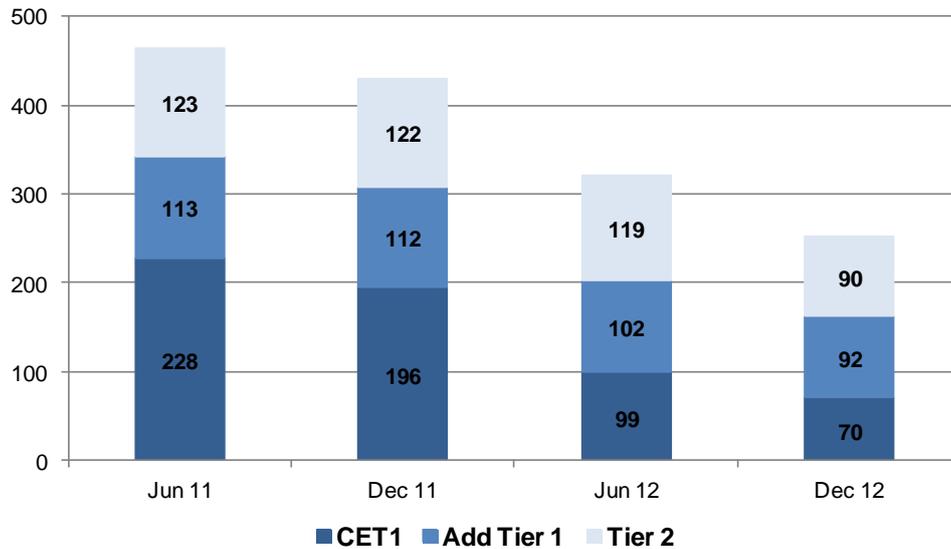
Given these results, an additional effort by banks to fulfil the risk-based capital requirements is expected, although part of the initial shortfall has already been covered since the last reporting date. The reasoning behind the reduction of the shortfall, compared to the previous period, could be attributed to the continuous efforts of the banks, in the second half of 2012, to raise additional CET1 capital, following the EBA's recapitalisation exercise. Once again, it should be stressed that these shortfalls refer to target levels that would be in effect from 2019 and therefore banks have six more years to comply with them.

Compared to the previous period (reporting date as of June 2012) and based on a consistent sample of banks, the aggregate CET1 shortfall of Group 1 with respect to the 7% target level improved by €29.1 bn (from €99.5 bn in June 2012 to €70.4 bn in December 2012) or 29.3% (see Figure 10).

<sup>24</sup> The capital surcharge for global systemically important banks (G-SIBs) is “binding” if a bank’s shortfall is solely caused by the additional G-SIB surcharge (ie the bank is compliant with the CET1 target ratio of 7%, but it does not fulfil the target ratio of 7% including the G-SIB surcharge).

<sup>25</sup> Capital shortfalls are calculated as the aggregate of the difference between capital requirements and the sum of eligible capital on bank level. Due to the calculation method any effects on threshold deductions are not taken into account and the effect that a part of these items will not be deducted is not covered.

Figure 10: Estimated overall capital shortfall with the capital conservation buffer, Group 1 banks (in € bn)



### 3. Impact of capital deductions on Common Equity Tier 1

As noted above, reductions in capital ratios under the Basel III framework are partly attributed to capital deductions previously not applied at the common equity level of Tier 1 capital. Figure 11 shows the impact of the various categories on the gross CET1 capital (ie, CET1 before applying deductions) of Group 1 and Group 2 banks.

Figure 11: CET1 deductions as a percentage of gross CET1 (in percent)

	N	Goodwill	Intangibles	DTA*	Financials	MSR	DTA above threshold	Excess above 15%**	Other***	Total
Group 1 banks	40	-13.5	-3.5	-3.5	-4.6	0.0	-1.0	-2.0	-4.7	-32.9
Group 2 banks	122	-9.0	-2.8	-2.5	-6.8	0.0	-4.1	-2.3	-4.2	-31.6

\* DTA refers to the deferred tax assets that are fully deducted under Basel III (ie it excludes DTAs that are related to temporary timing differences which are only deducted when they exceed a threshold).

\*\* Excess above 15% pertains to significant investments in the common shares of unconsolidated financial institutions, mortgage servicing rights, and DTA due to temporary differences that do not separately exceed the 10% category thresholds but in the aggregate exceed the 15% basket threshold.

\*\*\* Other includes deductions 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 and deductions from Additional Tier 1 capital to the extent they exceed a bank's Additional Tier 1 capital.

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In aggregate, deductions reduce gross CET1 of Group 1 banks by 32.9% with goodwill being the most important driver (13.5%), followed by holdings of capital of other financial companies. For Group 2 banks, average results are similar: CET1 deductions reduce gross CET1 by 31.6% due in particular to goodwill, followed by holdings of capital of other financial companies. 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 €3 bn). Without considering these banks in Group 2, the overall decline of gross CET1 due to deductions would be 15.0%. Mortgage servicing rights related deductions have no impact, for both groups.

## 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 12 for 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 securitisation exposures currently deducted under the Basel II framework that are risk-weighted at 1250% under Basel III. 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 central counterparties (CCPs) are not included.
- **Other:** This column measures the new capital charge for the higher capital charge that results from applying a higher asset correlation parameter against exposures to large financial institutions under the IRB approaches to credit risk. In addition the higher haircuts for credits collateralised with 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 12.8% which can be mainly attributed to the capital charges for credit valuation adjustments (CVA) (+6.0%), followed by changes due to increase of risk weights for exposures that fall below the 10% and 15% limits for CET1 deduction (+3.4%).

For Group 2 banks, aggregate RWA increase overall by 10.2%. 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 6.7%. As expected, CVA capital charges increase RWA only by 2.9% as the 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 to RWA (4.7%) while the increase attributable to items that fall below the 10%/15% thresholds account for 2.3% of the overall increase in RWA.

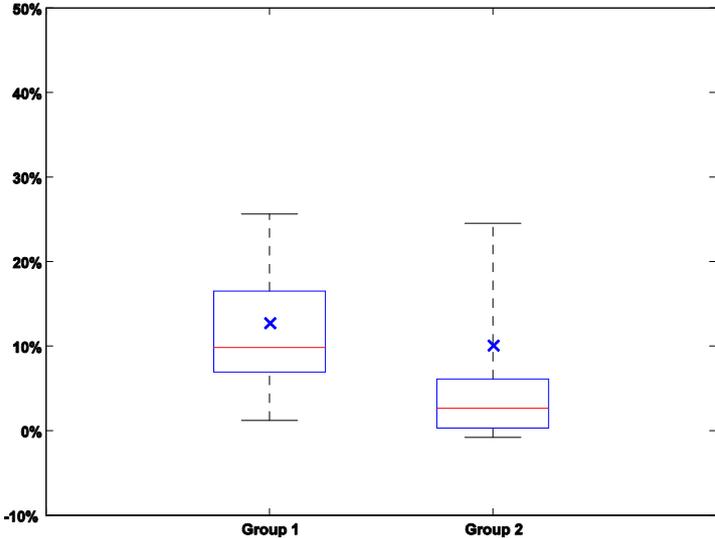
Figure 12: Changes in RWA by banking group  
(in percent)

	N	Total	Definition of capital			CVA	Other*
			50/50	threshold	other		
Group 1 banks	40	12.8	2.8	3.4	-1.0	6.0	1.6
Group 2 banks	122	10.2	4.7	2.3	-0.5	2.9	0.8

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

Figure 13 gives an indication of the distribution of the results across participating banks.

Figure 13: Change in total risk-weighted assets<sup>26</sup>  
(in percent)



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

Credit valuation adjustment (CVA) risk capital charges lead to a 6.0% increase in total RWA for the sample of Group 1 banks, of which 3.5% is attributed to the application of the standardised method and 2.5% to the application of advanced methods. The impact on Group 2 banks is approximately half of the impact on Group 1 banks, resulting in an overall 3.1% increase in RWA over a subsample of 86 banks, totally attributable to the standardised method. Further details on CVA amounts are provided in Figure 14.

<sup>26</sup> The median value is represented by the thin red horizontal line, the weighted average by "x" and the 75<sup>th</sup> and 25<sup>th</sup> percentile values are defined by the blue box. The upper and lower end points of the black vertical lines show the 95<sup>th</sup> and 5<sup>th</sup> percentile, respectively.

Figure 14: Changes in RWA for credit valuation adjustment (CVA)  
(in percent)

	N	CVA vs credit RWA	Of which:		CVA vs total RWA	Of which:	
			Standardised method	Advanced method		Standardised method	Advanced method
Group 1 banks	40	7.2	4.2	3.0	6.0	3.5	2.5
Group 2 banks	86	3.5	3.5	0.0	3.1	3.1	0.0

## 5. Leverage Ratio

A simple, transparent, non-risk based leverage ratio has been introduced in the Basel III framework in order to act as a supplementary measure to the risk based capital requirements. It is intended to constrain the build-up of leverage in the banking sector and to complement the risk based capital requirements with a non-risk based “backstop” measure.

For the interpretation of 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 (ie 50 times) as opposed to a ratio (ie 2.0%). Therefore, a bank with a high level of leverage will have a **low** leverage ratio.

40 Group 1 and 122 Group 2 banks provided sufficient data to calculate the leverage ratio according to the Basel III framework.

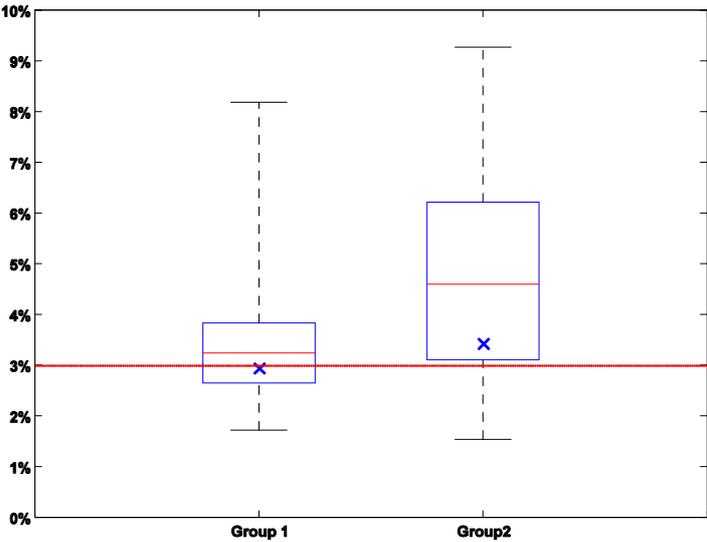
It is important to recognise that the monitoring results may underestimate the amount of capital that will actually be held by the bank over the next few years as the Basel III capital figures reported in this monitoring exercise assume that all common equity deductions are fully phased in and all non-qualifying 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, Common Equity Tier 1, 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 non-qualifying under Basel III. As the implementation date of the leverage ratio approaches, this will become less of an issue.

With respect to Group 1 banks, the average Basel III Tier 1 leverage ratio is 2.9% (remained nearly unchanged compared to June 2012) while for Group 2 banks the leverage ratio is 3.4% (lower than the 3.6% reported six month before). Assuming full implementation of Basel III at 31 December 2012, 58% of Group 1 banks would meet the calibration target of 3% for the leverage ratio while 96% of them (or 55% compared to the total Group 1 sample) would also be at or above the 6% minimum requirement for the risk-based Tier 1 ratio. For Group 2 banks, 76% show a leverage ratio at or above the target level while 98% of them (or 75% of the total Group 2 sample) reported Tier 1 ratios at or above the risk-based Tier 1 minimum requirement of 6%.

The overall capital shortfall of those banks which do not meet the 3% target level yet amounts to €106.6 bn for Group 1 and to €26.0 bn for Group 2.

Figure 15 give an indication of the distribution of the results across participating banks. The dashed red lines show the calibration target of 3% while the thin red lines represent the 50<sup>th</sup> percentile<sup>27</sup> (the “median”), ie the value separating the higher half of a sample from the lower half (it means that 50% of all observations fall below this value, 50% are above this value). The weighted average is shown as “x”. For further information on the methodology see section 1.2.

Figure 15: Basel III Leverage Ratio<sup>28</sup>  
(in percent)



The distribution and summary statistics of the leverage ratio of 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 16 illustrates the composition of the leverage ratio exposure for Group 1 banks. It shows that the on balance sheet exposure to Derivatives and Securities Financing Transactions is relatively small (15.1%), with the majority of on balance sheet exposures classified as “other”. However, the off balance sheet exposures are largely composed of Derivatives and those off balance sheet exposures with a credit conversion factor (CCF) of 50% or higher.

<sup>27</sup> A percentile is the value of a variable below which a certain percent of observations fall. For example, the 25th percentile is the value below which 25 percent of the observations may be found.

<sup>28</sup> The median value is represented by the thin red horizontal line, the weighted average by “x” and the 75<sup>th</sup> and 25<sup>th</sup> percentile values are defined by the blue box. The upper and lower end points of the black vertical lines show the 95<sup>th</sup> and 5<sup>th</sup> percentile, respectively. The dashed red line indicates the 3% target level.

Figure 16: Composition of leverage ratio exposure, Group 1 (in percent)

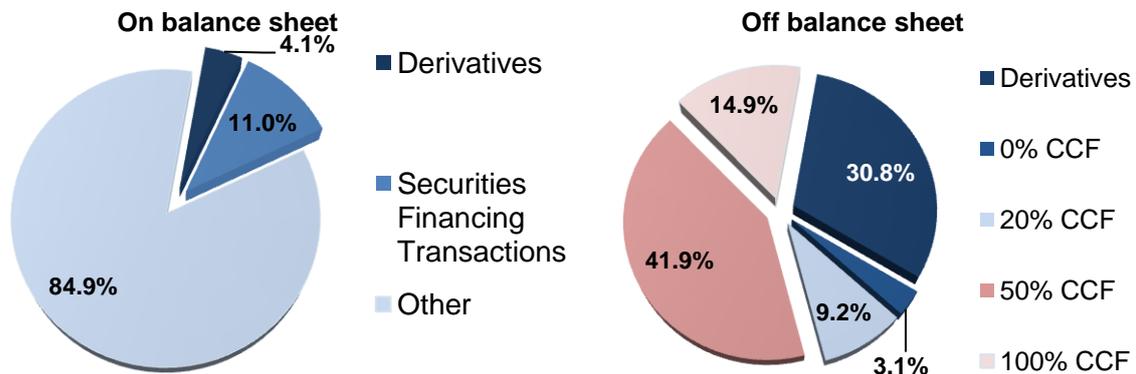


Figure 17 shows the average Basel III leverage ratio and the capital shortfall of fulfilling the leverage ratio target level of 3% and additionally under the assumption that banks already fulfill the risk-based capital requirements for the Tier 1 ratio of 6% and 8.5%, respectively. For the latter, the shortfall is the additional amount of Tier 1 capital that banks would need to raise in order to meet the target level of 3% for the leverage ratio (ie after the risk-based minimum requirements have been met).

Figure 17: Additional shortfall of Tier 1 capital as a result of the leverage ratio requirement

	Number of banks	Leverage Ratio	Hypothetical Shortfall from 3% threshold in € bn	After fulfilling a Tier 1 solvency ratio of 6%		After fulfilling a Tier 1 solvency ratio of 8.5%	
				Leverage Ratio	Shortfall in € bn	Leverage Ratio	Shortfall in € bn
Group 1 banks	40	2.9%	106.6	3.0%	101.3	3.5%	29.6
Group 2 banks	122	3.4%	26.0	3.7%	15.9	4.1%	13.4

Assuming that banks with a risk-based Tier 1 ratio below 6% would have raised capital to fulfil the minimum requirement of 6%, 38% of Group 1 and 20% of Group 2 would not meet the calibration target of 3% for the leverage ratio. The additional shortfall related to the leverage ratio requirement would be €101.3 bn (Group 1) and €15.9 bn (Group 2), respectively.

Assuming that banks with a risk-based Tier 1 ratio below 8.5% would have raised capital to meet the minimum requirement of 8.5%, 23% of Group 1 and 16% Group 2 would show a leverage ratio below the 3% target level. The additional shortfall would be €29.6 bn and €13.4 bn for Group 1 and Group 2, respectively.

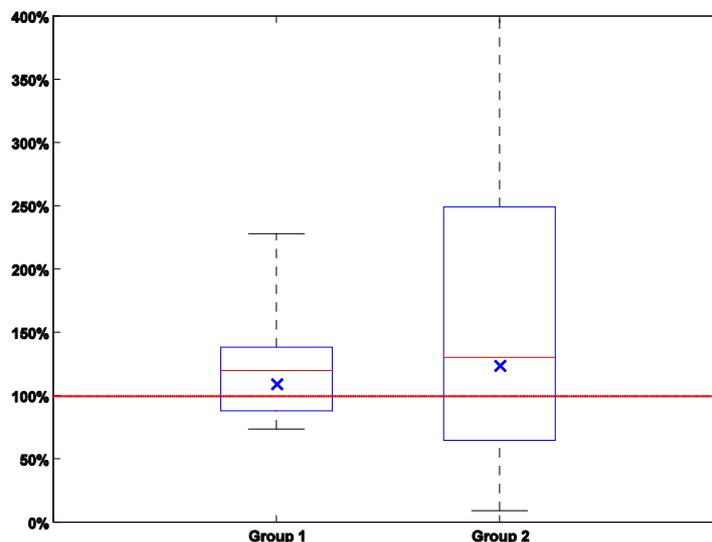
## 6. Liquidity

### 6.1 Liquidity Coverage Ratio

One of the new minimum standards is a 30-day liquidity coverage ratio (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 at 75% of total outflows. Consequently, 25% of cash outflows have to be covered by liquid assets. The LCR will be introduced on 1 January 2015. According to the recent revisions to the LCR<sup>29</sup> the minimum requirement will be set at 60% and rise in equal annual steps to reach 100% in 2019.

As of December 2012, Group 1 and Group 2 on average show a LCR of 109% and 127%, respectively. On bank level, the ratio varies widely, especially for Group 2 banks. Figure 18 gives an indication of the distribution of bank results. 60% of Group 1 and Group 2 banks in the sample already meet or exceed the 100% requirement. Only 16% Group 1 and Group 2 banks are required to take further actions to meet the required minimum of 60% in 2015.

Figure 18: Liquidity Coverage Ratio<sup>30</sup>  
(in percent)



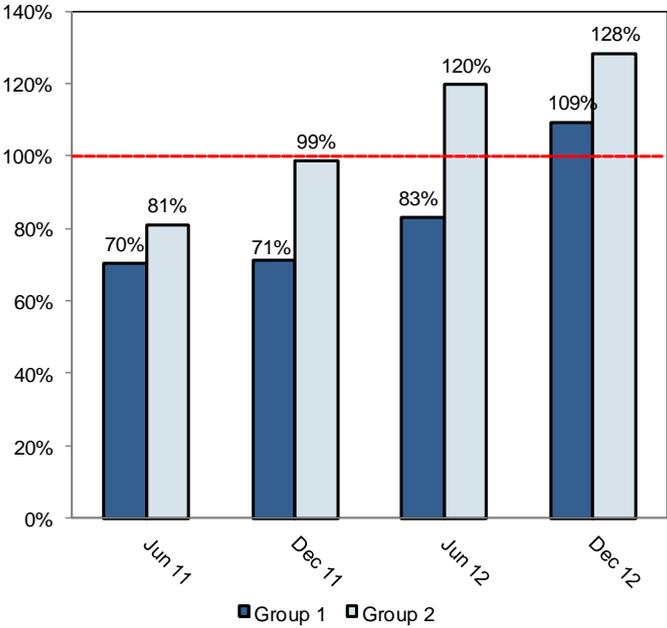
<sup>29</sup> Basel Committee on Banking Supervision, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, January 2013 ([www.bis.org/publ/bcbs238.pdf](http://www.bis.org/publ/bcbs238.pdf)).

<sup>30</sup> The median value is represented by the thin red horizontal line, the weighted average by "x" and the 75th and 25th percentile values are defined by the blue box. The upper and lower end points of the black vertical lines show the 95th and 5th percentile, respectively. The dashed red line indicates the 100% minimum ratio.

For the banks in the sample, monitoring results show a shortfall of liquid assets (ie the difference between high-quality liquid assets and net cash outflows) of €225 bn (which represents 0.1% of the €31.3 trillion total assets of the aggregate sample) as of 31 December 2012. This number is only reflective of the aggregate shortfall for banks that are below the 100% requirement and does not reflect surplus liquid assets at banks above the 100% requirement.

For both groups, the LCR has steadily increased since June 2011 (Figure 19). The average LCR of Group 1 has been exceeding the threshold of 100% since December 2012 (Group 2: since June 2012). This increase reflects the adjustment already made by European banks towards a more resilient liquidity position but also the impact of the recent revisions introduced by the Basel Committee to the LCR calibration, already included in data as of December 2012<sup>31</sup>.

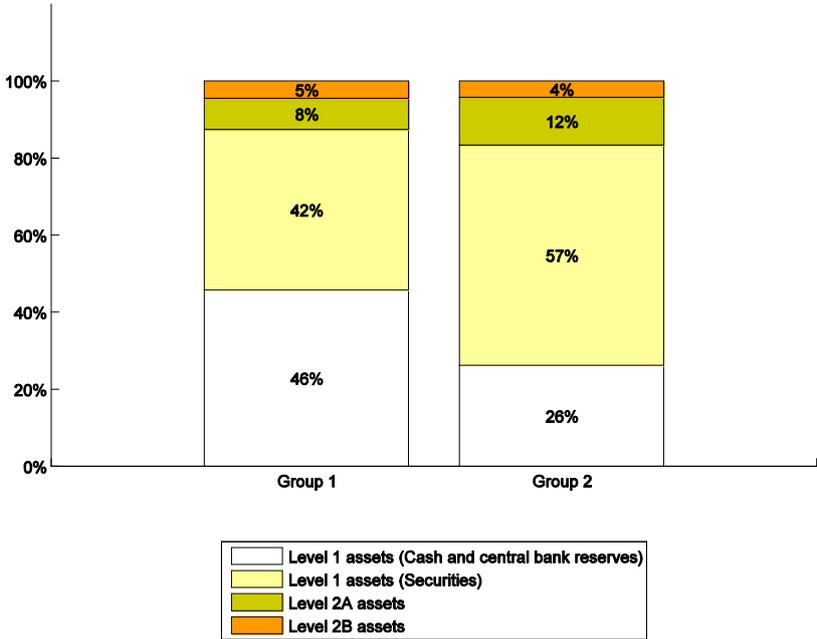
Figure 19: Liquidity Coverage Ratio over time of Group 1 banks (dark blue) and Group 2 banks (light blue) (in percent)



The composition of high-quality liquid assets currently held at banks is depicted in Figure 20. Almost 90% of the holdings of LCR eligible liquid assets are Level 1 assets which implies that the caps on Level 2 assets have a limited impact for most banks. In total, 27 banks need to exclude €44 bn Level 2 assets because they exceed the 40% or 15% cap. Five banks, which currently do not meet the required minimum, would report ratios of 100% or above if the cap on liquid assets were not taken into account.

<sup>31</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 20: Segmentation of liquid assets<sup>32</sup>  
(in percent)



The key components of outflows and inflows are presented in Figure 21. Group 1 banks show a notably larger percentage of total outflows, when compared to balance sheet liabilities, than Group 2 banks. This can be explained by the relatively greater share of interbank funding and commitments within the Group 1 sample, whereas, Group 2 banks are more reliant on retail deposits, which receive lower run-off factors. The cap on inflows has only limited impact on participating banks. In total, €0.1 bn are capped for two Group 1 and 17 Group 2 banks.

<sup>32</sup> **Level 1** liquid assets comprises: (a) cash and withdrawable Central Bank reserves, 0% risk-weighted assets issued or guaranteed by Sovereigns, Central Banks and Public Sector Entities and (b) Non 0% risk-weighted assets issued or guaranteed by Sovereigns, Central Banks and Public Sector Entities (under conditions as described in Basel III framework); **Level 2A** liquid assets comprises (a) 20% risk-weighted assets issued or guaranteed by Sovereigns, Central Banks and Public Sector Entities, (b) Non-financial corporations' bonds of AA rating or better and (c) Covered Bonds of AA rating or better; **Level 2B** liquid assets comprises (a) Non-financial corporations' bonds of ratings from BBB to A and (b) Equity.

Figure 21: LCR outflows and inflows (post-factor) as a percentage of balance sheet liabilities\*  
(in € bn)

	Group 1	Group 2
Unsecured retail and small business customers	1.7	2.0
Unsecured non-financial corporates	2.6	1.2
Unsecured sovereign, central bank, public sector entities and other counterparties	0.6	0.4
Unsecured financial institutions and other legal entities	4.8	3.4
Other unsecured wholesale funding incl. unsecured debt issuance	1.3	0.9
Secured funding and collateral swaps	1.7	0.8
Collateral, securitisations and own debt	0.4	0.4
Credit and liquidity facilities	1.5	0.5
Other contractual and contingent cash outflows including derivative payables	1.9	1.4
<b>Total outflows**</b>	<b>16.6</b>	<b>11.2</b>
Secured lending	1.3	0.5
Retail and small business customers, non-financial corporates and other entities	1.4	1.0
Financial institutions	1.7	1.7
Other cash inflows including derivative receivables	0.2	0.3
<b>Total inflows <u>before</u> applying the 75%-cap**</b>	<b>4.7</b>	<b>3.6</b>
<b>Total inflows <u>after</u> applying the 75%-cap**</b>	<b>4.7</b>	<b>3.5</b>
* As reported in the net stable funding ratio. ** Sums may contain rounding differences		

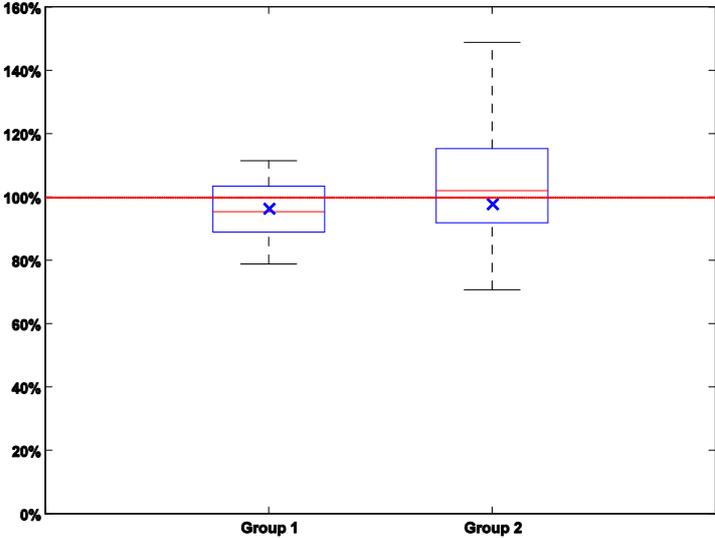
## 6.2 Net Stable Funding Ratio

The second liquidity standard is the net stable funding ratio (NSFR), a longer-term structural ratio to address liquidity mismatches and to provide incentives for banks to use stable sources to fund their activities.

164 Group 1 and Group 2 banks provided sufficient data in the end-2012 Basel III implementation monitoring exercise to calculate the NSFR according to the Basel III liquidity framework. As of December 2012, the average NSFR for Group 1 and Group 2 is 96% and 99%, respectively. 50% of these banks already meet or exceed the minimum NSFR requirement, 87% show a NSFR higher than 85%.

In total, banks in the sample show a shortfall of stable funding<sup>33</sup> of €959 bn at the end of 2012, which is 22% lower than the €1.23 trillion reported six month before. This number is only reflective 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. Banks that are below the 100% required minimum can still take a number of measures until 2018 to meet the standards, including lengthening the term of their funding or reducing maturity mismatches. Figure 23 shows that the NSFR for both, Group 1 and Group 2, has increased since June 2011, meaning that banks have already taken actions to comply with the NSFR requirement.

Figure 22: Net Stable Funding Ratio<sup>34</sup>  
(in percent)



<sup>33</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.

<sup>34</sup> The median value is represented by the thin red horizontal line, the weighted average by “x” and the 75th and 25th percentile values are defined by the blue box. The upper and lower end points of the black vertical lines show the 95th and 5th percentile, respectively. The dashed red line indicates the 100% minimum ratio.

Figure 23: Net Stable Funding Ratio over time of Group 1 banks (dark blue) and Group 2 banks (light blue)  
(in percent)

