

3 March 2015

# CRD IV – CRR / Basel III monitoring exercise

Results based on data as of 30 June 2014



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# Abbreviations

AQR	Asset quality review
ASF	Available stable funding
СВ	Central bank
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
ECB	European Central Bank
G-SIBs	Global systemically important banks
HQLA	High quality liquid assets
LCR	Liquidity coverage ratio
LR	Leverage ratio
MSR	Mortgage servicing rights
NSFR	Net stable funding ratio
RWA	Risk-weighted assets
RSF	Required stable funding
SFT	Security financing transactions
SSM	Single Supervisory Mechanism
LTRO	Long-term financing operations



# **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. The set of regulatory requirements in EU comprises a directive (Capital Requirements Directive, CRD IV) and a regulation (Capital Requirements Regulation, CRR), thereafter CRD IV / CRR, which applies as of 1 January 2014. It is noteworthy that the <u>current</u> implementation of the CRD IV / CRR differs from the <u>full</u> implementation of the CRD IV / CRR due to a number of transitional arrangements.

This report is the seventh publication of the Basel III monitoring exercise and summarises the results at EU level using data as of 30 June 2014<sup>2</sup>. The sample of 146 banks, which submitted data for this exercise, comprises 40 Group 1 banks and 108 Group 2 banks<sup>3</sup>. EU Member States' coverage of their respective banking system was notably high for Group 1 banks, reaching 100% coverage for some jurisdictions (aggregate coverage in terms of CRD IV / CRR risk-weighted assets: 91.9%), while for Group 2 banks it was lower with more variation across jurisdictions (aggregate coverage: 28.5%). Furthermore, the analysis of Group 2 results showed that a significant number of large, but non-internationally active banks, i.e. banks without notable 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 CRD IV / CRR requirements and definitions for the sections referring to capital and RWA, including the requirements for global systemically important banks (G-SIBs). Therefore, the sections referred to above are based on the CRD IV and CRR. For the calculation of results under the current framework, the exercise refers to the current state of implementation of the CRD IV / CRR framework, i.e. considering all the transitional arrangements that apply at the reference date (June 2014).

As the rules for the leverage ratio (LR) and liquidity ratios have not yet been fully implemented by the CRD IV package in the reporting framework, the relevant sections of the report are still based

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;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 17 banks that have a Tier 1 capital in excess of EUR 3 billion but are not internationally active.

<sup>&</sup>lt;sup>4</sup> There are 42 Group 2 banks (that submitted data for any of the sections) that have Tier 1 capital in excess of EUR 1.5 billion. These banks account for over 80% of total Group 2 RWA (current definition of RWA) and are classified as 'large Group 2 banks.



on Basel III rules<sup>5</sup>. Therefore, this monitoring exercise assumes full implementation of the Basel III framework requirements and definitions<sup>6</sup> for the sections referring to liquidity and leverage.

In addition, it is important to note that the monitoring exercise is based on the 'static balance sheet' assumption, i.e. capital elements are only included in the report if the eligibility criteria are fulfilled at the reference date, i.e. June 2014. For this reason, the report did not take into account any planned management actions to increase capital or decrease risk-weighted assets in the future. In essence, this approach taken for the exercise does not include any subjective assumptions regarding banks' future profitability and/or any behavioural responses to economic conditions. As a consequence, the monitoring results in this report are not comparable to similar industry estimates, as the latter usually include assumptions on banks' future profitability, planned capital and/or further management actions that may mitigate the impact of CRD IV / CRR and/or Basel III provisions.

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

Assuming full implementation of the CRD IV / CRR package as of 30 June 2014 (i.e. without taking into account transitional arrangements), the Common Equity Tier 1 (CET1) capital ratios of Group 1 banks would decrease from an average CET1 ratio of 11.7%, under the current CRD IV / CRR rules (i.e. considering the transitional arrangements applicable in 2014), to an average CET1 ratio of 10.8%. All of the Group 1 banks would be at or above the 4.5% minimum while 94% of Group 1 would be above the 7.0% target level (i.e. including the capital conservation buffer). The CET1 capital shortfall for Group 1 banks would be none, with respect to the minimum requirement of 4.5%, and EUR 2.8 billion, with respect to the target level of 7.0%. The latter shortfall includes, where applicable, the additional regulatory surcharge for G-SIBs.

Compared to the previous exercise (reporting date of end of December 2013), the results show an increase of 1.1 percentage points (or of 9.6%) in the average CET1 ratio of Group 1 banks; the corresponding shortfall with respect to the 7.0% target level (also considering the capital surcharge for G-SIBs) decreased from EUR 10.2 billion to EUR 2.8 billion, which is a decrease of 73%.

The average Tier 1 ratio of Group 1 banks would decrease from 12.9% under the current CRD IV / CRR rules (i.e. including transitional arrangements) to 11.2% under full implementation CRD IV / CRR, while the total capital ratio would decrease from 15.8% to 13.3%. Capital shortfalls corresponding to the minimum ratios (including the capital conservation buffer and the surcharge for G-SIBs) amount to EUR 13.2 billion for Tier 1 capital and EUR 37.6 billion for total capital.

For Group 2 banks, the average CET1 ratio would decline from 13.4% under the current CRD IV / CRR implementation to 12.3% under the fully phased-in CRD IV / CRR package. The CET1 capital

<sup>&</sup>lt;sup>5</sup> Only the exposure measure for the leverage ratio is reported under the Basel III framework, as capital measures are already reported under the CRD IV / CRR framework.

<sup>&</sup>lt;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, paragraph 16(a) of Directive 2006/49/EC.



shortfall for Group 2 banks would be none, with respect to the minimum requirement of 4.5%, and approximately EUR 0.7 billion with respect to the target level of 7.0%. The average Tier 1 and total capital ratios of Group 2 banks would decrease from 13.7% to 12.6% and from 16.3% to 15%, respectively.

The above figures do not include any additional shortfalls that may arise from additional surcharges stemming from any domestic systemically important banks (D-SIBs) 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.

### Main drivers of changes in capital ratios

For Group 1 banks, the overall impact of the full implementation of the CRD IV / CRR on the CET1 ratio, relative to the current rules, is mostly attributed to changes in the definition of capital and, to a lesser extent, to the changes related to the calculation of risk-weighted assets (RWA): while CET1 capital would decrease by 6.5% on average compared to current rules, RWA would increase by less than 1.0% on average. For Group 2 banks, while the average CET1 capital would decrease by 6.3%, the RWA of Group 2 banks would increase by 1.5%. Note that the figures are skewed by large Group 2 banks: if those banks are not considered in the calculation, the average decrease in CET1 capital and the average increase in RWA fall to 3.1% and 0.4%, respectively. Deductions in the CET1 of both Group 1 and Group 2 banks are mainly driven by goodwill (11.6% and 7.7%, respectively), followed by the treatment of intangibles: 3.1% for Group 1 banks and 2.6% for Group 2 banks.

The current CET1 ratio of Group 1 banks had been on the increase until December 2013, while in June 2014 it fell from 12.5% to 11.7%, i.e. by 0.8 percentage point. The current CET1 ratio of Group 2 banks remained almost the same compared to the previous period, increasing by 0.02 percentage point. The decrease of the current CET1, at the reference date, for Group 1 banks and the slowdown in the increase for Group 2 banks is due to the application of the CRD IV / CRR package as of 1 January 2014, which has resulted in lower current capital ratios relative to previous reference dates. As expected, this effect is more pronounced for Group 1 banks, since they are predominantly affected by the new rules for counterparty credit risk which, for the first time, are included in the current capital ratios as of the end of June 2014.

### Leverage ratio

For the first time, the previous report took into account the new Basel III LR framework that was published together with the new disclosure requirements in January 2014. It showed a significant increase in banks' LRs, which could at least partially be attributed to this recalibration and the first application of CRR rules for the definition of capital. This increasing trend, although smaller in magnitude, continued in June 2014.

<sup>&</sup>lt;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.



Assuming full implementation of the Basel III framework, Group 1 banks show an average LR of 3.9%, while the ratio for Group 2 banks' is 4.9% as of June 2014. Approximately 89% of both Group 1 and Group 2 banks would fulfil the preliminary<sup>8</sup> target LR requirement of 3.0%. The corresponding shortfall of Tier 1 capital due to the LR would amount to EUR 2.4 billion for Group 1 and EUR 3.7 billion for Group 2 banks. 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

Since the previous report, the Basel III monitoring exercise has been taking into account the recent developments relating to the definition and adequacy of the liquidity coverage ratio (LCR)<sup>9</sup> and the net stable funding ratio (NSFR)<sup>10</sup>. Although the EU Delegated Act on LCR (DA LCR) has been published, regulatory reporting will not be in place before 1 October 2015, so the report could not take into account the newly issued DA LCR rules. Instead, the Basel III LCR framework was used as the basis for the analysis. The Basel III standard envisages the implementation of the LCR on 1 January 2015<sup>11</sup> with a minimum requirement of 60% increasing gradually by 10 percentage points to reach 100% in 2019. In the EU the deadline for the 100% level implementation of the LCR is 2018, i.e. one year before the Basel standard<sup>12</sup>. The NSFR is anticipated to be introduced on 1 January 2018 with a minimum requirement of 100%.

With regard to the LCR, the average ratio for data as of the end of June 2014 is 113% and 156% for Group 1 and Group 2 banks, respectively. In the total sample, 82% of the banks show an LCR ratio above 100% while 96% of the banks have an LCR ratio above the 60% minimum requirement of 2015. The overall shortfall in relation to the 100% threshold is EUR 115 billion. This approximation of banks' actual shortfall does not consider the surplus of banks already meeting the 100% requirement, i.e. does not assume the reallocation of liquidity from banks with a liquidity shortfall. There has been an increase in banks' LCR over time, which can be attributed to structural adjustments (both an increase in High quality liquid assets (HQLA) and a decrease of net outflows) as well as to the recalibration of the LCR framework as published in January 2013.

With respect to the NSFR, Group 1 and Group 2 banks show an average ratio of 102% and 111%, respectively, with an overall shortfall in stable funding of EUR 324 billion. About 67% of Group 1 banks and 85% of Group 2 banks already meet the minimum NSFR requirement of 100%.

<sup>&</sup>lt;sup>8</sup> The Basel Committee is in the process of monitoring to assess whether the design and calibration of a minimum Tier 1 leverage ratio of 3% is appropriate over a full credit cycle and for different types of business models.

<sup>&</sup>lt;sup>9</sup> Basel Committee on Banking Supervision, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, January 2013 (www.bis.org/publ/bcbs238.pdf).

<sup>&</sup>lt;sup>10</sup> Basel Committee on Banking Supervision, Basel III: the Net Stable Funding Ratio – consultative document, January 2014 (www.bis.org/publ/bcbs271.pdf).

<sup>&</sup>lt;sup>11</sup> In the EU framework the minimum requirement of 60% will be introduced in October 2015.

<sup>&</sup>lt;sup>12</sup> In the EU framework the minimum requirement of 80% in 2017 becomes 100% in 2018; According to Article 461(2) of the CRR, the Commission is empowered, where necessary to address market and other developments, to move the deadline for the 100% binding minimum standard to 2019 and apply in 2018 a 90% binding minimum standard.



Compared with previous periods, there is a continuous increase in banks' NSFR, which is mainly driven by the increasing amount of available stable funding (ASF) for both groups.



# 1. General remarks

## 1.1 Sample of participating banks

The analysis of the report is based on data submitted by 40 Group 1 banks from 12 countries and 108 Group 2 banks from 17 countries, which submitted complete data for at least one part of the monitoring exercise. Table 1 shows the distribution of participation by jurisdiction. Group 1 banks in this report are defined as the banks that have Tier 1 capital in excess of EUR 3 billion and are internationally active. All other banks are classified under Group 2.

The coverage of the banking sector is high, reaching 100% of Group 1 banks in some jurisdictions (aggregate coverage in terms of CRD IV / CRR RWA: 91.9%). The coverage of Group 2 banks is lower and varies across countries (aggregate coverage: 28.5%). Furthermore, the results of Group 2 are driven by a significant number of large but non-internationally active banks, i.e. banks that, setting aside the international activity, have similar characteristics to Group 1 banks. For this reason, the results presented in this report for Group 2 banks may not be representative for the small Group 2 banks.

The distinction between large and small Group 2 banks has been made by applying a Tier 1 capital threshold of EUR 1.5 billion. Group 2 banks with less than EUR 1.5 billion of Tier 1 capital have been classified as small while those with Tier 1 capital equal to or higher than EUR 1.5 billion have been classified as large banks.

Not all banks provided sufficient data for all parts of the reporting template. Therefore, a small number of banks are excluded from individual sections of the monitoring analysis due to incomplete data. Where applicable, comparisons with previous periods are based on a consistent sample of banks, i.e. including only those banks that reported complete data at all reference dates to allow for time series analysis or reference-date-to-reference-date comparisons.



	Group 1	Group 2
Austria	3	3
Belgium	1	2
Denmark	1	2
France	5	4
Germany	8	37
Ireland	3	1
Italy	2	13
Latvia	_	2
Luxembourg	_	1
Malta	_	4
Netherlands	3	16
Norway	—	1
Poland	_	5
Portugal	2	4
Slovakia	_	4
Spain	2	4
Sweden	4	_
United Kingdom	6	5
Total	40	108

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

### 1.2 Methodology

### 'Composite bank' weighting scheme

The average ratios 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 the CET1 capital of all banks participating in the sample divided by the sum of the RWA of all banks participating in the same sample. Similarly, the average Tier 1 LR is the sum of the Tier 1 capital of all banks participating in the sample divided by the sum of the Tier 1 capital of all banks participating in the sample divided by the sum of the Tier 1 capital of all banks participating in the sample divided by the sum of the Tier 1 capital of all banks participating in the sample divided by the sum of the LR exposures of all banks participating in the sample.

### Box plots illustrating 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:



Solid red line:	Respective minimum requirement
Dashed lines:	Respective minimum requirement plus the capital conservation buffer (capital)
Thin red line within the blue box:	Median value (50% of the observations are below this value,
Thin fed line within the blue box.	50% are above this value)
'x':	Mean (weighted average)
	25 <sup>th</sup> and 75 <sup>th</sup> percentile values. A percentile is the value of a
Plue boy:	variable below which a certain percentage of observations
Blue box.	fall. For example, the 25th percentile is the value below
	which 25% of the observations are found.
Black horizontal lines	The upper end point represents the 95th percentile value,
('whiskers'):	the lower end point the 5th percentile value.

### 1.3 Interpretation of results

The quantitative impact study aims to monitor the convergence of the EU banks with the regulatory requirements under the assumption of **full implementation of CRD IV / CRR**. The **full implementation of the CRD IV / CRR package** does not consider the transitional arrangements relating to the phase-in of deductions and grandfathering arrangements. This implies that the CRD IV / CRR 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 recognise the non-qualifying instruments that are actually phased out over a nine-year time horizon.

For the calculation of results referred to as **'current rules'**, for the first time the report uses figures based on the current CRD IV / CRR framework, i.e. on the current state of implementation, being mindful of the fact that this framework is changing over time. This means that for the current reference date (June 2014), the figures under the current rules refer to the state of implementation of the CRD IV / CRR framework as of 2014. Therefore, the difference between the fully-phased-in results and the results under the current rules in the capital and RWA section is due to the remaining transitional arrangements.

The treatment of deductions and non-qualifying capital instruments under the assumption of full implementation of the CRD IV / CRR also affects the figures reported in the LR section. The potential underestimation of Tier 1 capital will become less of an issue as the **implementation date for the LR approaches**. In particular, in 2014 the capital amounts based on the CRD IV / CRR capital requirements in place on the reference date include the amount of non-qualifying capital instruments at that time. These amounts will be more representative of the capital held by banks on the implementation date for the LR (for a more detailed analysis, see Section 5).

It is also important to note that the monitoring exercise is based on the assumption of a **static balance sheet**, i.e. capital elements are only included should they fulfil the eligibility criteria on the reference date. Planned, but not implemented, bank measures to increase capital or decrease RWA are not taken into account. This allows the **effective** changes in bank capital to be identified



rather than identifying changes that 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 CRD IV / CRR.

### 1.4 Data quality

The banks participating in the monitoring exercise submitted comprehensive and detailed nonpublic confidential data on a voluntary and best-efforts basis. Supervisors have been working closely with banks to ensure the high quality of data, completeness and consistency with the reporting instructions. Banks are included in the sample for each of the analyses below only where they have provided data of sufficient quality to complete the analysis in question. For the capital and RWA sections, data from supervisory reporting systems have been used wherever possible.

With regard to the liquidity part of the exercise, the quality of the data has been improved significantly thanks to the experience gained from work on the Basel III monitoring exercise. Nevertheless, some banks may have based the reporting of their liquidity risk positions on slightly different interpretations of the rules. Most notably, individual banks appear to be using different methodologies to identify the operational wholesale deposits and to exclude liquid assets.



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

### 2.1 Capital ratios

One of the main objectives of the Basel III – CRD IV / CRR framework is to increase the resilience of the banking sector by strengthening both the quantity and quality of regulatory capital. For this purpose the framework sets higher quantitative minimum requirements and stricter rules for the definition of capital and the calculation of risk weighted assets. As this exercise assumes full implementation of CRR/ CRD IV (without accounting of any transitional arrangements<sup>13</sup>), it compares capital ratios under current CRD IV / CRR set of rules with capital ratios that banks would exhibit should the set of CRD IV / CRR rules be fully implemented at the reference date, i.e. June 2014.

Due to the application of the CRD IV / CRR package from 1 January 2014, the results shown under the current rules are based, for the first time, on the current CRD IV / CRR. In this context, the report elaborates that on the impact that fully implementing CRD IV / CRR package has on the monitoring results of the current implementation. The CRD IV / CRR 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. Therefore, these amounts may underestimate the amount of Tier 1 capital and total capital currently held by banks as they do not recognise the non-qualifying instruments to be phased out during the transitional period.

Table 2 shows the aggregate change in CET1, Tier 1 and total capital ratios under the assumption that all banks have fully implemented CRR/ CRD IV requirements, as of 30 June 2014.

For Group 1 banks, the average CET1 ratio would decrease from 11.7% under the current CRD IV / CRR rules (i.e. including the transitional arrangements applying in 2014) to 10.8% under the full implementation (a decline of 0.9 percentage point) while the average Tier 1 and total capital ratio would decrease from 12.9% to 11.2% (or 1.7 percentage points) and from 15.8% to 13.3% (or 2.5 percentage points) respectively.

<sup>&</sup>lt;sup>13</sup> For details on the transitional arrangements, see paragraphs 94 and 95 of the Basel III framework.



	Number of banks	CE	T1	Tie	er 1	Total capital		
		Current	Full impl.	Current	Full impl.	Current	Full impl.	
Group 1	38	11.7	10.8	12.9	11.2	15.8	13.3	
Group 2	98	13.4	12.3	13.7	12.6	16.3	15.0	
Large Group 2	40	13.5	12.4	13.9	12.7	16.6	15.3	
Small Group 2	58	12.5	12.1	12.9	12.2	14.9	13.4	

### Table 2: CET1, Tier 1 and total capital ratios, in per cent

The decrease in the CET1 ratio is driven by both a decrease in the level of capital due to the new definition of capital and an increase in the RWA. For Group 1 banks, the capital is the major driver behind the decrease in the CET1 ratio. The decrease in CET1 is 6.5% while the increase in RWA is less than 1.0%, on average. The previous report showed that the percentage change in RWA was strongly influenced by the percentage change in credit value adjustment (CVA). The finding indicated that banks that engage heavily in activities subject to counterparty credit risk tend to exhibit the largest denominator effects as these activities attract substantially higher capital charges under the new framework. The analysis of June 2014 data shows that a large majority of banks have already complied with the requirement related to CVA. Only 8% of the banks in the sample experience an increase in the level of RWA in relation to CVA changes.

For Group 2 banks, the change in the definition of capital causes a decrease in CET1 capital by 6.3% while the level of RWA increases by 1.5% due to the full implementation of the CRR. Changes in CET1 capital and RWA levels for Group 2 banks are mainly driven by large Group 2 banks. The average decrease in CET1 capital and the average increase in RWA for large Group 2 banks are higher than the average figures for the Group 2 sample as a whole. If large Group 2 banks are excluded from the sample (i.e. if only small Group 2 banks are considered), the average decrease in CET1 capital and the average increase in RWA would fall to 3.1% and 0.4%, respectively.

Figure 1 shows that the values of capital ratios for Group 2 banks fall within larger intervals (i.e. the distance between the 95% and the 5% percentile is greater), and the distance between the 75<sup>th</sup> percentile (indicated by the upper horizontal line of the box; 75% of the observations fall below this line) and the 25<sup>th</sup> percentile (indicated by the lower line of the box; 25% of the observations fall below this line) is larger for Group 2 banks. This can be explained by the fact that there is a larger degree of heterogeneity within the Group 2 sample since it consists of a large number of banks covering a broad range of business models. In addition, the median value for all capital ratios for Group 2 banks is higher than the respective ratios of Group 1 banks.





### Figure 1: Distribution of CET1, T1 and total capital ratio per bank group

Figure 2 shows the distribution of the levels of CET1 ratios amongst Group 1 banks as of June 2011 and June 2014. As of June 2014, there are no any Group 1 banks in the sample with a CET1 ratio lower than the 4.5% minimum capital requirement, and 94% of Group 1 banks have a CET1 ratio above the 7.0% target ratio, i.e. the minimum capital requirement plus the capital conservation buffer.

In comparison to the previous report, the participating banks have complied further with the regulatory requirements relating to capital ratios since none of the Group 1 banks are below the 4.5% CET1 threshold and the share of Group 1 banks with a CET1 ratio above 7% increased by approximately 8 percentage points.

Compared to June 2011, the Group 1 participating banks have significantly increased their CET1 capital ratios – as Figure 2 indicates. During the period of June 2011 to June 2014, the share of Group 1 banks with a CET1 ratio equal to or higher than 4.5% increased by approximately 23 percentage points.





#### Figure 2: Distribution of CET 1 ratios under full implementation, Group 1 banks

The share of Group 2 banks with a CET1 ratio of at least 4.5% was 99% (one Group 2 bank did not achieve this threshold) in June 2014 – an increase of one percentage point from December 2013 and 12 percentage points from June 2011. In the current sample, as indicated in Figure 3, 96% of the Group 2 banks report a CET1 ratio above 7% and 3% of the Group 2 banks report a CET1 ratio within the range of 4.5% - 7% while only 1% of the participating banks exhibit CET1 ratios below the 4.5% threshold. The one bank that does not comply with the 4.5% threshold, as defined by the fully implemented CRD IV / CRR, does comply with the 4.5% threshold, as defined by the current CRD IV / CRR.





Figure 4 shows the trend in the current CET1 ratio at each reference date for the period from June 2011 to June 2014 for the consistent sample of banks, i.e. those that have been consistently submitting data for all reporting dates. The current CET1 ratio for Group 1 banks had been constantly increasing from just over 10% to 12.5% during the period from June 2011 to December 2013 while in June 2014 it decreased to 11.7%. The decrease in the current CET1 ratio for Group 1 banks is explained by the application of the different, stricter methodology under the CRD IV /



CRR, as from January 2014, compared to the methodology applied until December 2013 under the previous regulatory framework.

In contrast to the current CET1 ratio, the fully implemented CET1 ratio for Group 1 banks increased by over 7% in June 2014 compared to December 2013. The overall CET1 increase from June 2011 is 4.4 percentage points.

The trend is somewhat similar for Group 2 banks. The current CET1 ratio, which increased for the period June 2011 to December 2013, remained almost the same (an increase of 0.02 percentage point) in June 2014 compared to previous reporting date. The reason for the slowdown of the increase in June 2014 is similar to that for Group 1 banks. The fully implemented CET1 ratio for Group 2 banks increased by two percentage points.

Monitoring results show that Group 1 banks in particular have steadily increased their capital ratio over time. The increase over recent years indicates that banks are already trying to meet market expectations well in advance of the full implementation of Basel III / CRD IV / CRR framework.



### Figure 4: Evolution of CET1 ratios over time

The upward trend in the CET1 ratio for Group 1 and Group 2 banks is mainly explained by the increases in the CET1 and to a less extent by decreases in the RWA (Figure 5 and Figure 6). The increasing trend for the CET1 capital and the decreasing trend for the RWA can be observed for most of the data points for Group 1 banks from June 2011.





#### Figure 5: Components of CET1 versus RWA over time, Group 1

Figure 6 indicates a sharp increase in CET1 capital for the period spanning from June 2013 to June 2014 for Group 2 banks. This sharp increase is driven by few large banks that have raised large amounts of CET1 capital. The RWA trend has evolved similarly to that of Group 1 banks. However, the RWA decrease is less pronounced.

#### Figure 6: Components of CET1 versus RWA over time, Group 2





### 2.2 Capital shortfall

Table 3 provides estimates of the additional amount of capital that Group 1 and Group 2 banks would need to meet the target CET1, Tier 1 and total capital ratios under the CRD IV / CRR requirements. The estimates assume fully phased-in target requirements and deductions as of June 2014. In the analysis, 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, there is no CET1 capital shortfall in relation to the minimum requirement of 4.5%, the shortfall increases to EUR 2.8 billion for the target level of 7.0%<sup>14</sup>. With respect to Tier 1 capital ratios (total capital ratios), the capital shortfall amounts to EUR 0.3 billion (EUR 0.6 billion) without the capital buffer and to EUR 13.2 billion (EUR 37.6 billion) when the buffer is included.

Note that the analysis for the current Basel III monitoring exercise includes 14 EU G-SIBs. All of these banks meet the 7.0% CET1 target ratio and all except one bank also meet the threshold of 7.0% plus the additional surcharges for G-SIBs. Therefore, the surcharge is a binding constraint on one G-SIB in the sample.<sup>15</sup> On the basis, the current analysis finds the same conclusion as the analysis for the December 2013 reference date.

For Group 2 banks, there is no CET1 capital shortfall vis-a-vis the minimum requirement of 4.5% while the shortfall rises to EUR 0.7 billion for the target level of 7.0%. The Tier 1 capital shortfall (total capital shortfall) amounts to EUR 0.4 billion (EUR 1.1 billion) without the capital buffer and to EUR 2.4 billion (EUR 4.1 billion) when the buffer is included.

	Number of banks	Minimum				Minimum plus buffers			
		CET1	Tier1	Total	CET1	Tier1	Total		
		4.5%	6%	8%	7%	8.5%	10.5%		
Group 1	38	0.0	0.3	0.6	2.8	13.2	37.6		
Group 2	98	0.0	0.4	1.1	0.7	2.4	4.1		
Large Group 2	40	0.0	0.0	0.0	0.0	0.9	1.7		
Small Group 2	58	0.0	0.4	1.1	0.7	1.5	2.4		

### Table 3: Capital Shortfall, in EUR billion

Group 1 banks have been continuously reducing the shortfall over recent years. Figure 7 shows this trend. The aggregate decrease in capital shortfall is fairly proportionate across the different categories of capital (i.e. CET1, Tier 1 and total capital). Between June 2011 and June 2014, the capital shortfall for Group 1 banks fell by 93%. The decrease from the previous reference date was 53%, the highest relative change that has been observed in the monitoring exercises.

<sup>&</sup>lt;sup>14</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>&</sup>lt;sup>15</sup> The capital surcharge for G-SIBs is "binding" if a bank's shortfall is caused solely by the additional G-SIBs 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-SIBs surcharge).



However, the fact that the CET1 shortfall, relating to the 4.5% minimum capital requirements threshold under Pillar I, is zero does not necessarily imply that there is no actual need for capital from Group 1 banks, since there are several additional requirements that the banks should comply with, such as additional bank-specific Pillar II buffers that are not considered in the current analysis.

For Group 2 banks, the change in the shortfall showed a temporary increasing trend from June 2012 to June 2013, which was reversed from June 2013 onwards. In June 2014, the aggregate capital shortfall for Group 2 banks decreased by 79.5% to EUR 3.7 billion.



### Figure 7: Change in capital shortfall (including buffers) by type of capital under full implementation

Table 4 presents the aggregate Tier 1 capital shortfall due to the risk-based capital requirements and the leverage ratio. The reported figures represent the total Tier 1 capital that banks in the respective group would have to raise to meet the risk-based Tier 1 ratio of 6% (or 8.5% including the capital conservation buffer and G-SIBs buffer) and the leverage ratio of 3.0%.

	Number of	6% minimum Tier1 +	8.5% minimum Tier1 +		
	banks	3% LR	3% LR		
Group 1	38	2.4	15.2		
Group 2	97	3.8	5.8		
Large Group 2	40	1.6	2.5		
Small Group 2	57	2.2	3.3		

Table 4: Total Tier1 shortfall due to the risk-based capital requirements and the LR, in EUR billion



# 3. Impact of the new capital rules

## 3.1 Definition of capital

At the current implementation stage of CRD IV / CRR, banks are still subject to transitional arrangements (phase-in of deductions and capital buffers and phase-out of capital elements). It is therefore reasonable to expect a decrease in the level of capital on average for both Group 1 and Group 2 banks.

The aggregate CET1 capital of Group 1 banks shows a decrease of 6.5%, while Tier 1 capital and total capital decreases by 12.2% and 14.7%, respectively (Table 5). For Group 2 banks the percentage change in CET1 capital is 6.3%, while for Tier 1 capital it is 6.7% in Tier 1 capital. The figures suggest that, on average, Group 1 banks are slightly more constrained in relation to CET1 capital than Group 2 banks and that the decrease in Tier 1 and total capital is considerably lower for the latter.

For Group 2 banks, the decrease in both CET1 capital and Tier 1 capital is driven by the large Group 2 banks whose CET1 capital and Tier 1 capital decrease is greater than the decrease for Group 2 level as a whole. The negative percentage change of the total capital for small Group 2 banks (-9.9%) is greater than that of the entire Group 2 sample (-6.8%).

	Number of banks	CET1	Tier 1	Total capital
Group 1	38	-6.5	-12.2	-14.7
Group 2	98	-6.3	-6.7	-6.8
Large Group 2	40	-6.9	-6.9	-6.3
Small Group 2	58	-3.1	-5.3	-9.9

### Table 5: Relative change in CET1, Tier 1 and total capital, in per cent

Figure 8 and Figure 9 show the composition of total capital for Group 1 and Group 2 banks under the current implementation stage of the CRD IV / CRR and after the full implementation of the CRD IV / CRR package.

Based on the consistent Group 1 sample, the share of the fully implemented CET1 capital to total capital is 80.6% as of June 2014. Additional Tier 1 and Tier 2 capital amounts to approximately 2.8% and 16.5% of the total capital of Group 1 banks, respectively. 16 banks (or 42% of the Group 1 banks) in the consistent Group 1 sample hold CET1 capital that represents approximately 77% of the fully implemented CRD IV / CRR total CET1 capital.

Compared to Group 1, Group 2 banks hold almost the same share of CET1 capital under the full implementation of CRD IV / CRR (around 80.4%) with additional Tier 1 capital representing the



2.2% of the total capital of Group 2 banks and Tier 2 capital representing the 17.4% of the total capital of Group 2 banks.



### Figure 8: Capital structure over time under full implementation

The change in the current CET1 and the proportion it makes up of the total capital differs between Group 1 and Group 2 banks; Group 2 banks have a higher level of CET1 capital on average, which has been increasing since June 2011 (Figure 9).







## 3.2 Impact of capital deductions on Common Equity Tier 1

Capital deductions are one of the elements that are still the result of transitional arrangements, and applying these deductions leads to a partial reduction in the level of CET1 capital for banks under full implementation. Capital deductions cover a set of elements that are shown in Table 6. The table shows the impact of these elements relative to gross CET1 capital (i.e. CET1 before applying deductions) for Group 1 and Group 2 banks.

	Number of banks	Goodwill	Intangibles	рта	Financials	MSR	DTA above threshold	Excess above 15%	Other	Total
Group 1	38	-11.6	-3.1	-3.0	-0.6	0.0	-0.4	-0.1	-2.6	-21.4
Group 2	98	-7.7	-2.6	-2.2	-1.8	0.0	-0.2	-0.6	-3.3	-18.3
Large Group 2	40	-8.4	-2.7	-2.3	-1.8	0.0	-0.1	-0.6	-3.7	-19.5
Small Group 2	58	-3.3	-1.9	-1.2	-1.8	0.0	-0.8	-0.9	-1.3	-11.2

### Table 6: CET1 deductions as a percentage of gross CET1

Overall, deductions reduce the gross CET1 of Group 1 banks by 21.4% with goodwill having the strongest impact (11.6%), followed by the change in the treatment of intangibles (3.1%) and of deferred tax assets (DTA) (3.0%). For Group 2 banks, the findings show that the overall CET1 deduction of 18.3% is mainly attributed to goodwill (7.7%) and intangibles (2.6%). However, these Group 2 results are driven by the large Group 2 banks (19.5%). Without considering these banks in Group 2, the overall decrease in gross CET1 due to deductions would be reduced to 11.2%.



# 4. Composition of risk-weighted assets

After analysing the different forms of capital in Section 3, which represents the numerator of the capital ratios, the current section deals with RWA, the denominator of the capital ratios.

Figure 10 and Table 7 show that the credit risk is the major component of the RWA under the fully phased-in CRD IV / CRR package, for both Group 1 and Group 2 banks. The share of credit risk in RWA is over 80% for Group 1 banks and over 85% for Group 2 banks. Operational risk has the second-highest share in the RWA for both groups of banks with 10.1% and 7.9%, respectively. Furthermore, the declining share of RWA for CVA over time, for both Group 1 and Group 2 banks, suggests that the new regulatory framework has had a direct impact on bank behaviour: Figure 10 shows that the introduction of the CVA capital charge resulted in the reduction of CVA positions, which in turn has reduced the overall capital requirements.



### Figure 10: Composition of RWA over time under full implementation

#### Table 7: Changes in RWA, all banks, in per cent

			Impact of the		RWA a	as share o	f total RWA	
	Number of banks	RWA share	definition of capital on RWA under CRR	Credit risk	CVA	Market risk	Operational risk	Other RWA
Group 1	38.0	100.0	0.6	81.3	1.8	6.0	10.1	0.2
Group 2	98.0	100.0	1.3	86.7	1.2	2.5	7.9	0.5
Large Group 2	40.0	84.4	1.5	86.6	1.3	2.7	7.5	0.5



	Number	RWA	Impact of the	RWA as share of total RWA			f total RWA	
Small Group 2	58.0	15.6	0.3	86.8	1.1	1.2	10.2	0.4



# 5. Leverage ratio

The leverage ratio as a simple, non-risk-based mean has been introduced in the Basel III framework to constrain the build-up of excessive leverage in the banking sector. Furthermore, the leverage ratio should act as a supplementary 'backstop' measure to the risk-based capital requirements. This ratio therefore provides an extra layer of protection against model risk and measurement error. As the leverage ratio has not yet been implemented in the reporting framework of the European legislation, the calculation is still based on the Basel III framework. Nevertheless, the Tier 1 capital (numerator of the leverage ratio) is calculated based on the CRD IV / CRR definition.

For the interpretation of the results relating to the leverage ratio, it is important to understand the terminology used to describe a bank's leverage. In general and outside of the scope of the Basel III leverage ratio definition, 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. exposure/capital ratio, e.g. 50 times) as opposed to the leverage ratio used by the Basel III which is the reversed one (i.e. capital/exposure ratio, e.g. 2.0%). Therefore, a bank with a high level of leverage will have a low leverage ratio pursuant to the Basel III definition (as defined by the fraction of Tier 1 capital and the exposure measure).

For the current exercise, 38 Group 1 and 97 Group 2 banks provided sufficient data to calculate the leverage ratio pursuant 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 CRD IV / CRR 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. Therefore, all other things being equal these assumptions 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 until 2021. In this exercise, CET1 capital, 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 the full implementation of the CRD IV / CRR. As the implementation date for the leverage ratio approaches, this will become less of an issue.

### 5.1 Leverage ratio and capital shortfall

Figure 11 shows the distribution of leverage ratios across participating banks by bank group. The dotted red line at 3.0% marks the preliminary target value of the leverage ratio. The distribution of leverage ratios among Group 2 banks shows a greater dispersion than that among Group 1 banks. This is similar to the findings of the previous report, and could be attributed to the heterogeneity of the Group 2 banks in terms of business models.





#### Figure 11: Distribution of leverage ratio by bank group, in per cent

Assuming full implementation of Basel III, Table 8 shows that the average leverage ratio would be 3.9% (increased by 0.2 percentage point from the previous report) for Group 1 banks and 4.9% (increased by 0.4 percentage point from the previous report) for Group 2 banks. Therefore, 89% of Group 1 banks (34 banks) and 89% of Group 2 banks (86 banks) would fulfil a Basel III leverage ratio of 3.0%. The corresponding shortfall of Tier 1 capital due to the leverage ratio would amount to EUR 2.4 billion for Group 1 and EUR 3.7 billion for Group 2 banks. Under the current definition of capital, the average leverage ratio would be 4.5% for Group 1 banks and 5.2% for Group 2 banks. The shortfall of Tier 1 capital due to current leverage ratio of 3.0% would amount to EUR 3.2 billion for Group 2 banks, while there would not be any shortfall for Group 1 banks.

Table 0. Leverage ratio and capital shortrain according to current rules and baser in							
		Curren	nt rules	Basel III			
	Number of banks	Leverage ratio (in per cent)	Shortfall in EUR billion	Leverage ratio (in per cent)	Shortfall in EUR billion		
Group 1	38	4.5	0.0	3.9	2.4		
Group 2	97	5.2	3.2	4.9	3.7		
Large Group 2	40	5.3	1.3	5.0	1.6		
Small Group 2	57	4.7	1.8	4.4	2.1		

Table 8: Leverage ratio and ca	pital shortfall according to current rules and Basel III



### 5.2 Development of the leverage ratio over time

Looking at the previous reference dates, there was a significant increase in the leverage ratio of the consistent sample of banks between June 2013 and December 2013 (see Figure 12) which can be partially attributed to the recalibration of the leverage ratio exposure in January 2014 as well as to the first application of CRR rules for the definition of capital. This increase continued in the period December 2013 to June 2014. Since June 2011, the leverage ratio shortfall has decreased by 98% for Group 1 and by 84% for Group 2 banks. Compared to the previous report, the figures show an improvement (i.e. a decrease) compared to the previous report, in the level of shortfall by 15 percentage points and 8 percentage points for Group 1 and Group 2 banks, respectively.





### 5.3 Composition of leverage ratio exposure

Figure 13 illustrates the composition of leverage exposure for Group 1 and Group 2 banks. The major part is represented by other on-balance-sheet assets (73% for Group 1 and 90% for Group 2 banks). Securities financing transactions (SFT) (9%), off-balance-sheet items (8%) and derivatives (8%) are the other major components of the leverage ratio exposure for the aggregate Group 1 banks. Other off-balance-sheet items (5%) are the second most significant component of the leverage ratio for Group 2 banks.





#### Figure 13: Composition of leverage exposure, in per cent

# 5.4 Interaction of the leverage ratio with risk-based minimum requirements

Table 9 shows the average Basel III leverage ratio assuming that banks have already fulfilled the risk-based capital requirements for the Tier 1 ratio of 6.0% and 8.5%. Furthermore, Table 9 shows the additional shortfall of Tier 1 capital that banks would still need in order to meet the preliminary target level of 3.0% for the leverage ratio. Under the assumption that banks, with a risk-based Tier 1 ratio below 8.5% would have raised capital in order to meet the minimum requirements, three Group 1 banks and nine Group 2 banks (8% of the banks in Group 1 and 9% of the banks in Group 2) would still show a leverage ratio below the 3.0% minimum requirement. The additional shortfall would amount to EUR 2.0 billion for Group 1 banks and EUR 3.4 billion for Group 2 banks. For the 6% Tier 1 ratio, Group 1 would need EUR 2.1 billion on average and Group 2 banks would need EUR 3.5 billion in order to meet a 3.0% leverage ratio.

		6% T	ier 1	8.5% Tier 1		
	Number of banks		Shortfall in EUR billion	Leverage ratio (in per cent)	Shortfall in EUR billion	
Group 1	38	3.9	2.1	4.0	2.0	
Group 2	97	4.9	3.5	4.9	3.4	
Large Group 2	40	5.0	1.6	5.0	1.6	
Small Group 2	57	4.5	1.8	4.6	1.8	

Table 9: Additional shortfall of Tier 1 ca	apital as a result of the	leverage ratio requirement



The implementation of the leverage ratio is not intended to offset any positive incentives of the risk-based approach. Therefore, the interaction between the leverage ratio and the risk-based factors is being monitored. Figure 14 shows the development of the relation of RWA to leverage ratio exposure by bank group. If the 'relation' is below the dotted red line (35.3%), this implies that the leverage ratio rather than the risk-based Tier 1 capital ratio of 8.5% would be, on average, a binding constraint. While this figure has been mostly decreasing for the period June 2011 to June 2013 (which was caused by both a decrease in RWA and an increase in exposure), increases of 390 basis points (3.9 percentage points) for Group 1 and 190 basis points (1.9 percentage points) for Group 2 were observed in December 2013 compared to June 2013. This change was caused by a decrease in the leverage ratio exposure, partly driven by the recalibration of the exposure definition referred to above. In the current period of June 2014 compared to previous period, there is a decrease of 90 basis points and 160 basis points on average for Group 1 and Group 2 banks, respectively. This change is due to the increase in the exposures, i.e. the denominator of the ratio, which dominated over the increase in RWA, i.e. the numerator of the ratio.



#### Figure 14: Relation of RWA to leverage exposure, in per cent



# 6. Liquidity

### 6.1 Liquidity coverage ratio

One of the 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 level of HQLA to withstand a stressed funding scenario of 30 days. The LCR defines the minimum stock of unencumbered, HQLA 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 must be covered by liquid assets. In Europe, the minimum requirement is set at 60% in October 2015 and will then gradually increase to 100% in January 2018<sup>16</sup> meaning that the EU regulation requires a minimum of 100% one year before the Basel standard does (see also footnote 12, page 9).

### LCR and shortfall in liquid assets

Figure 15 provides an overview of the LCR by bank group. As of June 2014, the LCR of Group 1 banks is 113% on average, while for Group 2 banks, it is 156%. A set of 28 out of the 36 Group 1 banks (78%) already meet the 100% requirement, while only two Group 1 banks are below the 60% minimum level. The picture is similar for Group 2 banks. Approximately 84% of the Group 2 banks (82 Group 2 banks) have an LCR ratio above 100% while 4% of the Group 2 banks (four Group 2 banks) need to improve their liquidity positions to reach the minimum requirement of 60%.

<sup>&</sup>lt;sup>16</sup> 70% from 1 January 2016, 80% from 1 January 2017, 100% from 1 January 2018.





Figure 15: Distribution of LCR by bank group<sup>17</sup>

The total LCR shortfall with regard to a minimum ratio of 100% for the entire sample is EUR 114.6 billion, of which EUR 103.6 billion correspond to Group 1 and EUR 11 billion to Group 2 banks. The total shortfall represents 0.4% of total assets (EUR 25,543 billion) of all participating banks in the LCR section of the exercise. To comply with the minimum requirement of 60% by October 2015, banks need an additional amount of EUR 20 billion of liquid assets. 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 60% or 100%, respectively, not reflecting the surplus of the banks already meeting the minimum requirement. As a consequence, the reported shortfall amount represents a conservative proxy of banks' actual shortfall, as it does not include any assumptions on the reallocation of liquidity between individual banks, or within the system as a whole.

	Number	LCR	LCR shortfall (in EUR billion) at a minimum of				
	of banks		60%	70%	80%	100%	
			(2015)	(2016)	(2017)	(2018)	
Group 1	36	112.6	14.3	19.2	28.7	103.6	
Group 2	98	156.4	5.7	6.5	7.3	11.0	
Large Group 2	42	155.7	3.4	3.8	4.3	6.8	
Small Group 2	56	159.5	2.3	2.7	3.0	4.2	

Table 10: LCR and shortfall for different minimum ratios according to Article 460 (2) of the CRR

 $<sup>^{17}</sup>$  The 95  $^{\rm th}$  percentile of Group 2 banks' LCR in Figure 15 is approximately 1,140%



### Change in the LCR over time

Compared to the previous reference date the LCR of the consistent sample increased by 6 percentage points to 112% for Group 1 banks and 7 percentage points to 160% for Group 2 banks (Figure 16). Overall, the reasons for these increases vary across banks and include structural adjustments such as an increased stock of liquid assets or reduced net cash outflows as well as reference date effects (i.e. occasional changes in the liquidity positions of that date). Therefore, they cannot solely be explained by one single factor.



### Figure 16: Evolution of LCR by bank group, percent

### Composition of liquid assets

The split between Level 1 and Level 2 assets remained similar to the previous monitoring exercise, with 84% of HQLA stock being represented by Level 1 assets for Group 1 (an increase of one percentage point since the previous report) and 87% for Group 2 (an increase of three percentage points since the previous report) (Figure 17). However, a shift from cash and central bank (CB) reserves towards other Level 1 assets such as bonds issued by sovereigns, central banks and public sector entities (Figure 18) has been observed.



### Figure 17: Composition of liquid assets

### Impact of the cap on HQLA

Two Group 1 banks and 13 Group 2 banks are affected by the cap on Level 2A or 2B assets, totalling EUR 43.9 billion of capped assets (Table 11). In general, the impact of the cap on the overall stock of liquid assets (EUR 2,849 billion) is limited (1.5%). However, the cap can have a significant impact on the liquidity profile of the individual banks. In total, had the Level 2 assets not been capped, three out of four banks that currently have an LCR below 60% would have passed the minimum threshold of 100%.

	Cap on Lev	vel 2 assets	Cap on Lev	Shortfall of		
	# of banks where Level 2A cap applies	Reduction of Level 2A assets due to cap EUR billion	# of banks where Level 2B cap applies	Reduction of Level 2B assets due to cap EUR billion	banks where Level 2A or Level 2B cap applies (in EUR billion)	
Group 1	1	28.6	1	0.2	35.5	
Group 2	10	16.2	5	0.3	8.4	
Large Group 2	1	10.5	1	0.0	4.9	
Small Group 2	9	5.6	4	0.3	3.4	

### Table 11: Impact of the cap on liquid assets

### Composition of cash outflows and inflows

The structure of the outflows and inflows (Table 12) is broadly in line with the structure observed in December 2013. In terms of a share of total balance sheet liabilities, Group 1 banks show a larger percentage of total outflows than Group 2 banks. This can be explained by the relatively larger share of interbank funding and commitments within the Group 1 sample, whereas, Group 2 banks tend to be more reliant on retail deposits, which receive smaller run-off weighting factors.



A total of EUR 9.4 billion of inflows have been capped for 22 banks (two Group 1 banks and 20 Group 2 banks), to ensure that a minimum of 25% of cash outflows need to be covered by liquid assets.

	Group 1	Group 2
Number of banks	36	98
Unsecured retail and small business customers	1.4	1.8
Unsecured non-financial corporates	2.2	1.2
Unsecured sovereign, central bank, public sector entities and other counterparties	0.6	0.4
Unsecured financial institutions and other legal entities	4.2	3.1
Other unsecured wholesale funding incl. unsecured debt issuance	0.9	0.9
Secured funding and collateral swaps	1.4	0.3
Collateral, securitisations and own debt	0.2	0.2
Credit and liquidity facilities	1.3	0.6
Other contractual and contingent cash outflows including derivative payables	2.5	1.4
Total outflows	14.6	9.8
Secured lending	1.3	0.2
Retail and small business customers, non-financial corporates and other entities	1.3	0.9
Financial institutions	1.5	1.6
Other cash inflows including derivative receivables	0.6	0.1
Total inflows before applying the 75%-cap	4.7	2.8
Total inflows after applying the 75%-cap	4.7	2.6

### Table 12: LCR outflows and inflows (post-factor) as a percentage of balance sheet liabilities

### Development of the components of the LCR

Figure 18 shows the trends in the HQLA, the numerator of the LCR, for the period June 2011 to June 2014. It highlights the differences in business models between Group 1 and Group 2 banks, in terms of acquisitions of Level 1 assets. Figure 18 and Figure 19 show that Group 1 banks have consistently held more cash and CB reserves while securities classified as type Level 1 assets make up the larger part of the Group 2 banks' portfolios. In other words, compared to Group 1 banks, Group 2 banks rely to a lesser extent on CB facilities. In broad terms, this may be due to the more specialised business models of Group 2 banks. However, it is however difficult to make a clear statement since there is also greater heterogeneity among Group 2 banks.

Overall, the level of cash and CB reserves (Figure 18) and the share of cash and CB reserves in total assets (Figure 19) increased (from 2.3% to 4.4%) during the period June 2011 to December 2012 for both Group 1 and Group 2 banks.

The increasing trend can be explained by the banks' behaviour of holding more secure assets during the crisis. The European Central Bank's (ECB) long-term refinancing operations (LTROs) may have supported and shaped this behaviour by providing liquidity to banks which could have been invested in assets eligible for the LCR liquidity buffer. The subsequent downward trend in



cash and CB reserves after December 2012 indicates that there was less liquidity hoarding after the crisis period ended.

Similarly, Level 1 assets in the form of securities increased between June 2011 and June 2014. Banks continued investing in securities also after the crisis. Due to the amelioration of the financial markets and sovereign bond markets, banks have been reinvesting in securities instead of holding large amount of CB reserves, which could be to the increasing quantity of products in the market or to the higher price/return of the products or to both of the previous factors (Figure 18).

Level 2A and 2B assets remain constant across the period for both Group 1 and Group 2 banks. In line with the small market size for these assets, they form a smaller part of the banks' portfolios.



#### Figure 18: Development of HQLA (absolute values in EUR billion)



![](_page_38_Figure_2.jpeg)

### Figure 19: Development of HQLA (share of total assets)

Figure 20 shows the net amount of outflows from Group 1 and Group 2 banks. Credit Sensitive Wholesale Deposits exhibit the highest amount of outflows as they also receive the highest run-off factor in the calculation of the LCR.

For Group 1 banks, the Credit Sensitive Wholesale Deposits represent approximately 11% of total assets (Figure 21) while their share decreased considerably in June 2012 and then again in December 2012 to below 8%. The decrease in Credit Sensitive Wholesale Deposits may be due to the reallocation of deposits, i.e. financial institutors and corporates putting their deposits in third countries and/or due to the shrinking of the deposits, i.e. financial institutions and corporates hold less in deposits. The decrease in December 2012 is also attributed to the recalibration of the LCR, which includes the smaller run-off factor for non-operational wholesale deposits. The increase in June 2014 in relation to December 2013 is predominantly attributed to the increase in securities belonging to Level 1 assets. The contribution of Securities in Level 1 assets was also increased over the same period (December 2014 to June 2014) in relation to cash and CB reserves.

Other deposits and liabilities have been more stable and constant throughout the period for the banks in the sample. Compared to Group 1 banks, Group 2 banks rely more on refinancing through retail and small business deposits. This is due to the business models and the structure of these banks, e.g. specialisation and business ties with smaller corporates.

![](_page_39_Picture_1.jpeg)

![](_page_39_Figure_2.jpeg)

### Figure 20: Development of cash outflows (absolute values in EUR billion)

![](_page_39_Figure_4.jpeg)

![](_page_39_Figure_5.jpeg)

Figure 22 shows the amount of the inflows that mature within the next 30 days for each of the reference dates covering June 2011 to June 2014 while Figure 23 shows the same parameter as a percentage of the total assets. For Group 1 and Group 2 banks there was a decrease in the amount of cash inflows during the financial crisis, particularly up to June 2012. For Group 1 banks, the aggregate value of cash inflows has been increasing since June 2013. The changes in the

![](_page_40_Picture_0.jpeg)

aggregate values of cash inflows for a bank depend on changes in the quantity, maturity and price (e.g. interest rate) of the banks' assets.

Due to their nature and market behaviour, derivatives have been the most volatile products for both Group 1 and Group 2 banks.

![](_page_40_Figure_4.jpeg)

Figure 22: Development of cash inflows (absolute values in EUR billion)

Figure 23: Development of cash inflows (share of total assets)

![](_page_40_Figure_7.jpeg)

![](_page_41_Picture_1.jpeg)

### 6.2 Net Stable Funding Ratio

The second liquidity standard is the NSFR, a longer-term structural ratio to address liquidity mismatches and to provide incentives for banks to use stable sources to fund their activities. The NSFR is defined as the amount of stable funding relative to the amount of required stable funding (RSF). This ratio should be equal to or higher than 100%. Available stable funding (ASF) is defined as the portion of capital and liabilities expected to be reliable over the time horizon considered by the NSFR, which extends to one year. The amount of RSF is a function of liquidity characteristics and residual maturities of the various assets held by that institution as well as those of its off-balance sheet exposures.

The results for data as of June 2014 presented in this report are based on the proposals made by the Basel Committee in a January 2014 consultative document.<sup>18</sup> The revisions aim to improve the alignment of the NSFR with the LCR and altering the calibration of the NSFR to put more focus on short-term, potentially volatile funding sources.

### NSFR and shortfall in stable funding

In total, 135 banks provided sufficient data for the June 2014 Basel III implementation monitoring exercise to calculate the NSFR. As of June 2014, the average NSFR for Group 1 and Group 2 banks is 102% and 111%, respectively. Approximately 67% of Group 1 and 85% of Group 2 banks already meet or exceed the minimum NSFR requirement of 100%. Overall, banks in the sample exhibit a need for stable funding of EUR 324 billion as of June 2014. The shortfall is approximately 1.3% of total assets (EUR 25,543 billion) of all banks participating in the NSFR part of the exercise. The need for stable funding is estimated by aggregating the positive differences between RSF and ASF (RSF – ASF), i.e. the deficit in stable funding of the banks whose NSFR is below the 100% requirement, and does not account of any surpluses of stable funding observed in banks with a NFSR above the 100% requirement. Banks that are below the 100% required minimum are still able to take a number of measures between now and 2018 to meet the NSFR standard, e.g. lengthening of their funding term or the decreasing the maturity mismatches.

<sup>&</sup>lt;sup>18</sup>Basel Committee on Banking Supervision, Basel III: the Net Stable Funding Ratio – consultative document, January 2014 (www.bis.org/publ/bcbs271.pdf).

![](_page_42_Picture_1.jpeg)

![](_page_42_Figure_2.jpeg)

Figure 24: Distribution of NSFR by bank group

### Evolution of the NSFR over time

Figure 25 illustrates the development of the NSFR over time using a consistent sample of banks. The findings show that the average NSFR for Group 1 banks has been continuously increasing since June 2011 while for Group 2 banks the average level of NSFR remained almost at the same level for the periods June 2012 – December 2012 and December 2013 – June 2014. Nevertheless, an overall increasing trend can also be observed for Group 2 banks for the period June 2011 – June 2014. The increase in the level of NSFR for both groups is predominantly due to an increase of 18% in the available stable funding for Group 1 banks and of 20% for Group 2 banks compared to June 2011 data. Moreover, the significant increase in banks' NSFR in December 2013 may also be driven by the revisions made by the Basel Committee which were considered in the previous monitoring exercise for the first time as of December 2013<sup>19</sup>. The NSFR figures in June 2014 remained almost the same for both Group 1 and Group 2 banks.

The overall positive trend is also reflected in the reduction of the shortfall of stable funding needed to meet the 100% ratio, which – compared to June 2011 – has been reduced by 80% on average for Group 1 banks and by 84% for Group 2 banks.

<sup>&</sup>lt;sup>19</sup> In contrast to that, previous monitoring data is based on the old liquidity framework: Basel Committee on Banking Supervision, Basel III: International framework for liquidity risk measurement, standards and monitoring, December 2010 (http://www.bis.org/publ/bcbs188.htm).

![](_page_43_Picture_1.jpeg)

![](_page_43_Figure_2.jpeg)

![](_page_43_Figure_3.jpeg)