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15 September 2015

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Task Force on Impact Studies (TFIS)

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# CRD IV–CRR/Basel III monitoring exercise report

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Results based on data as of 31 December 2014

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# Abbreviations

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<b>ASF</b>	available stable funding
<b>BCBS</b>	Basel Committee on Banking Supervision
<b>CB</b>	central bank
<b>CEM</b>	Current Exposure Method
<b>CET1</b>	Common Equity Tier 1
<b>CRD IV</b>	4th Capital Requirements Directive
<b>CRR</b>	Capital Requirements Regulation
<b>CVA</b>	credit value adjustment
<b>DA</b>	delegated act
<b>D-SIBs</b>	domestic systemically important banks (term used by the BCBS – equivalent to the term ‘other systemically important institutions (O-SIIs)’ used by the European Commission)
<b>EBA</b>	European Banking Authority
<b>ECAI</b>	external credit assessment institution
<b>ECB</b>	European Central Bank
<b>G-SIBs</b>	global systemically important banks (term used by the BCBS – equivalent to the term ‘global systemically important institutions (G-SIIs)’ used by the European Commission)
<b>HQLA</b>	high-quality liquid assets
<b>ITS</b>	implementing technical standards
<b>LCR</b>	liquidity coverage ratio
<b>LR</b>	leverage ratio
<b>LTRO</b>	long-term refinancing operation
<b>NSFR</b>	net stable funding ratio
<b>PSEs</b>	public sector entities
<b>RSF</b>	required stable funding
<b>RWA</b>	risk-weighted assets
<b>SBC</b>	small business customers

## Executive summary

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Since the finalisation of the new global regulatory framework (Basel III) in December 2010<sup>1</sup>, its impact has been monitored semi-annually by the Basel Committee on Banking Supervision (BCBS) at global level and the European Banking Authority (EBA) at European level, using data provided by participating banks on a voluntary and confidential basis. The relevant set of regulatory requirements in the EU comprises the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR), referred to hereafter CRD IV–CRR, which applies as of 1 January 2014. It is noteworthy that the current implementation of CRD IV–CRR differs from full implementation of CRD IV–CRR due to a set of transitional arrangements.

The capital and RWA section of the report assesses the compliance of EU banks with the fully implemented CRD IV–CRR framework, while the leverage and liquidity sections assess the level of compliance with the Basel III framework.

This report is the eighth publication of the CRD IV–CRR/Basel III monitoring exercise and summarises the results at EU level using data as of 31 December 2014<sup>2</sup>. The sample of 364 banks which submitted data for this exercise comprises 53 Group 1 banks and 311 Group 2 banks<sup>3</sup>. EU Member States' coverage of their banking systems was notably high for Group 1 banks, reaching 100% coverage for some jurisdictions (aggregate coverage in terms of CRD IV–CRR risk-weighted assets (RWA): 96%), while for Group 2 banks it was lower, with more variation across jurisdictions (aggregate coverage: 35%).

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

Assuming full implementation of the CRD IV–CRR package as of 31 December 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 12.2% under the current CRD IV–CRR rules (i.e. considering the transitional arrangements applicable in 2014) to an average CET1 ratio of 11.4%. This decrease can be fully attributed to transitional arrangements between the current and full implementation. The Group 1 banks would not have any CET1 capital shortfall with respect to the minimum requirement of 4.5%, while they would have a shortfall of EUR 1.5 billion with respect to the target level of 7.0% (plus, where applicable, the additional regulatory surcharge for global systemically important banks (G-SIBs)).

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

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

<sup>3</sup> Group 1 banks are banks with Tier 1 capital in excess of EUR 3 billion and which are internationally active. All other banks are categorised as Group 2 banks. Among the Group 2 banks there are 17 banks that have Tier 1 capital in excess of EUR 3 billion but are not internationally active.

Compared with the previous exercise (reference date June 2014), the average CET1 ratio of Group 1 banks increased by 0.5 percentage points<sup>4</sup>; the corresponding shortfall with respect to the 7.0% target level (taking into account also the capital surcharge for G-SIBs) decreased from EUR 2.8 billion to EUR 1.5 billion, which is a decline of 45%. The average Tier 1 ratio of Group 1 banks would decrease from 13.5% under the current CRD IV–CRR rules (i.e. including transitional arrangements) to 11.9% under fully implemented CRD IV–CRR, while the total capital ratio would decrease from 16.3% to 14.2%.

Capital shortfalls corresponding to the minimum ratios (including the capital conservation buffer and the surcharge for G-SIBs) amount to EUR 4.5 billion for Tier 1 capital and EUR 18.9 billion for total capital.

For Group 2 banks, the average CET1 ratio would decline from 13.2% under the current CRD IV–CRR implementation to 12.4% under the fully phased-in CRD IV–CRR package. The CET1 capital shortfall for Group 2 banks would be almost zero with respect to the minimum requirement of 4.5%, and approximately EUR 2.4 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 12.7% and from 15.7% to 14.5%, respectively<sup>5</sup>.

## **M a i n d r i v e r s o f c h a n g e s i n c a p i t a l r a t i o s**

In general, the impact on the fully implemented CET1 ratio can be almost entirely attributed to the transitional arrangement with regard to the definition of capital (CET1 level), while RWA are only marginally impacted. The increase in RWA may also imply a concurrent decrease in CET1 capital levels, since banks, when calculating the fully implemented capital ratios, are allowed to risk-weight certain positions instead of deducting them from the capital. For Group 1 banks, CET1 capital would decrease by 6.5% compared with under the current rules, while RWA would increase by 0.1%. For Group 2 banks, while CET1 capital would decrease by 5.2%, RWA would increase by 0.9%. Note that the figures are affected by large Group 2 banks. The decrease in CET1 capital and the increase in RWA for large Group 2 banks are 7.7% and 1.3%, respectively.

The current CET1 ratio of Group 1 banks had been increasing until December 2013, while in June 2014 it fell from 12.5% to 11.7%, i.e. by 0.8 percentage points. In December 2014, the CET1 ratio again increased to 12.2%. The current CET1 ratio of Group 2 banks remained almost the same for the period December 2013 to June 2014. The decrease in the current CET1 ratio at the June 2014 reference date for Group 1 banks and the slowdown in the increase for Group 2 banks were due to the application of the CRD IV/CRR package as of 1 January 2014, which resulted in lower current capital ratios than at previous reference dates. The inclusion of the new rules for counterparty credit risk in the calculation of capital ratios as of June 2014 temporarily reduced

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<sup>4</sup> Based on a consistent sample, i.e. including only those banks that reported the required data at all reporting dates to allow for period-to-period comparisons, this rule applies for all the time series analyses.

<sup>5</sup> Any additional shortfalls that may arise from additional surcharges, e.g. stemming from the Pillar 2 or domestic systemically important banks (D-SIBs) framework, are not included.

capital ratios at that reference date. However, capital ratios bounced back, increasing in December 2014.

## Leverage ratio

The current report takes into account the new Basel III leverage ratio (LR) framework, which was published in January 2014. Assuming full implementation of the Basel III LR framework, in terms of the LR exposure measure (denominator of the LR), and full implementation of CRD IV–CRR regarding the capital measure, Group 1 banks show a LR of 4.2%, while the ratio for Group 2 banks is 5.0% as of December 2014. As of 31 December 2014, approximately 90% of both Group 1 and Group 2 banks would fulfil the preliminary target LR requirement of 3.0%. The corresponding shortfall in Tier 1 capital required by the LR would amount to EUR 1.1 billion for Group 1 banks and EUR 6.1 billion for Group 2 banks. The BCBS and the EBA are monitoring the LR in order to assess whether the design and calibration of a minimum Tier 1 LR of 3% are appropriate for different types of business models over a full credit cycle.

## Liquidity standards

Although the EU Delegated Act<sup>6</sup> (DA) on the liquidity coverage ratio (LCR) has been published, data submissions through the Implementing Technical Standards (ITS) supervisory reporting framework will most probably not be in place before 2016. Therefore, the Basel III LCR framework was used as the basis for the analysis. The DA on the LCR envisages the implementation of the LCR on 1 October 2015, with a minimum requirement of 60% increasing gradually to reach 100% in 2018, i.e. one year before the Basel III standard. The net stable funding ratio (NSFR) is expected to be introduced on 1 January 2018, with a minimum requirement of 100%. Since the NSFR has not yet been finalised at EU level, the Basel III standard is used in this section as well<sup>7</sup>.

With regard to the LCR, the average ratio based on data as of the end of December 2014 is 123.7% and 149.6% for Group 1 and Group 2 banks, respectively. In the total sample, 72% of the banks show an LCR ratio above 100%, while 87% 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 65.6 billion. 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 in net outflows), as well as to the recalibration of the LCR framework as published in January 2013. However, the LCR for Group 2 banks decreases compared with the previous reference date, which is predominantly due to a reduction in securities included in Level 1 assets.

With respect to the NSFR, Group 1 and Group 2 banks show an average ratio of 102% and 109%, respectively, with an overall shortfall in stable funding of EUR 523 billion. About 60% of Group 1

<sup>6</sup> European Commission, Delegated Act on the LCR: [http://ec.europa.eu/finance/bank/docs/regcapital/acts/delegated/141010\\_delegated-act-liquidity-coverage\\_en.pdf](http://ec.europa.eu/finance/bank/docs/regcapital/acts/delegated/141010_delegated-act-liquidity-coverage_en.pdf).

<sup>7</sup> BCBS, Basel III: The net stable funding ratio – consultative document, January 2014 ([www.bis.org/publ/bcbs271.pdf](http://www.bis.org/publ/bcbs271.pdf)).

banks and 74% of Group 2 banks already meet the minimum NSFR requirement of 100%. Compared with previous periods, there has been a continuous increase in banks' NSFR, which is mainly driven by the increasing amount of available stable funding (ASF) for both groups.

At the end of 2015, the EBA will also publish the NSFR impact assessment report which will present a more detailed analysis on NSFR, in accordance with its mandate under Article 510 of the CRR.

# 1. General remarks

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The report includes an analysis of data submitted by 53 Group 1 banks from 14 countries and 311 Group 2 banks from 22 countries. Table 1 shows the participation by jurisdiction. Group 1 banks in this report are defined as banks with Tier 1 capital in excess of EUR 3 billion which are internationally active. All other banks are classified in Group 2. For the purposes of more discriminatory analyses Group 1 and Group 2 are further separated into sub-samples: G-SIBs<sup>8</sup> have been analysed separately within Group 1, while large, medium and small Group 2 banks have been analysed separately within Group 2.

Coverage of the banking sector is high, reaching 100% of Group 1 banks in some countries (aggregate coverage in terms of CRD IV–CRR RWA: 96%). Coverage of Group 2 banks is lower and varies across countries (aggregate coverage: 35%). Furthermore, the analysis of overall Group 2 results is driven by a significant number of large but non-internationally active banks, i.e. banks that, excluding international activity, have similar characteristics to those of Group 1 banks. To analyse further this effect, this report for the first time has classified Group 2 banks into sub-samples. Group 2 banks are classified as large when they have Tier 1 capital in excess of EUR 3 billion, medium when they have Tier 1 capital less than or equal to EUR 3 billion and greater than EUR 1.5 billion, and small when they have Tier 1 capital less than or equal to EUR 1.5 billion.

Not all banks provided data relating to all parts of the reporting template for the monitoring exercise. Accordingly, a certain number of banks are excluded from individual sections of the monitoring analysis due to the provision of incomplete data. In all sections, comparisons with previous periods are based on a consistent sample of banks, i.e. including only those banks which have consistently reported the relevant data for all reference dates, so as to allow for reference-date-to-reference-date comparisons and/or time series analyses.

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<sup>8</sup> See Financial Stability Board, 2014 update of list of G-SIBs, 6 November 2014, [www.financialstabilityboard.org/wp-content/uploads/r\\_141106b.pdf](http://www.financialstabilityboard.org/wp-content/uploads/r_141106b.pdf).

## 1.1 Sample of participating banks

**Table 1: Number of banks which submitted data for any part of the monitoring exercise<sup>9</sup>**

	Group 1	Group 2
Austria	3	8
Belgium	4	11
Cyprus	—	4
Czech Republic	—	14
Denmark	2	13
France	5	12
Germany	8	88
Greece	4	—
Hungary	—	2
Ireland	4	9
Italy	2	30
Latvia	—	2
Lithuania	—	2
Luxembourg	—	7
Malta	—	4
Netherlands	3	12
Norway	1	3
Poland	—	19
Portugal	2	4
Slovakia	—	4
Spain	2	9
Sweden	4	6
United Kingdom	9	48
<b>Total</b>	<b>53</b>	<b>311</b>

## 1.2 Methodology

### ‘Composite bank’ weighting scheme

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

<sup>9</sup> The number of banks which submitted data is higher than the number of banks included in the analysis of the various sections of the report due to the following reasons: (a) the banks which did not submit data on a particular topic, or submitted data of low quality, were excluded from the relevant sections of the report; and (b) subsidiaries of banks which submitted data on an individual basis were also excluded from the analysis in order to avoid double counting.

## Box plots illustrate the distribution of results

To ensure data confidentiality, some of the figures in the reports are 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	Regulatory minimum requirement
Dashed lines	Regulatory minimum requirement plus the capital conservation buffer (capital)
Thin red line	Median value (50% of the observations are below this value, 50% are above this value)
x	Mean (weighted average)
Blue box	25th and 75th percentile values. A percentile is the value of a variable below which a certain per cent of observations fall. For example, the 25th percentile is the value below which 25% 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.

## 1.3 Interpretation of results

The quantitative impact study aims to monitor the convergence of EU banks with the regulatory requirements under the assumption of full implementation of CRD IV–CRR, that is, not considering the transitional arrangements relating to the phase-in of deductions and to grandfathering. 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 being phased out over a nine-year time horizon.

For the calculation of results referred to as 'current', 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 (December 2014), the figures under the current rules refer to the state of implementation of the CRD IV–CRR framework as of December 2014. Therefore, the differences between the fully phased-in results and the results under the current rules in the capital and RWA section are solely due to the remaining transitional arrangements in place between December 2014 and the full implementation date.

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 analysis. 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.

It is important to note that the monitoring exercise is based on the assumption of a static balance sheet, i.e. capital elements are only included if 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 reliance on the effective changes in a bank's capital to be identified, rather than relying on anticipated changes based on underlying modelling assumptions. As a consequence, monitoring results are not comparable with industry estimates, as the latter usually include assumptions on banks' future profitability, planned capital and/or management actions intended to mitigate the impact of CRD IV–CRR.

## 1.4 Data quality

The banks participating in the monitoring exercise submitted comprehensive and detailed non-public confidential data on a best-effort voluntary 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 national supervisory reporting systems have been used wherever possible to reduce recourse to banks. The sample of banks was extended for the purpose of analytical work on the European LR<sup>10</sup>. Since some of the banks reported the relevant information for the first time, the data quality will need to improve, especially for the calculation of derivative exposures.

In the liquidity part of the exercise, some banks may have reported their liquidity risk positions based 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. However, data quality has improved significantly since the beginning of the monitoring exercise.

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<sup>10</sup> The EBA is currently analysing different aspects of the calibration and impact of the LR, as required by Art 511(3) and (4) of the CRR.

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

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### 2.1 Capital ratios

One of the main objectives of the CRD IV–CRR/Basel III 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 for the calculation of RWA. As this exercise assumes full implementation of CRD IV–CRR (without accounting for any transitional arrangements), it compares capital ratios under the current level of implementation with the capital ratios that banks would exhibit were the set of rules in the CRD IV package fully implemented at the reference date.<sup>11</sup>

Due to the implementation of the CRD IV package in 2014, the results shown under the current rules are based on the state of implementation at the reference date. In this context, it is important to elaborate on the implications for the monitoring results of fully implementing the CRD IV package. The CRD IV–CRR capital/capital ratio figures of this exercise presume that all common equity deductions are fully phased in while all non-qualifying capital instruments are fully phased out. Accordingly, these amounts may underestimate the amount of Tier 1 capital and total capital currently held by banks, as they do not take into account 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 had fully implemented CRD IV–CRR requirements, as of 31 December 2014.

For Group 1 banks, the impact on CET1 ratio is a reduction from 12.2% under the current rules (i.e. taking into account the transitional arrangements applying in 2014) to 11.4% under the full implementation regime (a decline of 0.8 percentage points), while the average Tier 1 and total capital ratio would decline from 13.5% to 11.9% (or 1.6 percentage points) and from 16.3% to 14.2% (or 2.1 percentage points), respectively.

Table 2 also includes the results for the Basel III LR requirement. Had the Basel III LR requirement already been in place at the reference date, the average LR of Group 1 would have been 4.8%. Under full implementation of the Basel III capital framework, the LR decreases to 4.2%.

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<sup>11</sup> Figures shown in the report reflect capital ratios before the application of national floors.

**Table 2: Capital ratios and leverage ratio per bank group (per cent)**

	Number of banks	CET1		Tier 1		Leverage ratio		Total capital	
		Current	Full	Current	Full	Current	Full	Current	Full
<b>Group 1</b>	<b>45</b>	<b>12.2</b>	<b>11.4</b>	<b>13.5</b>	<b>11.9</b>	<b>4.8</b>	<b>4.2</b>	<b>16.3</b>	<b>14.2</b>
G-SIBs	14	11.5	11.0	12.9	11.5	4.5	4.1	15.5	13.5
<b>Group 2</b>	<b>160</b>	<b>13.2</b>	<b>12.4</b>	<b>13.7</b>	<b>12.7</b>	<b>5.3</b>	<b>5.0</b>	<b>15.7</b>	<b>14.5</b>
Large Group 2	25	12.8	11.6	13.2	12.1	5.4	5.0	15.4	14.1
Medium Group 2	31	14.3	13.9	15.1	14.3	5.3	5.1	16.6	15.4
Small Group 2	104	13.5	13.3	14.0	13.3	4.9	4.7	16.0	14.7

For Group 2 banks, the transitional arrangements for the definition of capital result in a decline of 5.2% in the level of CET1 capital and the level of RWA increases by 0.9% due to the provisions of full implementation of the CRR, which allow banks to risk-weight some of their exposures instead of deducting them from the capital. The findings show that changes in CET1 capital and RWA levels for Group 2 banks are driven mainly by large Group 2 banks. The decrease in CET1 capital and the increase in RWA for large Group 2 banks are 7.7% and 1.3%, respectively, higher than the average figures both for the entire Group 2 sample and for the Group 1 sample. For medium Group 2 banks the average decrease in CET1 capital and the average increase in RWA from the current reporting date to full implementation are 2.6% and 0.6%, respectively.

Figure 1 presents the basic descriptive statistics on capital ratios and the LR for the participating Group 1 and Group 2 banks. It illustrates the regulatory minimum requirement (thick red line), the weighted average (x) and the median (thin red line), i.e. the median value or the 50th percentile under which 50% of observations fall. Dashed lines indicate the minimum regulatory requirement plus the capital conservation buffer.

Figure 1 shows that the values of capital ratios and the LR 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 75th percentile (indicated by the upper line of the blue box, under which 75% of the observations fall) and the 25th percentile (indicated by the lower line of the box, under which 25% of the observations fall) is greater for Group 2 banks. An explanation for this is the greater 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 Group 2 banks is higher than that for Group 1 banks for all ratios.

**Figure 1: Left side: distribution of CET1, Tier1 and total capital ratio; right side: leverage ratio per bank group**

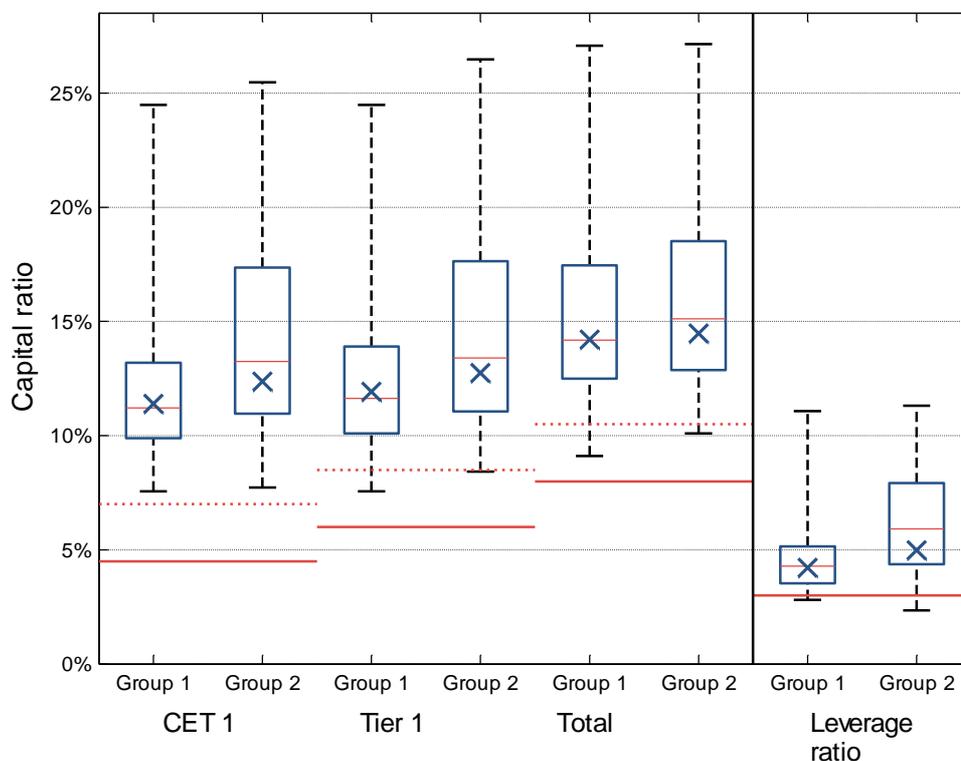
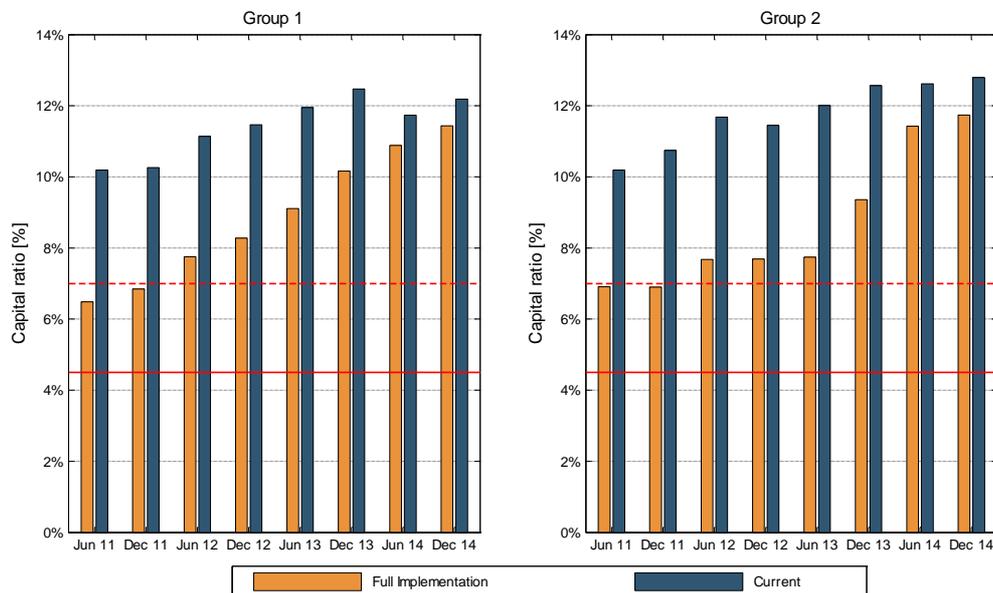


Figure 2 shows the trend in the current and full implementation CET1 ratios for the period June 2011 to December 2014 for a consistent sample, i.e. the banks which consistently submitted data for all reference dates. The current CET1 ratio for Group 1 banks increased from just over 10% to 12.5% during the period June 2011 to December 2013; it then temporarily decreased to 11.7% in June 2014 before increasing to its current level of 12.2%. The reduction observed in June 2014 can be explained by the introduction of the CRD IV–CRR in January 2014, which, for the first time, is reflected in the monitoring exercise for reporting date end June 2014. Nevertheless, the CET1 ratio for Group 1 banks, under full implementation of the CRD IV–CRR package, increased by 0.6 percentage points compared with the previous reference date. The overall cumulative CET1 increase since June 2011 is 5.0 percentage points.

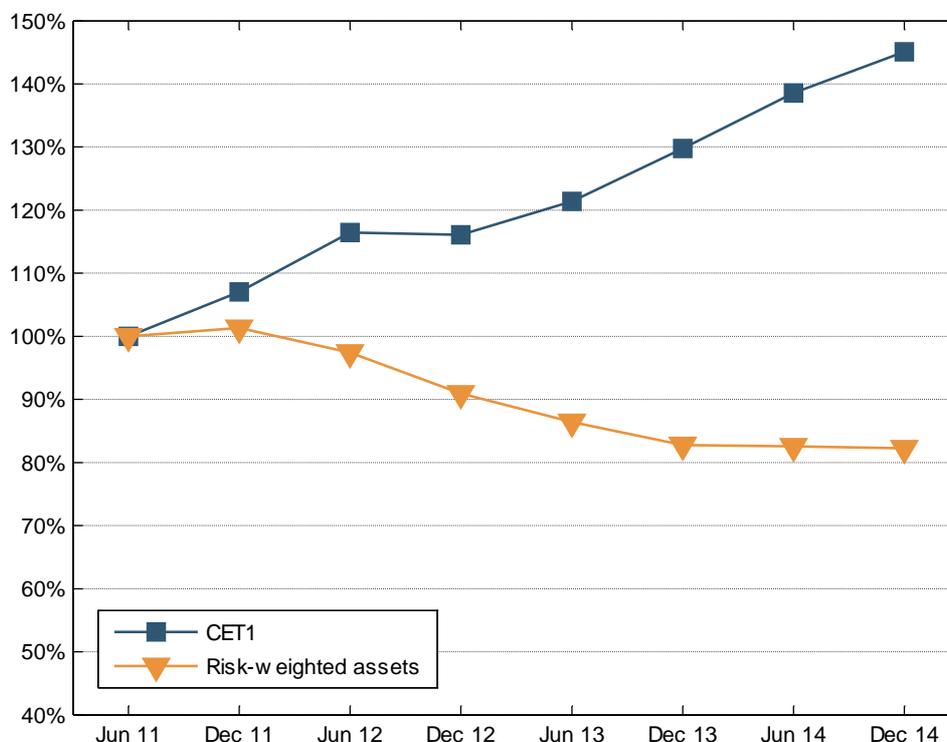
**Figure 2: Evolution of CET1 ratios over time**

A similar trend can be observed for Group 2 banks. The current CET1 ratio, which increased for the period June 2011 to December 2013, remained almost the same in June 2014 as at the previous reporting date. In December 2014, the CET1 ratio for Group 2 banks under full implementation of CRD IV–CRR increased by 0.2 percentage points.

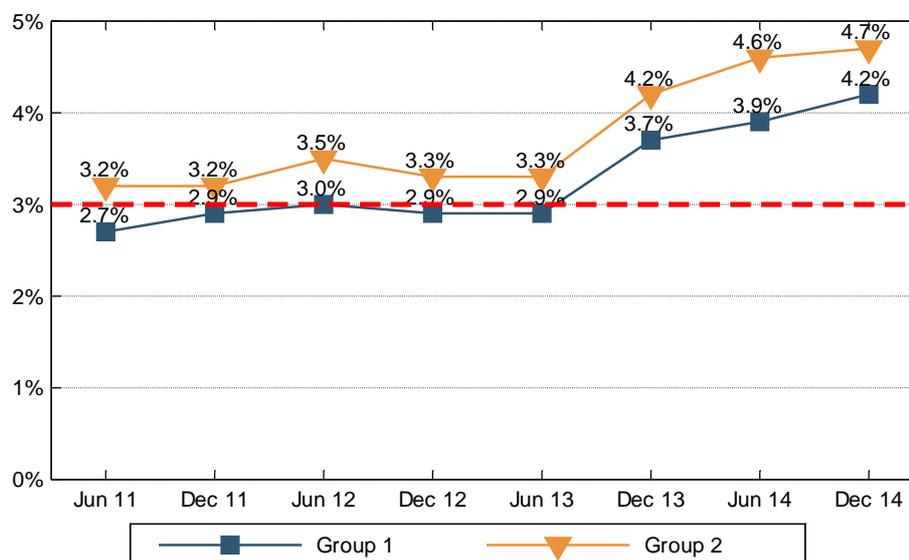
Monitoring results show that Group 1 banks in particular have steadily increased their capital ratio over time. The increase over the most recent monitoring periods implies that banks are already trying to meet market expectations well in advance of full implementation of the CRD IV–CRR/Basel III framework.

The historical upward trend in the CET1 ratio for Group 1 banks is mainly explained by the increase in CET1 capital and, to a lesser extent, by the decrease in RWA (Figure 3). This trend can be observed for most of the data points covered since June 2011.

**Figure 3: Evolution of CET1 versus RWA over time, Group 1 banks**



The increase in the level of capital is also reflected to an extent in the LR. Compared with the previous period and taking a consistent sample of banks, between June 2013 and December 2013 there was a significant increase in banks' LRs (see Figure 4), which can be partially attributed to the recalibration of the LR exposure in January 2014, with the first application as of December 2013. The increase continued during the period December 2013 to June 2014. The increase continued for Group 1 banks in December 2014; however, the average LR for Group 2 banks for this period remained nearly the same. The increase in the LR for Group 1 banks is mostly due to the increase in Tier 1 capital (about 6%), whereas LR exposure decreased only slightly. For Group 2 banks, the decrease in the LR exposure (1.8%) is offset by a decrease in Tier 1 capital (0.9%).

**Figure 4: Evolution of leverage ratio by bank group**

## 2.2 Capital shortfall

Table 3 provides estimates of the additional amount of capital that Group 1 and Group 2 banks would need in order to meet the target CET1, Tier 1 and total capital ratios under the CRD IV package and the LR under the Basel III framework. The estimates assume fully phased-in target requirements and deductions. In the analysis, capital shortfall is calculated as the difference between capital requirements and eligible capital at bank level and represents capital needs assuming capital requirements for successively higher-quality capital layers have been met.

For Group 1 banks, the CET1 capital shortfall is zero when compared with the minimum requirement of 4.5% (not shown) and EUR 1.5 billion when compared with the target level of 7.0%<sup>12</sup>, i.e. the minimum requirement plus the conservation buffer. The total shortfall of Tier 1 capital to meet both the capital ratio and the LR is EUR 5.0 billion for Group 1 banks and EUR 1.2 billion for G-SIBs<sup>13</sup>. The total capital shortfall necessary to fulfil the risk-based requirements (7.0% CET1, 8.5% Tier1 and 10.5% total capital) and the LR requirement of 3% is EUR 19.4 billion for Group 1 banks.

Group 2 banks have a CET1 shortfall of EUR 2.4 billion at 7% level and the aggregate shortfall can be attributed to six banks in the Group 2 sample.

<sup>12</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>13</sup> Note that the total Tier 1 capital shortfall for a bank is the higher of the Tier 1 capital shortfall for Tier 1 capital ratio requirement and the Tier 1 shortfall for the LR requirement.

**Table 3: Capital shortfall, all banks by bank group (billion EUR)**

	Number of banks	CET1	Tier1			Total	
			Tier1 8.5%	LR 3%	To meet both	To meet all risk-sensitive ratios	To meet all risk-sensitive ratios and LR
<b>Group 1</b>	<b>45</b>	<b>1.5</b>	<b>4.5</b>	<b>1.1</b>	<b>5.0</b>	<b>18.9</b>	<b>19.4</b>
G-SIBs	14	—	1.2	—	1.2	14.1	14.1
<b>Group 2</b>	<b>160</b>	<b>2.4</b>	<b>4.7</b>	<b>6.1</b>	<b>8.1</b>	<b>6.5</b>	<b>9.8</b>
Large Group 2	25	2.0	3.2	2.7	3.6	3.3	3.7
Medium Group 2	31	—	0.3	0.9	1.2	1.1	1.9
Small Group 2	104	0.4	1.2	2.5	3.3	2.2	4.1

Group 1 banks' shortfall has been continuously reducing over the last years. Figure 5 presents this trend. The aggregate decrease in capital shortfall is fairly proportionate across different categories of capital (i.e. CET1 and Tier 1, when taking into account both the risk-sensitive requirement, and the LR, and total capital). Between June 2011 and December 2014, the total capital shortfall for Group 1 banks fell by 95%.

However, the downward trend presented in Figure 5 does not necessarily imply that the 'actual shortfall' of Group 1 banks is zero for the current reference date. There are several additional requirements, such as additional bank-specific Pillar II buffers, which are not considered in the current analysis and could potentially suggest the need for certain banks to raise additional capital.

For Group 2 banks, the data show an increase in aggregate capital shortfalls between June and December 2014, with the increase in CET1 shortfall being the most significant. The source of the shortfall for CET1 capital is four Group 2 banks; three of them had shortfall levels in December 2014 above their June 2014 values. In all three cases there were significant decreases in CET1 (from 10% to 58%), while the impact of RWA on the shortfall was negligible.

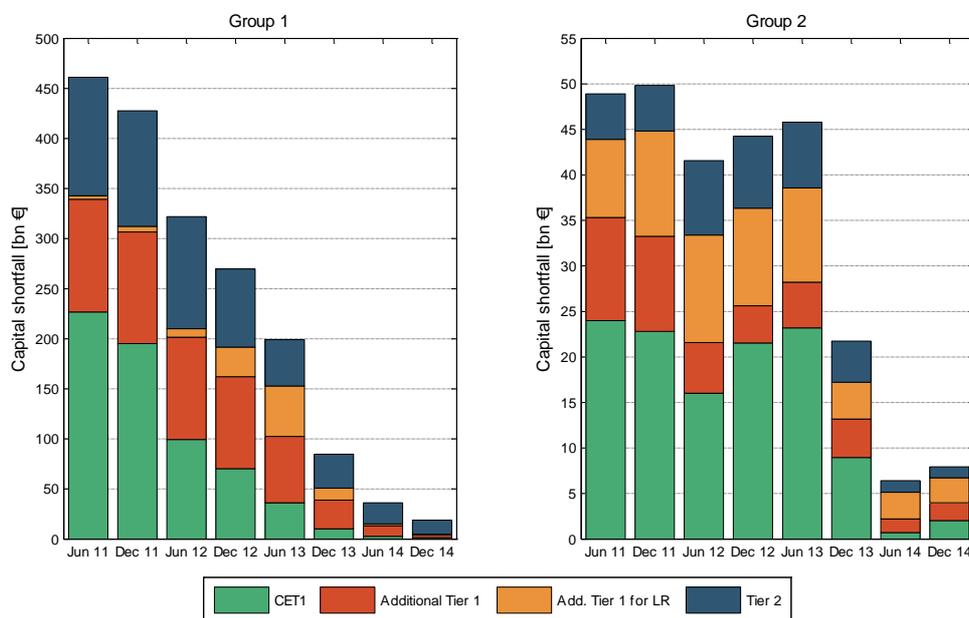
**Figure 5: Evolution of capital shortfall by type of capital under full implementation**

Table 4 presents the interaction between LR and T1 capital ratio requirements<sup>14</sup>.

In this sample, there are three Group 1 banks (or 6.7% of the Group 1 sample) that do not meet the minimum LR target. The corresponding shortfall is EUR 1.1 billion. The LR requirement is a constraint for about 75.6% of the Group 1 banks. The LR, rather than the Tier 1 capital ratio, is said to be a constraint for a bank if this bank requires more capital to meet the minimum LR requirement than to meet the minimum requirement for Tier 1 capital ratio. To be precise, it is deemed to be a constraint when 3% of the LR exposure exceeds the minimum Tier 1 capital ratio times the RWA.

The number of LR non-compliant Group 1 banks falls to two banks (4.4%) under the assumption that the minimum Tier 1 capital ratio of 6% has been met. The corresponding shortfall would be EUR 0.8 billion.

When conservation buffers and the G-SIB surcharges are considered, the proportion of Group 1 banks that are constrained by the LR goes down to 39.1%. This indicates that, even when considering compliance with the Tier 1 capital ratio of 8.5%, 40% of the banks are still constrained by the LR.

<sup>14</sup> Please note that a common sample (of 205 banks) was used to carry out the interaction analysis as shown in Table 4.

**Table 4: Banks constrained by leverage ratio rather than capital ratio requirement (excluding and including capital buffer), all banks by bank group**

	Number of non-compliant banks	Percentage of non-compliant banks	LR shortfall (billion EUR)	Tier 1: 6% requirement			Tier 1: 8.5% requirement		
				Constrained by LR (%)	Non-compliant after meeting T1 ratio (%)	Additional capital requirement	Constrained by LR (%)	Non-compliant after meeting T1 ratio (%)	Additional capital requirement
<b>Group 1</b>	<b>3</b>	<b>6.7</b>	<b>1.1</b>	<b>75.6</b>	<b>4.4</b>	<b>0.8</b>	<b>40.0</b>	<b>4.4</b>	<b>0.5</b>
G-SIBs	—	—	—	92.9	—	—	28.6	—	—
<b>Group 2</b>	<b>15</b>	<b>9.4</b>	<b>6.1</b>	<b>58.4</b>	<b>9.4</b>	<b>5.1</b>	<b>28.1</b>	<b>8.8</b>	<b>3.4</b>
Large Group 2	2	8.0	2.7	64.0	8.0	1.7	24.0	4.0	0.4
Medium Group 2	1	3.2	0.9	61.3	3.2	0.9	38.7	3.2	0.9
Small Group 2	12	11.5	2.5	56.7	11.5	2.5	26.0	11.5	2.1

## 2.3 Impact of phase-in arrangements

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 for both Group 1 and Group 2 banks under full implementation, mainly due to the reduction in eligible capital elements.

The aggregate CET1 capital of Group 1 banks shows a decrease of 6.5%, while Tier 1 and total capital decrease by 11.4% and 12.8%, respectively (Table 5). For Group 2 banks, the relative percentage changes in CET1, Tier 1 and total capital are 5.2%, 5.8% and 7.0%, respectively. The figures suggest that Group 1 banks are more constrained regarding CET1 capital than Group 2 banks, which exhibit a considerably smaller decrease in Tier 1 and total capital.

The reduction observed in CET1 and Tier 1 capital for Group 2 banks is mainly driven by the relatively greater changes observed in large Group 2 banks. Furthermore, banks in different categories follow similar patterns except large Group 2 banks, and relative changes in CET1 capital and RWA are more significant for large Group 2 banks.

**Table 5: Changes in CET1, Tier 1 and total capital and RWA relative to the current amounts (per cent)**

	Number of banks	CET1	Tier 1	Total capital	RWA
<b>Group 1</b>	<b>45</b>	<b>-6.5</b>	<b>-11.4</b>	<b>-12.8</b>	<b>0.1</b>
G-SIBs	14	-5.1	-10.3	-13.3	0.0
<b>Group 2</b>	<b>168</b>	<b>-5.2</b>	<b>-5.8</b>	<b>-7.0</b>	<b>0.9</b>
Large Group 2	25	-7.7	-7.3	-7.1	1.3
Medium Group 2	34	-2.6	-4.6	-7.2	0.6
Small Group 2	109	-0.0	-2.4	-6.1	0.0

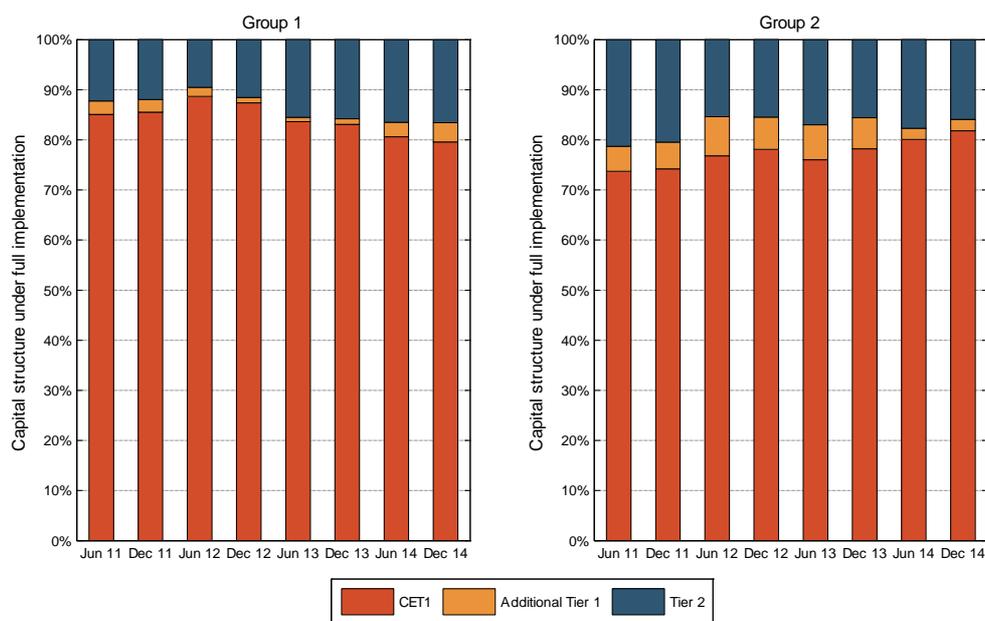
## 2.4 Composition of capital

Figure 6 shows the composition of total capital for Group 1 and Group 2 banks under the assumption of full implementation. Time-series analysis based on a consistent sample shows that the share of CET1 capital under full implementation has been decreasing for Group 1 banks and increasing for Group 2 banks since June 2013. However, for Group 1 banks this is due to the increased accumulation of additional Tier 1 and Tier 2 capital (both capital types having more than doubled since June 2011) compared with the accumulation of CET1 capital which increased by 45.0% during the same period.

As of December 2014, Group 1 banks' data indicate that the share of fully implemented CET1 to total capital is about 80%. Additional Tier 1 and Tier 2 capital amount to about 4% and 16%, respectively, of the total capital of Group 1 banks. In the Group 1 sample, 10 banks (or 22% of the Group 1 banks) hold CET1 capital that represents about 54% of the total CET1 capital of Group 1 banks.

Group 2 banks hold a slightly higher share of CET1 capital, compared with Group 1, under the assumption of full implementation of CRD IV–CRR. This share amounts to approximately 85% of total capital, while the shares of additional Tier 1 capital (3%) and Tier 2 capital (12%) are correspondingly lower.

**Figure 6: Capital structure over time**

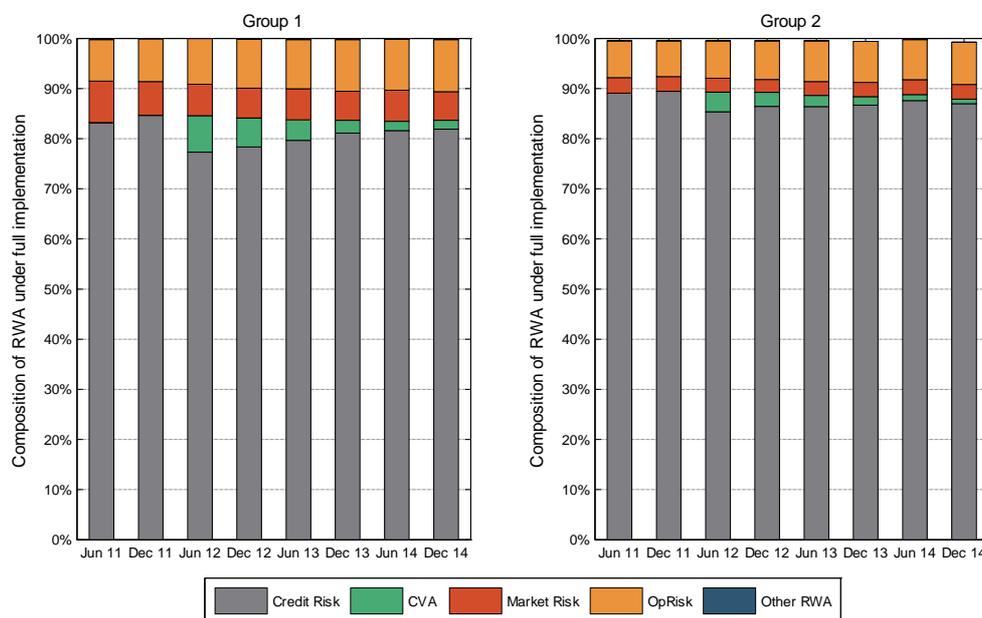


## 2.5 Composition of RWA

After analysing the different forms of capital that represent the numerators of capital ratios, the current sub-section deals with the RWA, the denominator of capital ratios.

Figure 7 shows that credit risk is the major component of RWA under the fully phased-in CRD IV 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. For Group 1 banks the share of credit risk has been increasing since June 2012. Operational risk makes up the second highest share of RWA for both groups of banks. Furthermore, the declining share of RWA for credit value adjustment (CVA) over time suggests that the CVA exemption introduced under the CRR<sup>15</sup> has had a direct impact on the capital structures of both Group 1 and Group 2 banks. Figure 7 also shows that the introduction of the CVA capital charge resulted in portfolio adjustments and the cutting down of CVA positions, which reduced overall capital requirements.

<sup>15</sup> See Article 382 and Article 482 of the CRR for the scope of the EU's CVA adoption.

**Figure 7: Composition of RWA over time**

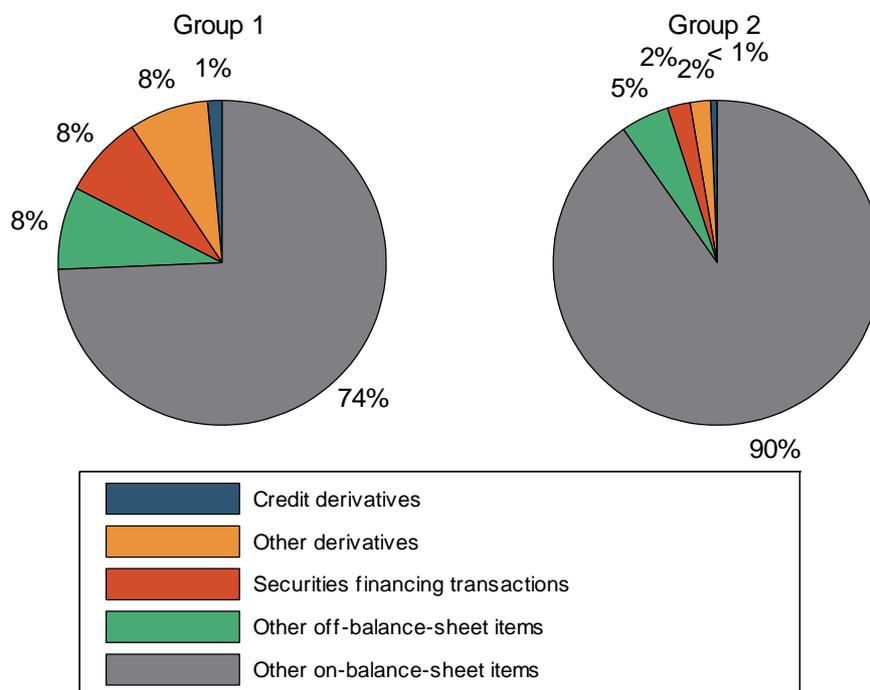
## 2.6 Composition of leverage ratio exposure

This sub-section looks at LR exposure, the denominator of the LR. Figure 8 shows the composition of LR exposure by group. For both groups ‘other on-balance-sheet exposures’ are the main component of LR exposures. For Group 1 banks the LR exposures relate to derivatives and securities financing transactions, and off-balance-sheet items are also relevant, while for Group 2 the exposures are characterised by a more traditional bank business model, with ‘other on-balance-sheet items’ representing 90% of LR exposure. Note that the calculation of derivatives exposure is currently under review by the BCBS<sup>16</sup>. According to the Basel III LR framework<sup>17</sup>, alternative approaches to the Current Exposure Method (CEM) are taken into account. The Standardised Approach for measuring Counterparty Credit Risk (SA-CCR), which will replace CEM in the risk-based framework in January 2017, is under review for the purpose of calculating the LR and is expected to have an impact on Group 1 banks. In addition, the BCBS and the EBA are in the process of assessing whether the design and calibration of a minimum Tier 1 LR of 3% are appropriate for different types of business models over a full credit cycle.

<sup>16</sup> The final calibration of the LR is envisaged to be completed by 2017.

<sup>17</sup> See p. 7 of the Basel III LR framework: <http://www.bis.org/publ/bcbs270.pdf>

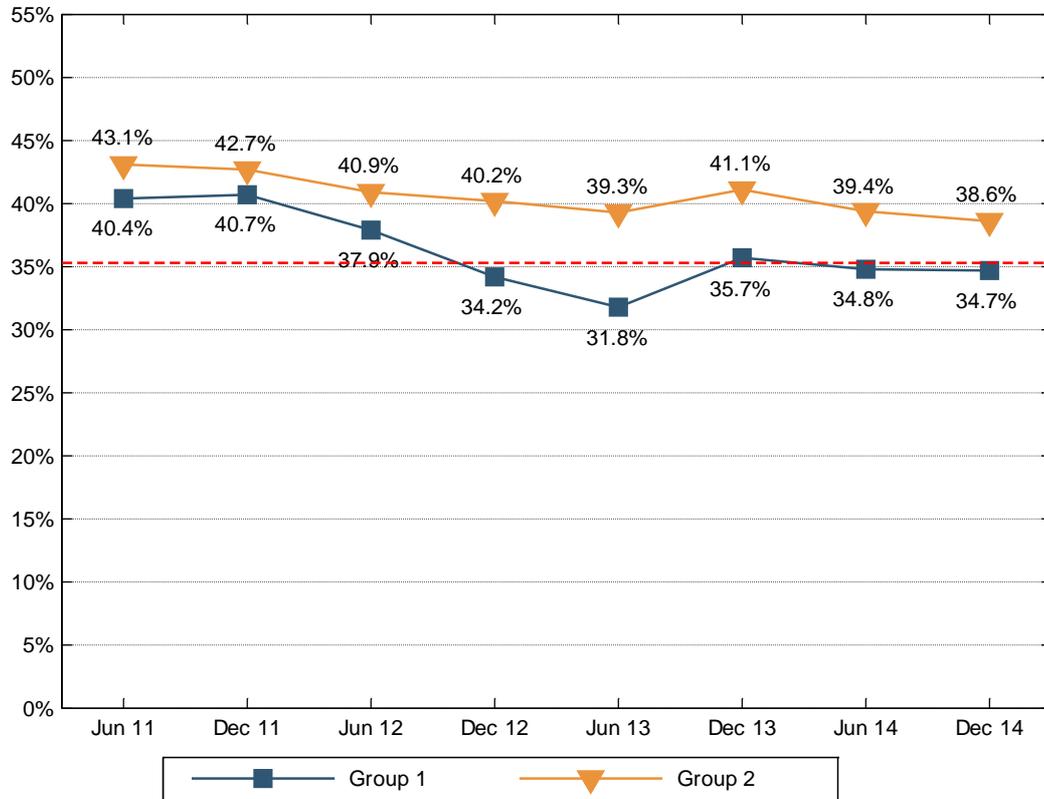
**Figure 8: Composition of leverage ratio exposure (per cent)**



The implementation of a LR is not intended to offset any positive effects of the risk-based approach. Therefore, the interaction of the LR with risk-based factors is being monitored. Figure 9 illustrates the development of the relationship of RWAs to LR exposure by bank group. If the relationship is below the dotted red line (35.3%), this implies that the LR, rather than the risk-based Tier 1 capital ratio of 8.5%, would be on average a binding constraint<sup>18</sup>. This figure mostly decreased for the period June 2011 to June 2013 (which was caused by a decrease in RWA coupled with an increase in LR exposure), while increases of 390 basis points for Group 1 and 190 basis points for Group 2 were observed in December 2013 compared with June 2013. This change was caused by a decrease in LR exposure, partially driven by the recalibration of the LR exposure definition. For the current reference date (December 2014), there has been a decrease, compared with the previous reference date, of the ratio of RWA to LR exposure of 10 basis points for Group 1 banks and of 80 basis points for Group 2 banks.

<sup>18</sup> The threshold represents the ratio of RWA to LR exposure that is equal to 3% over 8.5%.

**Figure 9: The evolution of the ratio of RWA to leverage ratio exposure per bank group**



## 3. Liquidity

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### 3.1 Liquidity coverage ratio

Another minimum standard in the CRD IV package is the 30-day LCR provision, which is intended to promote short-term resilience to potential liquidity disruptions. The LCR requires banks to have a 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.

At EU level, the European Commission adopted a DA on the LCR in October 2014, specifying in detail the general requirement set out in Article 412(1) of the CRR. The minimum requirement has been set at 60% from 1 October 2015 and will gradually increase to 100%. The deadline for the final implementation of the LCR at the 100% minimum level is in January 2018, i.e. the EU regulation requires a minimum of 100% one year before the Basel III standard. As supervisory reporting requirements in accordance with the DA, will most probably not be in place before 2016, and the current ITS on supervisory reporting cannot be used for calculating the LCR under the DA, the following results are based on the Basel III LCR framework as published in January 2013<sup>19</sup>. Therefore, the results presented in the analysis of this section should be cautiously interpreted, as reliance on LCR DA data might have led to slightly different results from the results based on the Basel III LCR framework below.

Under Basel III, there are two categories of assets that can be included in the stock of liquid assets. These are Level 1 assets, which can be included without limit, and Level 2 assets, which are capped at 40% of the total stock. Within Level 2, an additional class of assets, Level 2B assets, is defined; these assets should comprise no more than 15% of the total stock of HQLA. Net outflows are defined as total cash outflows minus cash inflows; the latter are subject to a cap of 75% of total outflows. Consequently, a minimum of 25% of cash outflows has to be covered by liquid assets. The DA on the LCR expanded the scope of the HQLA buffer within the EU framework by including (i) assets issued by credit institutions if the institution is guaranteed by a Member State's local or central government or if the institution is a promotional lender subject to additional criteria, (ii) external credit assessment institution (ECAI) 1-rated, ECAI 2-rated and unrated high-quality covered bonds, (iii) high-quality securitisation, and (iv) deposits in cooperative and institutional protection schemes.

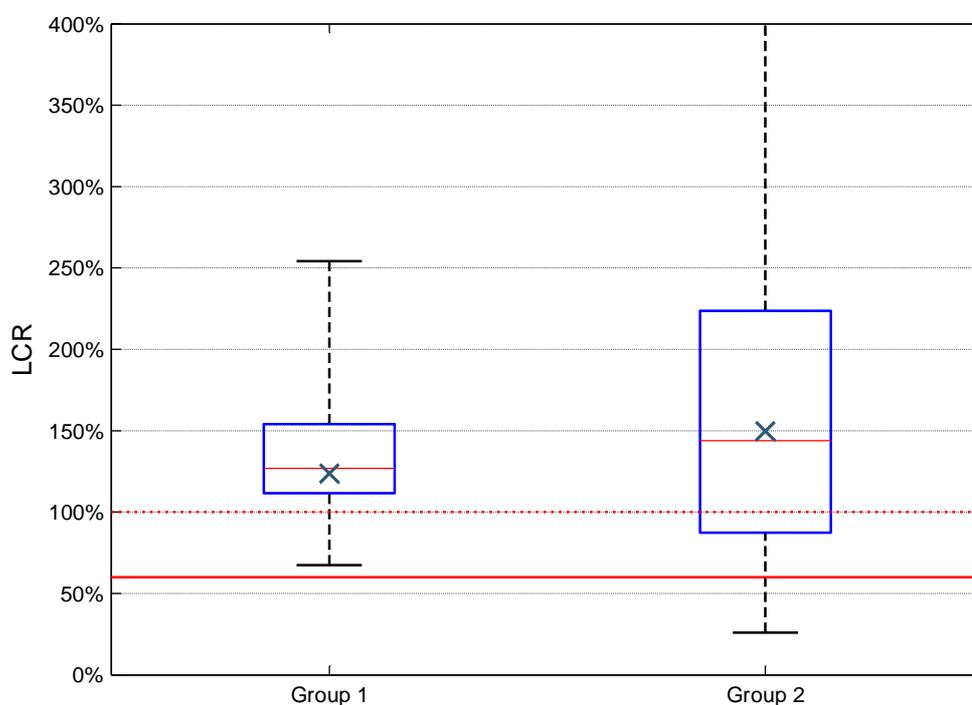
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<sup>19</sup> Except for securitisation positions in the trading positions in the trading book that do not belong to the correlation trading portfolio, as stated in Annex I, paragraph 16(a) of Directive 2006/49/EC.

### *LCR and shortfall in liquid assets*

Figure 10 provides an overview of LCR by bank group. As of December 2014, Group 1 banks exhibit an LCR of 124%, while Group 2 banks' LCR is 150%. The vast majority of Group 1 banks already meet the 100% requirement, i.e. 34 of the 39 banks (87%), while only one Group 1 bank is below the 60% minimum level. The picture is different for Group 2 banks: 117 of the 171 Group 2 banks (68%) have an LCR above 100%, while 27 of the Group 2 banks (16%) have to improve their liquidity positions in order to reach the minimum requirement of 60%.

**Figure 10: Distribution of LCR by bank group**



The total LCR shortfall with regard to a minimum ratio of 100% is EUR 65.6 billion, of which EUR 38.3 billion correspond to Group 1 banks and EUR 27.3 billion to Group 2 banks. The total shortfall represents 19.0% of total HQLA (EUR 346 billion) and 1.8% of total assets (EUR 3.6 trillion) of all non-compliant banks. In order to comply with the minimum requirement of 60% by October 2015, banks need an additional amount of EUR 8.4 billion of liquid assets. Shortfall is calculated here as 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%, not taking account of the surplus arising from those banks which already meet the minimum requirement. Therefore, the reported shortfall amount represents a conservative proxy of banks' actual shortfall, as it does not make any assumptions about the reallocation of liquidity between individual banks or within the system.

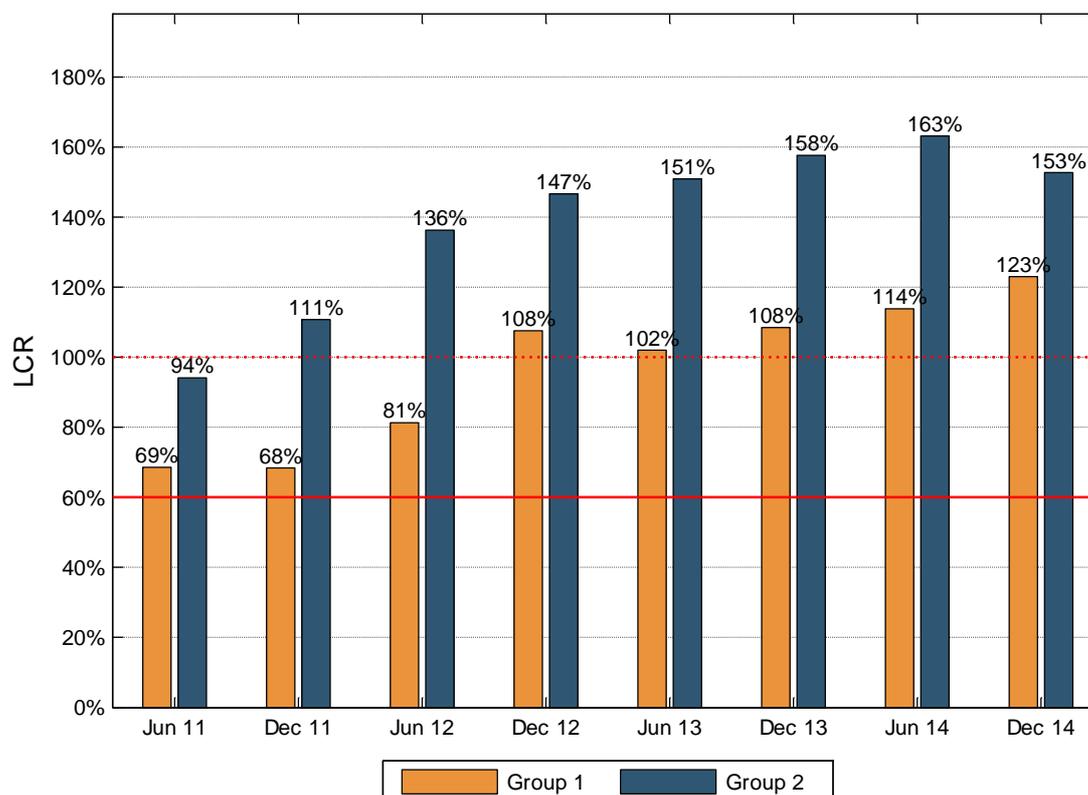
**Table 6: LCR levels in per cent and shortfall amounts (billion EUR) for different minimum ratios as set out in the schedule of compliance in Article 460(2) of the CRR**

	Number of banks	LCR	LCR shortfall at a minimum of			
			60% (Oct 2015)	70% (Jan 2016)	80% (Jan 2017)	100% (Jan 2018)
<b>Group 1</b>	<b>39</b>	<b>123.7</b>	<b>1.0</b>	<b>6.1</b>	<b>12.1</b>	<b>38.3</b>
G-SIBs	12	127.5	—	—	—	—
<b>Group 2</b>	<b>171</b>	<b>149.6</b>	<b>7.4</b>	<b>11.0</b>	<b>15.7</b>	<b>27.3</b>
Large Group 2	21	136.3	5.2	6.9	9.4	15.5
Medium Group 2	28	180.2	0.6	1.2	1.8	3.0
Small Group 2	122	152.2	1.6	2.9	4.5	8.8

#### *Evolution of the LCR over time*

Compared with the previous period and using a consistent sample of banks, the LCR for Group 1 banks increased by 9 percentage points to 123%, due to both an increase in the stock of liquid assets and a decrease in net cash outflows (Figure 11). On the contrary, for Group 2 banks there has been a decrease of 10 percentage points, mainly caused by a reduction in liquid assets while net outflows remained generally unchanged. Apart from structural adjustments, changes in the LCR can also be attributed to the recalibration of the LCR framework as published in January 2013.

**Figure 11: Evolution of LCR by bank group**



### Impact of the cap on HQLA

There are three banks in Group 1 and 26 banks in Group 2 affected by the cap on Level 2A or 2B assets or both. The total amount of capped assets, i.e. assets that are not included in Level 1 or Level 2 assets, is EUR 13.5 billion (Table 7). Nevertheless, the impact of the cap on the overall stock of liquid assets is limited; moreover, the cap seems not to have a significant influence on the liquidity profile of the individual banks. In total, had the Level 2 assets not been capped, only four out of the 29 banks which currently have an LCR below 60% would have passed the threshold of 60%.

**Table 7: Impact of the cap on liquid assets**

	Cap on Level 2A assets		Cap on Level 2B assets		Shortfall of banks where Level 2A or Level 2B cap applies (billion EUR)
	No of banks where Level 2A cap applies	Reduction of Level 2A assets due to cap (billion EUR)	No of banks where Level 2B cap applies	Reduction of Level 2B assets due to cap (billion EUR)	
<b>Group 1</b>	—	—	<b>3</b>	<b>1.7</b>	<b>21.6</b>
G-SIBs	—	—	—	—	—
<b>Group 2</b>	<b>20</b>	<b>11.4</b>	<b>9</b>	<b>0.4</b>	<b>8.8</b>
Large Group 2	1	5.9	—	—	7.2
Medium Group 2	2	0.5	1	0.1	0.6
Small Group 2	17	4.9	8	0.3	1.0

### Composition of cash outflows and inflows

The structure of outflows and inflows (Table 8) is broadly in line with that observed in June 2014. In terms of a share of total balance sheet liabilities, Group 1 banks show larger percentages of total outflows than Group 2 banks. This can be explained by the relatively greater share of interbank funding and commitments within the Group 1 sample; Group 2 banks tend to be more reliant on retail deposits, which receive lower run-off factors. A total of EUR 25.7 billion of inflows have been capped for 26 banks (four Group 1 banks and 22 Group 2 banks) in order to ensure that a minimum of 25% of cash outflows is covered by liquid assets.

**Table 8: LCR outflows and inflows (post-factor) as a percentage of balance sheet assets**

	Number of banks	Retail and SBC	Non-financial corporates	Sovereign, CBs, PSEs	Financial institutions	Other	Secured funding	Other contractual and contingent cash outflows	Secured lending	Retail and SBC	Financial institutions	Other cash inflows	Cap on inflows
<b>Group 1</b>	<b>39</b>	<b>1.3</b>	<b>2.3</b>	<b>0.5</b>	<b>3.9</b>	<b>0.8</b>	<b>1.4</b>	<b>4.2</b>	<b>1.5</b>	<b>1.2</b>	<b>1.4</b>	<b>1.0</b>	<b>0.1</b>
G-SIBs	12	1.2	2.3	0.4	3.4	0.7	1.4	4.2	1.4	1.1	1.4	0.8	—
<b>Group 2</b>	<b>163</b>	<b>1.8</b>	<b>1.3</b>	<b>0.5</b>	<b>3.4</b>	<b>0.7</b>	<b>0.2</b>	<b>2.2</b>	<b>0.3</b>	<b>0.9</b>	<b>1.7</b>	<b>0.2</b>	<b>0.3</b>
Large Group 2	21	1.9	1.5	0.5	2.3	0.8	0.3	2.1	0.1	1.0	0.9	0.1	—
Med. Group 2	28	1.5	1.2	0.5	4.1	0.7	0.1	2.1	0.2	1.0	2.2	0.1	0.2
Small Group 2	114	1.9	1.3	0.4	5.6	0.5	0.1	2.4	0.6	0.7	3.1	0.6	1.1

#### *Development of the components of the LCR*

Figure 12 shows the trends in HQLA, the numerator of the LCR, for the period June 2011 to December 2014. It shows that Group 1 banks have consistently held more cash and central bank (CB) reserves than Group 2 banks, while securities classified as Level 1 assets make up the larger part of the Group 2 banks' portfolios. It is difficult, though, to draw definite conclusions about the composition of Group 2 banks' portfolios since there is significant heterogeneity among Group 2 banks.

Overall, the share of cash and CB reserves in total assets increased during the period June 2011 to December 2012 for both Group 1 and Group 2 banks (see Figure 12). This trend can be explained by the banks' behaviour of holding more secure assets during the crisis. The long-term refinancing operations (LTROs) by the European Central Bank (ECB) may have supported and shaped this behaviour by providing liquidity to banks which may have been invested in assets eligible for the LCR liquidity buffer. The downward trend in cash and CB reserves after December 2012 indicates that there was less liquidity hoarding after the severest period of the financial crisis.

The share of securities which were Level 1 assets increased between June 2011 and December 2014. In the aftermath of the crisis, banks continued investing in securities, instead of holding large amounts of CB reserves, due to the amelioration of the financial markets and sovereign bond markets. This investment pattern could be attributed to the increasing quantity of products in the market and/or to the higher price/return of the products. The share of Level 2A and 2B assets remains constant across the period for both Group 1 and Group 2 banks. In line with the small market size for these assets, these assets constitute only a small part of banks' portfolios.

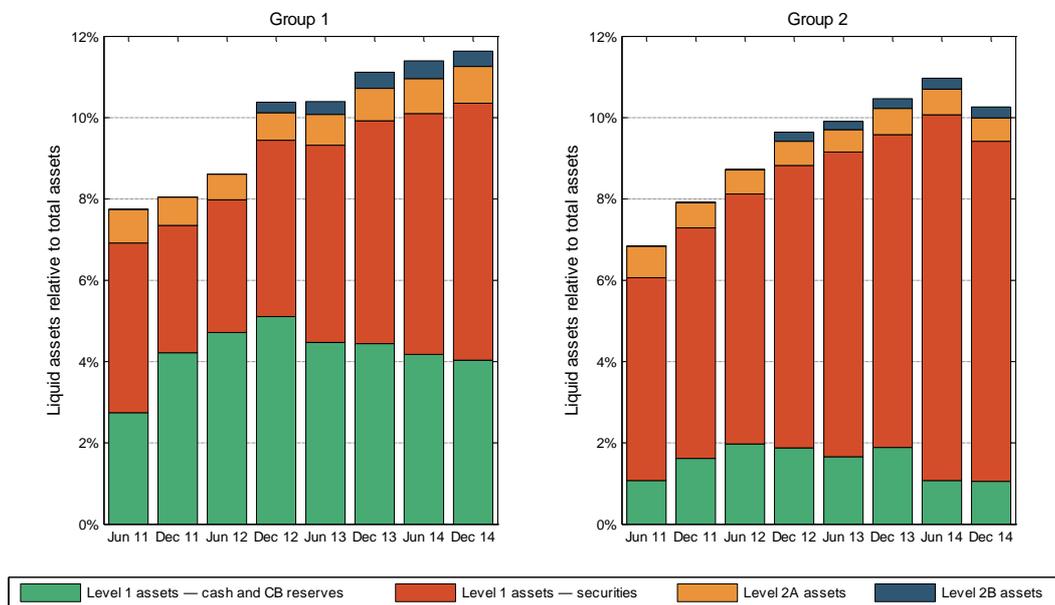
**Figure 12: Development of HQLA**

Figure 13 shows the net amount of outflows from Group 1 and Group 2 banks. The decrease in credit-sensitive wholesale deposits in December 2012 can be attributed to the recalibration of the LCR, which included the lower run-off factor for non-operational deposits. The 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, outflows related to credit-sensitive wholesale deposits represent nearly 8% of total assets; their share in cash outflows has been decreasing since June 2013 for Group 1 banks, while for Group 2 banks there were only small fluctuations around the area of 8% of total assets. After that, it stabilised at around 8%. The trend in relation to credit-sensitive wholesale deposits is similar for Group 2 banks. The increase in the share of higher-risk contingent liabilities such as derivatives in December 2012 can be explained by the recalibration, which provides a partial netting approach for the calculation of outflows and inflows arising from derivatives (differing from the 2010 framework, which allowed for full netting of those transactions). Other deposits and liabilities have been more stable and constant throughout the period for Group 2. Compared with 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. through specialisation and business links with smaller corporates.

**Figure 13: Development of cash outflows**

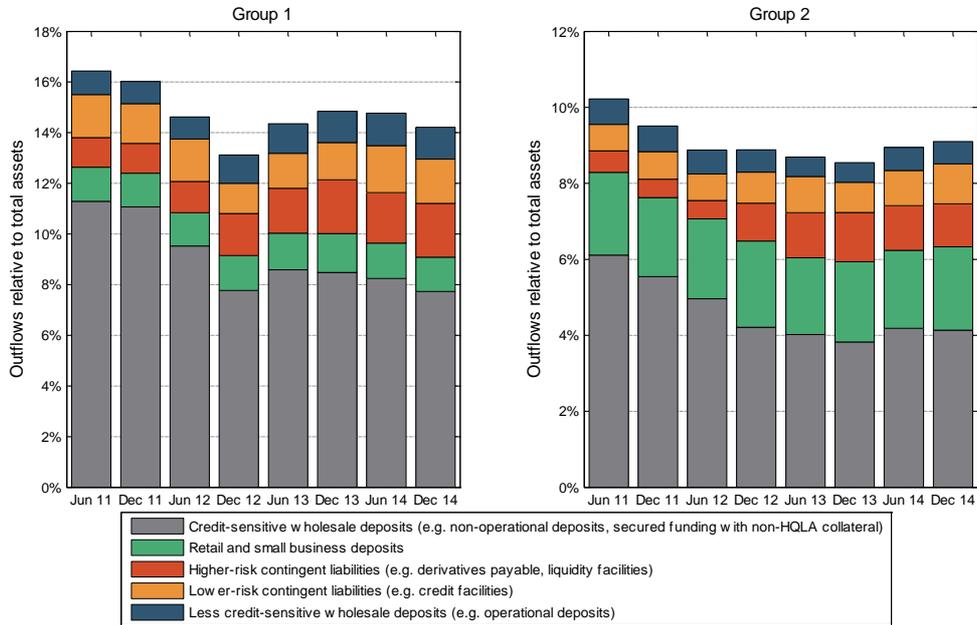
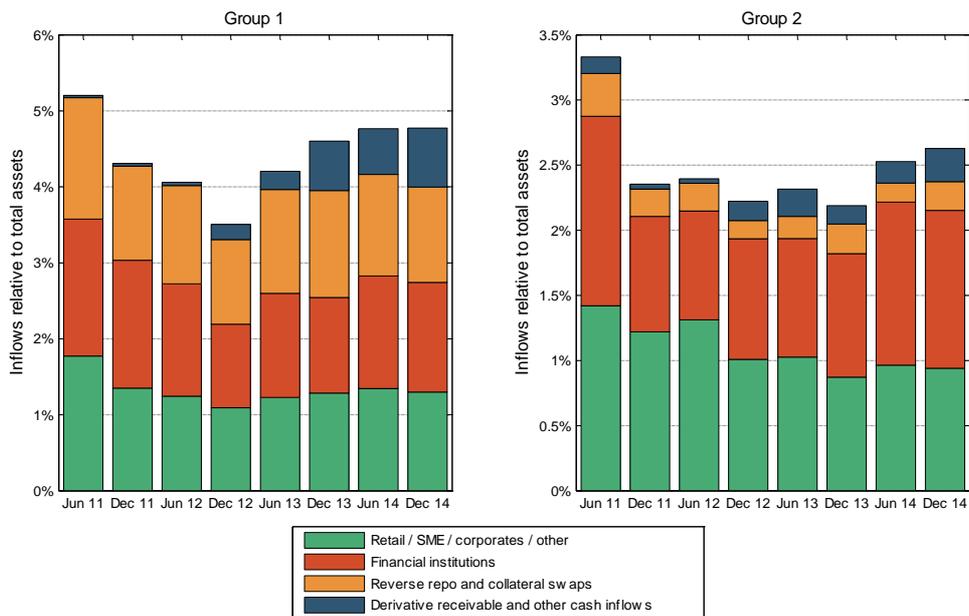


Figure 14 shows the inflows that mature within the next 30 days as a percentage of the total assets for each of the reference dates covering June 2011 to December 2014. For Group 1 and Group 2 banks there was a decrease in the amount of cash inflows during the financial crisis, particularly up to December 2012. For Group 1 banks, the aggregate value of cash inflows has been increasing since June 2013. The changes in the aggregate cash inflows for a bank depend on changes in the quantity, maturity and price (e.g. interest rate) of the banks’ assets.

**Figure 14: Development of cash inflows**

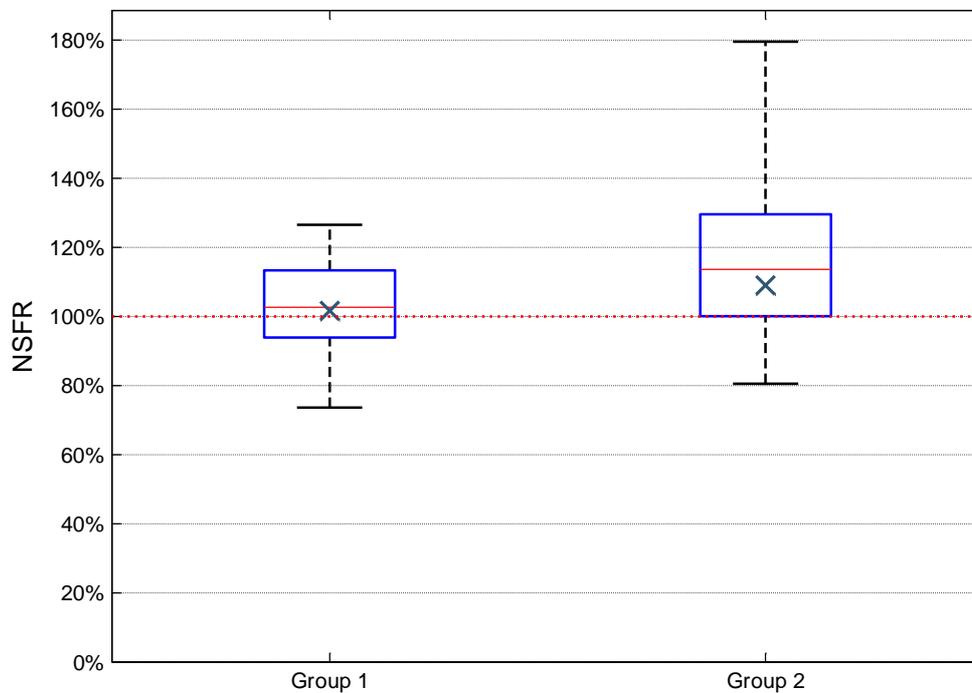


## 3.2 Net stable funding ratio

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%. The 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 the liquidity characteristics and residual maturities of the various assets held by an institution, as well as those of its off-balance-sheet exposures. At EU level, the NSFR has not been finalised yet, so the results are based on the final Basel III NSFR framework as published in October 2014.

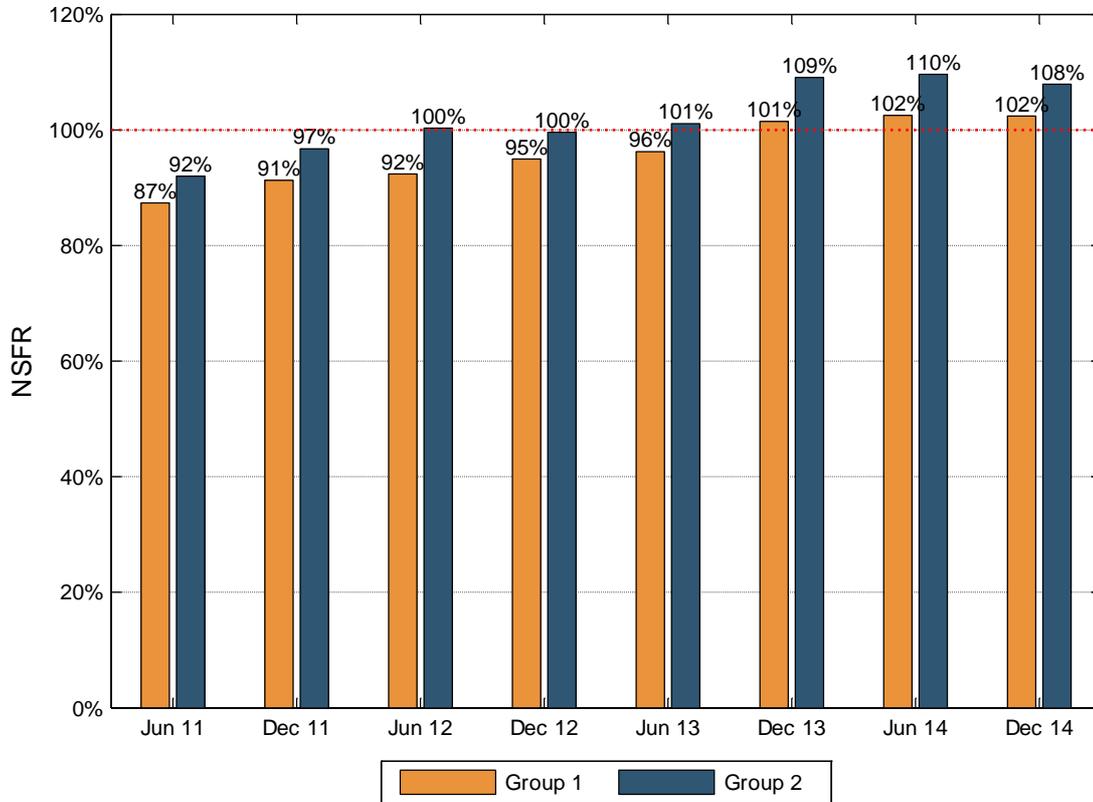
### *NSFR and shortfall in stable funding*

In total, 233 banks provided sufficient data for the December 2014 Basel III monitoring exercise to calculate the NSFR. As of December 2014, the average NSFR for Group 1 and Group 2 banks is 102% and 109%, respectively. Approximately 60% of Group 1 banks and 75% of Group 2 banks already fulfil the minimum NSFR requirement of 100%. Overall, banks in the sample are in need of additional stable funding of EUR 523 billion as of December 2014. The need for stable funding is approximately 10.0% of total ASF (EUR 5.2 trillion) and 4.5% of total assets (EUR 11.7 trillion) of all non-compliant banks participating in the NSFR part of the exercise. The need for stable funding is estimated by aggregating only the positive differences between RSF and ASF (RSF minus ASF), i.e. the deficit in stable funding of the banks whose NSFR is below the 100% requirement, and does not account for any surpluses of stable funding observed in banks with an NSFR 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. by lengthening funding term or decreasing maturity mismatches.

**Figure 15: Distribution of NSFR by bank group**

#### *Evolution of the NSFR over time*

Figure 16 illustrates the development of the NSFR over time using a consistent sample of banks. The findings show that the average NSFR for Group 1 and Group 2 banks increased by 15 percentage points and 16 percentage points, respectively. The significant increase in banks' NSFR in December 2013 may also have been driven by the revisions made by the BCBS, which were considered for the first time in December 2013. The NSFR figures in December 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 in stable funding needed to meet the 100% ratio, which – compared with June 2011 – has reduced by 77% for Group 1 banks and by 79% for Group 2 banks.

**Figure 16: Evolution of NSFR by bank group**

At the end of 2015, the EBA will also publish the NSFR impact assessment report which will present a more detailed analysis on NSFR, in accordance with its mandate under Article 510 of the CRR.