



**CRD IV – CRR / BASEL III MONITORING
EXERCISE – RESULTS BASED ON DATA AS OF 31
DECEMBER 2015**

13 SEPTEMBER 2016



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Abbreviations

ASF	Available stable funding
BCBS	Basel Committee on Banking Supervision
CET1	Common Equity Tier 1
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CVA	Credit value adjustment
EBA	European Banking Authority
FSB	Financial Stability Board
G-SIIs	Global systemically important institutions
HQLA	High-quality liquid assets
LCR	Liquidity coverage ratio
LR	Leverage ratio
NSFR	Net stable funding ratio
O-SIIs	Other systemically important institutions
RSF	Required stable funding
RWA	Risk-weighted assets

Executive summary

Since the finalisation of the new global banking regulatory framework ('Basel III') in December 2010,¹ its impact has been monitored semi-annually by the BCBS at the global level and by the EBA at the European level, using data provided by banks on a voluntary and confidential basis. The respective set of regulatory requirements in the EU comprises the CRD IV and the CRR (hereafter, CRD IV – CRR), which applied as of 1 January 2014.² It is noteworthy that the current implementation of the CRD IV – CRR differs from the full implementation of the CRD IV – CRR due to a set of transitional arrangements.

Three parts of this report (on risk-based and non-risk-based capital ratios, and LCR) assess compliance with the current EU definitions,³ while one part (on NSFR), in the absence of a finalised EU definition, monitors compliance with the current Basel III standards.

This report is the 10th publication of the monitoring exercise and summarises the results at the EU level using data as of 31 December 2015.⁴ The sample of the 227 banks that are included in this exercise comprises 45 Group 1 banks and 182 Group 2 banks.⁵ EU Member States' coverage of their respective banking system was notably high for Group 1 banks, reaching 100% coverage for many jurisdictions (aggregate coverage in terms of CRD IV – CRR RWA: 94.5%), while for Group 2 banks it was lower with more variation across jurisdictions (aggregate coverage: 36.6%). Further, for the first time, the analysis focuses on the joint sample of G-SIIs and O-SIIs. The sample of O-SIIs contains banks from both Group 1 and Group 2 samples that have been characterised as O-SIIs by the national competent authorities (see footnote 12).

¹ 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.

² REGULATION (EU) No 575/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012; DIRECTIVE 2013/36/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC.

³ The EU definition of leverage ratio (non-risk-based capital ratio) has not become an EU binding requirement yet. On 3 August 2016, the EBA published a report on the impact assessment and calibration of the leverage ratio, recommending the introduction of an LR minimum requirement in the EU to mitigate the risk of excessive leverage (see <https://www.eba.europa.eu/-/eba-recommends-introducing-the-leverage-ratio-in-the-eu> for further details). The report will inform the work of the European Commission on potential legislative proposals on LR.

⁴ Previous reports are available on the EBA website (<http://www.eba.europa.eu/risk-analysis-and-data/quantitative-impact-study/basel-iii-monitoring-exercise>).

⁵ Group 1 banks are banks with Tier 1 capital in excess of EUR 3 billion and that are internationally active. All other banks are categorised as Group 2 banks. This report has classified Group 2 banks into sub-samples: large, which have Tier 1 capital in excess of EUR 3 billion; medium-sized, with Tier 1 capital below or equal to EUR 3 billion and above EUR 1.5 billion; and small, which have Tier 1 capital below or equal to EUR 1.5 billion. Among the Group 2 banks, there are 28 banks that have a Tier 1 capital in excess of EUR 3 billion but that are not internationally active.

Table 1: Overall results assuming full implementation of Basel III as of 31 December 2015⁶

	Capital ratios				Liquidity ratios	
	CET1	Tier 1	Total	LR	LCR	NSFR
Group 1	12.4	13.1	15.9	4.7	126.8	105.5
Group 2	13.6	13.9	15.5	5.6	169.3	112.7
- Large	13.5	13.8	15.5	5.7	171.4	110.4
- Medium	14.2	14.4	16.1	5.9	183.7	117.4
- Small	13.6	13.8	15.2	5.0	150.6	115.9
Total	12.7	13.3	15.8	4.9	133.7	107.0
- G-SIIs/O-SIIs	12.6	13.3	15.9	4.7	129.9	106.3

Source: EBA QIS data (December 2015)

Capital requirements and shortfalls

Overall, the results show a further improvement in European banks' capital positions. Assuming full implementation of the CRD IV – CRR (i.e. without taking into account transitional arrangements), the risk-based capital ratios for Group 1 and Group 2 banks stand at 12.4% and 13.6% for CET1 ratio, 13.1% and 13.9% for Tier 1 ratio and 15.9% and 15.5% for total capital ratio respectively (Table 1). The average leverage ratios for the same sample of banks reach 4.7% (Group 1) and 5.6% (Group 2). On average, European banks largely fulfil the future regulatory capital requirements, while only a very small number of banks exhibit potential capital shortfalls. Those shortfall amounts constitute only a very minor fraction of the amounts observed at the beginning of the monitoring period (mid-2011), and the difference between current and full implementation capital ratios has been shrinking continuously. This monitoring exercise considers the leverage ratio as defined in EU legislation for the purpose of the capital analysis. Conceptually, the (non-risk-based) leverage ratio has been developed to serve as a backstop against unduly low risk-adjusted capital levels and to prevent the excessive build-up of leverage, both over the financial cycle and across credit institutions. The analysis contained in this report indicates that the leverage ratio is indeed a regulatory constraint for a significant proportion of institutions in the sample. On average, Group 1 banks are more constrained by the leverage ratio requirement than Group 2 banks.

⁶ The number of banks per section may differ.

Liquidity requirements and shortfalls

For the second time, the monitoring exercise presents the results of the LCR analysis according to the European Commission (the Commission) Delegated Regulation (EU) No 2015/61 (hereafter, LCR DA), which specifies the general requirement set out in Article 412(1) of the CRR.⁷ As defined in Article 38 of this Delegated Regulation and in accordance with Article 460(2) of the CRR, the minimum requirement has been set at 60% from 1 October 2015 and will gradually increase to 100% in January 2018 (i.e. the EU regulation requires a minimum of 100% one year before the Basel standard). The NSFR is anticipated to be introduced on 1 January 2018 with a minimum requirement of 100%. Since the NSFR has not yet been finalised at the EU level, the calculations in this report are based on the revised Basel III NSFR framework, published in October 2014.⁸

With regard to the LCR, the average ratio for data as of the end of December 2015 is 126.8% and 169.3% for Group 1 and Group 2 banks respectively. In the total sample, 91% of the banks show an LCR of above 100%, while 98% of the banks have an LCR of above the 70% minimum requirement of January 2016. The overall shortfall in relation to the 100% threshold is EUR 10.8 billion. There has been an increase in banks' LCR over time, which can be attributed to structural adjustments (both an increase in HQLA and a decrease of net outflows), as well as to the recalibration of the LCR framework as published in January 2013. The change in the previous period is also driven by the first application of the Commission Delegated Regulation, whereas the Basel III LCR framework has been used for reference dates prior to that—i.e. until December 2014. With respect to the NSFR, Group 1 and Group 2 banks show an average ratio of 105.5% and 112.7% respectively, with an overall shortfall in stable funding of EUR 240 billion. About 79% of participating banks already meet the minimum NSFR requirement of 100%.⁹ Compared with previous periods, there is a continuous increase in banks' NSFRs, which is mainly driven by the increasing amount of ASF for both groups.

⁷ <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2015:011:TOC>.

⁸ <http://www.bis.org/bcbs/publ/d295.pdf>.

⁹ Please note that, throughout the report, the NSFR analysis refers to the Basel III standard.

1. General remarks

1.1 Sample of participating banks

Table 2: Number of banks included in this monitoring exercise

	Group 1	Group 2	Of which:			G-SIIs/ O-SIIs	Total
			Large	Medium	Small		
Austria	2	6	1	1	4	4	8
Belgium	2	8	—	2	6	6	10
Denmark	1	12	2	2	8	5	13
France	5	2	1	—	1	6	7
Germany	8	74	8	7	59	12	82
Greece	4	—	—	—	—	4	4
Hungary	1	2	—	—	2	2	3
Ireland	3	5	—	3	2	2	8
Italy	2	21	6	8	7	3	23
Latvia	—	2	—	—	2	2	2
Luxembourg	—	3	—	2	1	2	3
Malta	—	3	—	—	3	2	3
Netherlands	3	10	1	2	7	5	13
Norway	1	8	—	1	7	2	9
Poland	—	5	1	—	4	—	5
Portugal	2	3	—	1	2	4	5
Spain	2	9	7	2	—	6	11
Sweden	4	4	—	1	3	4	8
United Kingdom	5	5	1	3	1	6	10
Total	45	182	28	35	119	77	227

Source: EBA QIS data (December 2015)

Table 2 shows the participation by jurisdiction and bank group. This report includes an analysis of data submitted by 227 banks of 18 EU Member States and a country from the EEA. This sample consists of 45 Group 1 banks from 15 countries and 182 Group 2 banks from 18 countries.¹⁰ Group

¹⁰ For one Member State (Greece) all participating banks are classified as Group 1 according to their size and activity.

1 banks in this report are defined as the banks with Tier 1 capital in excess of EUR 3 billion that are internationally active. All other banks are classified as Group 2. Coverage of the banking sector is high, reaching 100% of Group 1 banks in many countries (aggregate coverage in terms of CRD IV – CRR RWA: 94.5%). Coverage of Group 2 banks is lower and varies across countries (aggregate coverage: 36.6%).

For the purposes of a more differentiated analysis, the joint sample of G-SIIs¹¹ and O-SIIs has been analysed separately from the total sample. To analyse the driving forces behind aggregate Group 2 results in more detail, this report has classified Group 2 banks into three sub-samples: large, which have Tier 1 capital in excess of EUR 3 billion; medium-sized, with Tier 1 capital below or equal to EUR 3 billion and above EUR 1.5 billion; and small, which have Tier 1 capital below or equal to EUR 1.5 billion. In total, 28 large, 35 medium-sized and 119 small Group 2 banks are included in the current analysis. Pursuant to Article 131(3) of Directive 2013/36/EU, the identification of O-SIIs started in 2015. Authorities can set higher loss absorbency requirements for those institutions, in addition to the obligatory CET1 capital buffer of up to 2%. The additional measures for O-SIIs aim to reduce market distortions triggered by their possible negative externalities. For the analysis as of December 2015,¹² 77 banks are jointly recognised to be monitored as O-SIIs and G-SIIs.¹³ Not all banks provided data relating to all sought parts of the reporting template of this monitoring exercise. Accordingly, a certain number of banks are excluded from individual sections of this monitoring analysis due to the provision of incomplete data. In each section, comparisons with previous periods are based on a consistent sample of banks—i.e. including only those banks that have consistently been reporting the relevant data for all sought reference dates, so as to allow for reference-date-to-reference-date comparisons and time series analyses within each section. Similarly, the analyses relating to the interactions between and combined effects of various regulatory ratios have been based on consistent samples of banks to facilitate such an analytical approach.

¹¹ See also BCBS: Global systemically important banks—updated assessment methodology and the higher loss absorbency requirement (2013), EBA: Final draft RTS on the methodology for the identification of global systemically important institutions (2014) and FSB: 2015 update of list of G-SIBs (Nov 2015); the term ‘G-SIB’ in BIS and FSB documentation corresponds to ‘G-SII’ in EBA documentation.

¹² The first list of O-SIIs references as of April 2016 is available at: <http://www.eba.europa.eu/-/eba-discloses-first-list-of-o-siis-in-the-1>.

¹³ The sub-category of O-SIIs also includes banks that have been nominated as G-SIIs.

1.2 Methodology

‘Composite bank’ weighting scheme

Average amounts in this analysis have been calculated by creating a composite bank at the relevant sample level—i.e. the relevant sample averages are implicitly weighted. For example, the average CET1 capital ratio is the sum of all banks’ CET1 capital included in the relevant sample divided by the sum of all banks’ RWA included in the relevant sample. Similarly, the average Tier 1 leverage ratio is the sum of all banks’ Tier 1 capital included in the relevant sample divided by the sum of all banks’ leverage ratio exposure measure included in the relevant sample. By choosing this weighting scheme, methodologically the results of this analysis can implicitly be considered as more representative of the European banking sector as a whole than unweighted averages.

Box plots illustrating the distribution of results

To present more detailed results while at the same time ensuring data confidentiality, some charts show box plots that give an indication of the distribution of the results among the participating banks. Those box plots are defined as follows:

Thick red line	Respective minimum requirement
Dashed lines	Respective 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 percentage 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 represents the 5th percentile value

1.3 Interpretation of results

This 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/Basel III.

The full implementation of the CRD IV – CRR package does not consider the transitional arrangements relating to the phase-in of deductions and to the grandfathering of capital instruments.¹⁴ 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 regulatory capital held

¹⁴ For details on the transitional arrangements, see in particular Part Ten of the CRR and, in addition, paragraphs 94 and 95 of the Basel III framework (Basel III—A global regulatory framework for more resilient banks and banking systems).

by banks as they do not recognise the gradual phase-in of common equity deductions and the non-qualifying instruments that are actually phased out over multiple-year time horizons.

For the calculation of results referred to as ‘current rules’, 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 2015), the figures under the current rules refer to the state of implementation of the CRD IV – CRR framework as of December 2015. Therefore, the difference between the fully phased-in results and the results under the current rules in the risk-sensitive capital ratio and RWA analysis is solely due to the remaining transitional arrangements from December 2015 until the full implementation date.

The treatment of deductions and non-qualifying capital instruments under the assumption of full implementation of the CRD IV – CRR similarly affects the figures reported in the leverage ratio analysis. The potential underestimation of Tier 1 capital is becoming less of an issue as the implementation date for the leverage ratio approaches. In other words, in 2015, 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 point in time.

It is important to note that this 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 identification of effective changes in banks’ capital rather than relying on anticipated changes based on underlying behavioural and modelling assumptions. As a consequence, these monitoring results are different from industry estimates, as the latter usually include assumptions on banks’ future profitability, planned capital and/or management actions to mitigate the impact of the CRD IV – CRR framework.

1.4 Data quality

The banks included in this 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, completeness and consistency of data with the reporting instructions. For each of the analyses below, banks are included in the sample only if they have provided data of sufficient quality to conduct the analysis in question.

For the risk-based capital ratio and RWA analyses, data from supervisory reporting systems have been used wherever possible to reduce recourse to banks. In the liquidity part of this monitoring exercise, some banks may have reported their liquidity risk positions based on slightly different interpretations of the Commission Delegated Regulation (EU) No 2015/61. However, data quality has improved significantly since the beginning of the monitoring exercise.

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

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. The regulatory capital requirements consist of risk-based (capital ratios in relation to RWA) and non-risk-based (leverage ratio) measures.

The risk-based ratios refer to the capital definitions of CET1, Tier 1 and total capital, decreasing in their degree of loss absorbency, in relation to RWA. At the date of full implementation, the CRD IV – CRR/Basel III standard requires a regulatory CET1 ratio of 7% (minimum plus 2.5% conservation buffer), a Tier 1 ratio of 8.5% (incl. the CET1 conservation buffer) and a total capital ratio of 10.5% (incl. the CET1 conservation buffer). Figures related to capital shortfalls also reflect the bank-specific CET1 G-SII/O-SII buffer. For time series analysis, the evolution of the capital shortfall is calculated by using the most recent G-SII/O-SII surcharges throughout the whole time series. For G-SIIs, the maximum between the G-SII buffer and the O-SII buffer is taken into account. Additional capital requirements depending on macro-prudential considerations (systemic risk and countercyclical buffers), or based on supervisory judgement (Pillar II add-ons), are not included in the below analysis.

The non-risk-based capital requirement—the leverage ratio—is defined in terms of Tier 1 capital in relation to a comprehensive (on- and off-balance-sheet) exposure measure. The CRD IV – CRR/Basel III standard is preliminarily set at the 3% minimum requirement. This monitoring exercise considers the leverage ratio as defined in EU legislation for the purpose of capital analysis.

As this exercise envisages full implementation of CRD IV – CRR (without accounting for any transitional arrangements), in most parts it compares banks' actual capital ratios with the capital ratios that banks would have exhibited had the set of rules of the CRD IV package been fully implemented at the reference date. The results shown under 'current rules' are based on the state of regulatory implementation at the reference date. In this context, it is important to elaborate on the implications of full implementation of the CRD IV package on the monitoring results. These amounts may underestimate the amount of capital actually held by banks, as they do not take account of any non-qualifying instruments needing to be phased out and deductions to common equity needing to be phased in during the transitional period.

Table 3 shows the difference between banks' risk-based capital ratios and leverage ratios, calculated according to the current rules as of 31 December 2015, and the levels that would result if the CRD IV – CRR requirements were already fully implemented.

For Group 1 banks, this full implementation would result in a reduction of the CET1 ratio from 13.2% under the current rules (i.e. taking into account the transitional arrangements applying in 2015) to 12.4%, while the average Tier 1 and total capital ratios would decline under the full implementation regime from 14.3% to 13.1% and from 17.1% to 15.9% respectively. Regarding the leverage ratio, assuming the implementation is as defined in EU legislation at reference date, the average leverage ratio of Group 1 banks stands at 5.1%. Under full implementation of the CRD IV – CRR, the leverage ratio would decrease to 4.7%. Overall, the difference between Group 1 banks' capital ratios under the current state and full implementation lies between 80 basis points (bps) and 120 bps for the risk-sensitive measures, and around 40 bps according to the leverage ratio.

Under full implementation of the risk-sensitive capital requirements for banks, the CET1 ratio of Group 2 banks would, on average, drop from 14.1% to 13.6%, the Tier 1 ratio from 14.4% to 13.9% and the total capital ratio from 16.3% to 15.5%. The leverage ratio of Group 2 banks would drop from the current 5.8% to 5.6% under full implementation. Large Group 2 banks exhibit the greatest difference between current state and full implementation for the CET1 and Tier 1 capital requirements; however, for the total capital ratio, the small Group 2 banks show the biggest change.

Comparing Group 1 and Group 2 banks, the distance from current to full-implementation regulatory capital requirements and leverage ratio appears smaller for Group 2 banks, which also show higher capitalisation in terms of CET1 and Tier 1 (with reference to RWA) and in terms of leverage ratio.

The joint G-SIIs/O-SIIs¹⁵ sample shows very similar results for capital requirements (in relation to RWA and leverage ratio) to the Group 1 banks sample.

Table 3: Comparison of risk-based capital ratios and leverage ratio under alternative states of implementation (in %)

	Number of banks	CET1		Tier 1		Leverage ratio		Total capital	
		Current	Full	Current	Full	Current	Full	Current	Full
Group 1	40	13.2	12.4	14.3	13.1	5.1	4.7	17.1	15.9
Group 2	139	14.1	13.6	14.4	13.9	5.8	5.6	16.3	15.5
- Large	25	14.1	13.5	14.4	13.8	5.9	5.7	16.2	15.5
- Medium	27	14.3	14.2	14.8	14.4	6.0	5.9	16.6	16.1

¹⁵ It is noteworthy in this context that G-SIIs/O-SIIs are subject to additional capital requirements based on their systemic importance.

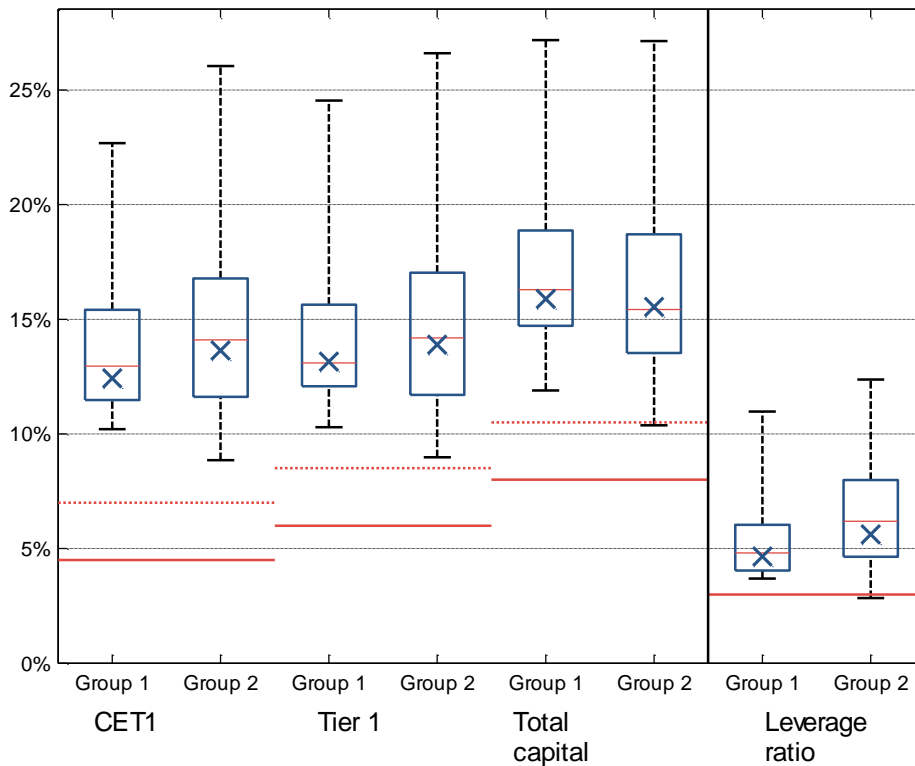
	Number of banks	CET1		Tier 1		Leverage ratio		Total capital	
		Current	Full	Current	Full	Current	Full	Current	Full
- Small	87	13.7	13.6	14.0	13.8	5.1	5.0	16.0	15.2
Total	179	13.4	12.7	14.3	13.3	5.2	4.9	16.9	15.8
- G-SIIs/ O-SIIs	63	13.4	12.6	14.4	13.3	5.1	4.7	17.0	15.9

Source: EBA QIS data (December 2015)

Figure 1 presents basic descriptive statistics¹⁶ on risk-sensitive capital ratios and the leverage ratio for Group 1 and Group 2 banks. It shows that, for the large majority (approximated by the 95th percentile) of banks—both in Group 1 and Group 2—capital ratios are above the current regulatory minimum requirements with respect to risk-sensitive measures and the leverage ratio. This result holds for risk-sensitive capital ratio measures, even when the capital conservation buffer is included. The median and average values of current CET1 and Tier 1 ratios, as well as the leverage ratio, are generally higher for Group 2 than for Group 1 banks. The results indicate a larger dispersion of extreme values (approximated by the 5th and 95th percentiles) for Group 2 banks' capital ratios than for Group 1 banks' capital ratios, while also being less concentrated (approximated by the interquartile range) around the mean and median values of the distribution.

¹⁶ For the methodology underlying the development of these box plots, please refer to section 1.2 of this report.

Figure 1: Distribution of CET1, Tier 1 and total capital ratios per bank group

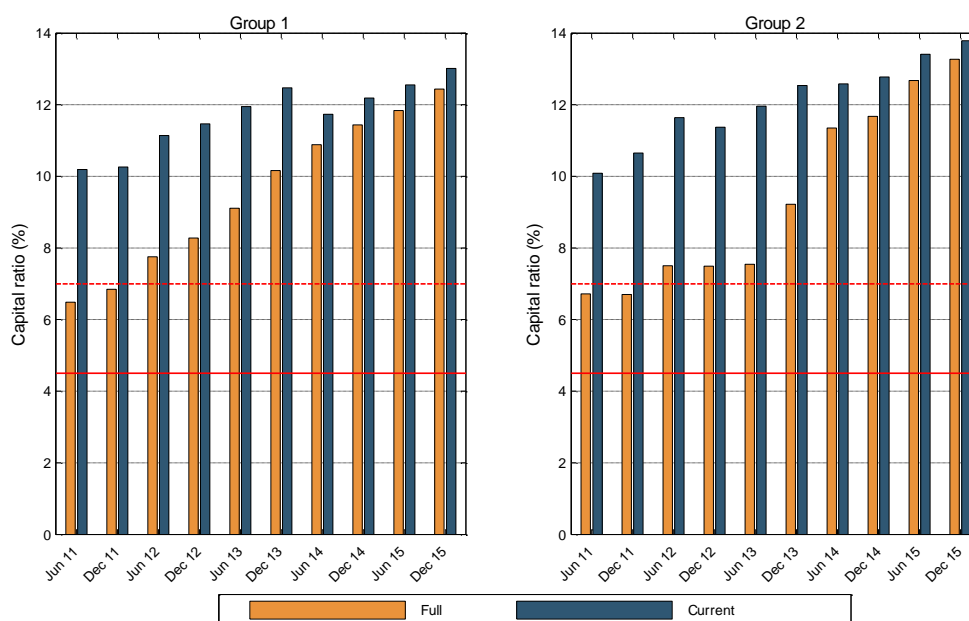


Source: EBA QIS data (December 2015)

Figure 2 shows the trend in the current and full implementation CET1 ratio for the period of June 2011–December 2015 for the consistent sample—i.e. the banks that have consistently submitted data for all reference dates. The CET1 ratio, according to the then applicable level of implementation for Group 1 banks, increased from just over 10% to around 12.5% during the period of mid-2011–end-2013. After a temporary decrease to 11.7% in June 2014, in December 2015 it exceeded its previous level to close at 13%. 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 June 2014. Nevertheless, the CET1 ratio for Group 1 banks under full implementation of the CRD IV – CRR package increased constantly over the observation period, with an overall CET1 increase since June 2011 of around 600 bps.

Similarly, for Group 2 banks, the average CET1 capital ratios in accordance with fully implemented European regulatory requirements have increased steadily since June 2011 (by around 660 bps). In December 2015, the full implementation CET1 capital ratio of Group 2 banks was slightly above 13%, while the respective current rules ratio is around 13.8%. As expected, the difference between CET1 ratios under current state and full implementation is markedly decreasing over the observation period for both groups of banks.

Figure 2: Evolution of CET1 ratios over time



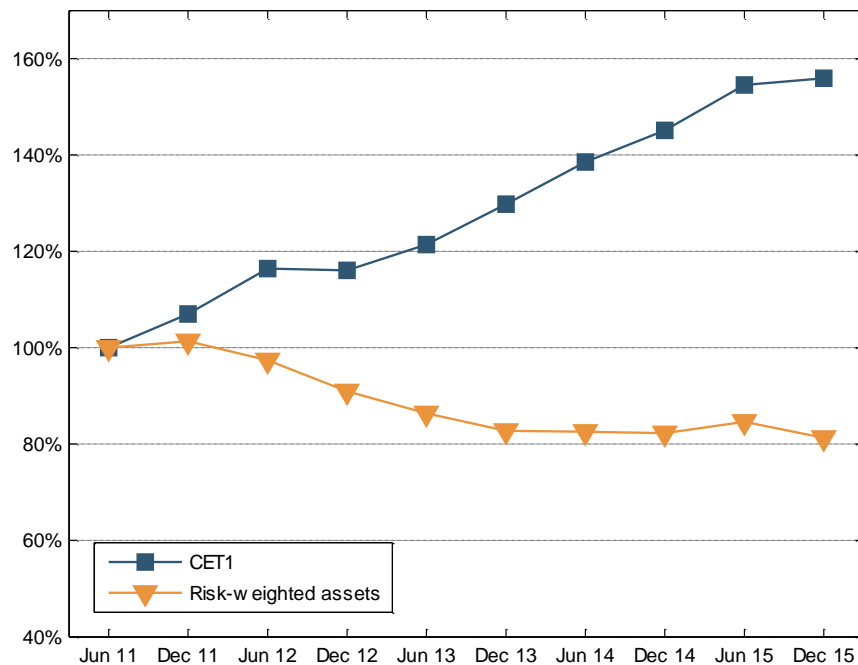
Source: EBA QIS data (December 2015)

The historical upward trend in the CET1 ratio under full implementation of the CRD IV – CRR for Group 1 banks is mainly explained by the increase in CET1 capital (by almost 60%) and to a less extent by the decrease in RWA (by nearly 20% as shown in Figure 3). This trend has been observed relatively continuously since June 2011, however, with decreasing growth of the CET1 capital and stronger decline in the RWA in the last observation period.

The increase in full implementation CET 1 capital over the observation period indicates that banks already try to meet market expectations well in advance of the legislative date for the full implementation of the CRD IV – CRR / Basel III framework.¹⁷

¹⁷ The trend of improving capital positions of European banks is consistent with findings to EBA’s reports on transparency and risks and vulnerabilities of the European banking sector (EBA: 2015 EU-wide transparency exercise (Nov 2015) and EBA: Risk Assessment of the European banking system (December 2015)).

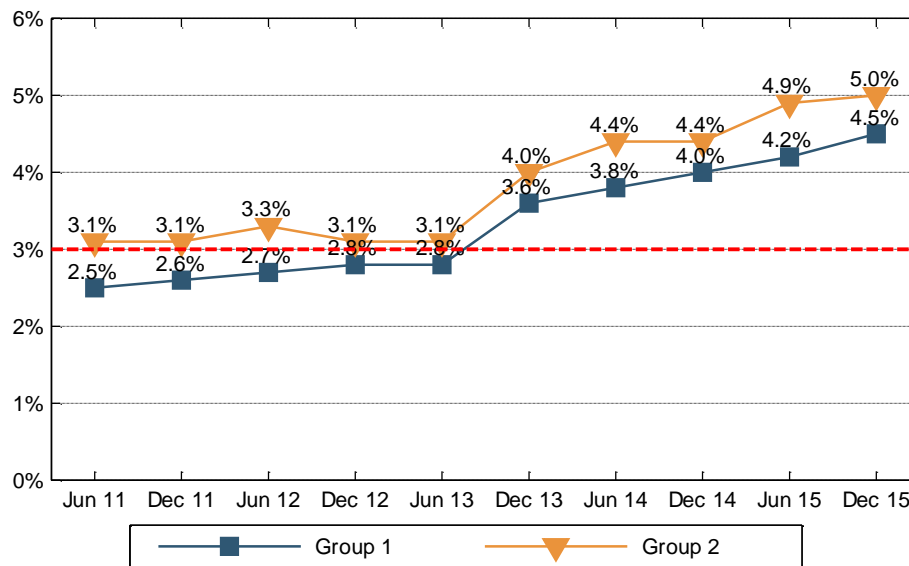
Figure 3: Evolution of CET1 capital versus RWA over time (for Group 1 banks)



Source: EBA QIS data (December 2015)

The increase in the level of capital is also generally reflected in the leverage ratio. Taking a consistent sample of banks, between June 2013 and December 2013 there was a significant increase in banks' leverage ratios (see Figure 4), which can be partially attributed to the recalibration of the leverage ratio exposure in January 2014, with the first application being as of reporting date December 2013. However, it has to be noted that the data reflect the respective calculation methodology at each reference date. The increase also continued for the period of December 2013–December 2015 for both groups of banks. Overall, while up to mid-2013 Group 1 and Group 2 banks, on average, showed leverage ratios very close to the target ratio (3%), since then they have increased their capital beyond the minimum requirement. Over the observation period, Group 2 banks have exhibited consistently higher average leverage ratios than Group 1 banks.

Figure 4: Evolution of leverage ratio by bank group over time (in %)



Source: EBA QIS data (December 2015)

2.2 Capital shortfall

Table 4 provides estimates of the additional amount of capital that Group 1 and Group 2 banks would need in order to meet the target risk-sensitive capital ratios (including G-SII/O-SII buffer) and the leverage ratio under the CRD IV package. These estimates assume fully phased-in target requirements and deductions. In this analysis, the capital shortfall is calculated as the difference between capital requirements and eligible capital held at the bank level, and represents the capital needs assuming that capital requirements had to be met to achieve successively higher-quality capital layers.¹⁸

For Group 1 banks, the CET1 capital shortfall is zero when compared with the minimum requirement of 4.5% (not shown in the table) and with the target level of 7%¹⁹—i.e. the minimum requirement plus the capital conservation buffer. The total shortfall of Tier 1 capital to meet both the risk-based capital ratio and the leverage ratio is EUR 0.2 billion for Group 1 banks. The total capital shortfall necessary to fulfil the risk-based requirements (7% CET1, 8.5% Tier 1 and 10.5% total capital) and the leverage ratio requirement (3% Tier 1 capital) is EUR 1.2 billion for Group 1 banks. For Group 1 banks, shortfalls arise from the risk-based capital requirements rather than from the requirements based on the leverage ratio.

¹⁸ Note that the total Tier 1 capital shortfall for a bank represents the maximum of the Tier 1 capital shortfall for risk-based Tier 1 capital ratio and the Tier 1 shortfall for the leverage ratio.

¹⁹ 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.

Group 2 banks have a CET1 shortfall of EUR 0.4 billion at 7% level, and the aggregate shortfall can be attributed to medium- and small-sized banks in the Group 2 sample. Group 2 banks would need EUR 3.4 billion to meet the target Tier 1 capital requirements (risk-based and based on leverage ratio), while they would need EUR 4.1 billion to comply with full implementation total capital requirements.

The joint G-SIIs/O-SIIs sample exhibits zero capital shortfalls at the 7% CET1 level—something that aligns with the results for Group 1 banks. They require EUR 0.7 billion to meet the Tier 1 (risk-based and leverage ratio) requirements and EUR 1.9 billion to comply with full implementation total capital requirement.

Table 4: Capital shortfall by bank group, including capital conservations buffer and G-SII/O-SII buffer where applicable (in billion EUR)

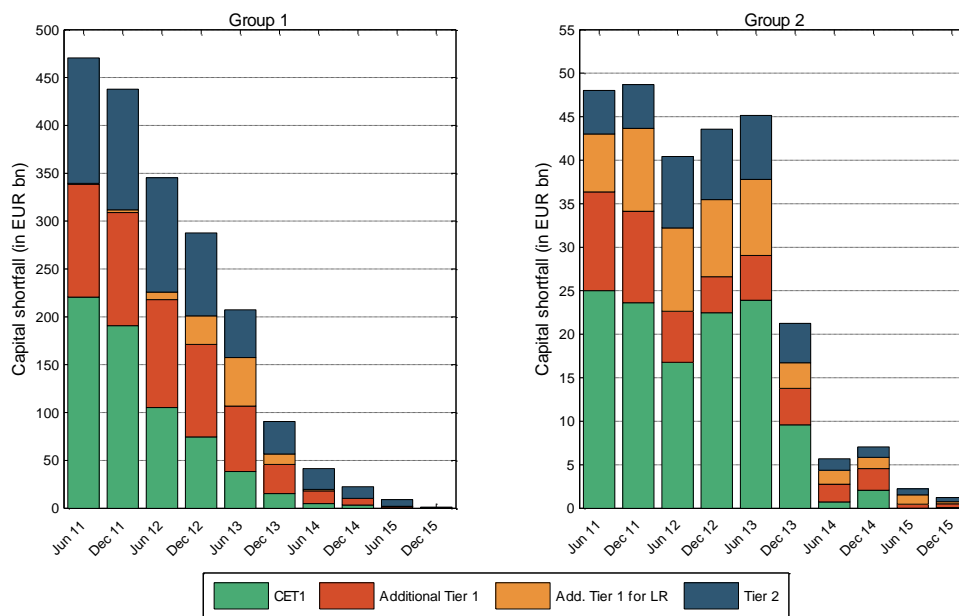
	Number of banks	CET1	Tier 1			Total capital	
			Risk-based ratio	LR	To meet both	To meet all risk-based ratios	To meet all risk-based ratios and LR
Group 1	40	—	0.2	—	0.2	1.2	1.2
Group 2	139	0.4	1.2	2.2	3.4	1.9	4.1
- Large	25	—	—	0.3	0.3	—	0.3
- Medium	27	0.3	0.9	—	0.9	1.4	1.4
- Small	87	0.1	0.3	1.9	2.2	0.5	2.4
Total	179	0.4	1.4	2.2	3.5	3.1	5.3
- G-SIIs/O-SIIs	63	—	0.2	0.5	0.7	1.4	1.9

Source: EBA QIS data (December 2015)

The very significant reduction in capital shortfalls (compared to full implementation) can be analysed in more detail, as shown in Figure 5. Whereas, at the beginning of the observation period (June 2011), banks (Group 1 and Group 2) lacked more than EUR 500 billion of total capital—half of which was CET1—shortfalls as of end-2015 represent only a very minor fraction of that amount. For Group 1 banks, nearly an 85% reduction in (CET1) capital shortfalls occurred in the period of mid-2013–mid-2014 alone.²⁰

²⁰ Although the trend holds for most banks during that period, the decline is significantly influenced by one large bank.

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



Source: EBA QIS data (December 2015)

Table 5 presents a particular aspect of the interaction between the leverage ratio and the risk-based Tier 1 capital ratio requirements.²¹ More concretely, it analyses which of the capital ratios—risk-based or leverage ratio—represents the stricter requirement for banks. The leverage ratio, rather than the risk-sensitive Tier 1 capital ratio, is said to be a constraint for a bank if this bank requires more capital to meet the leverage ratio requirement than to meet the risk-sensitive Tier 1 capital requirement. Mathematically, it is deemed to be a constraint when 3% of the leverage ratio exposure measure exceeds the required Tier 1 capital ratio multiplied the bank’s RWA.

In December 2015, all Group 1 banks were compliant with the 3% minimum Tier 1 LR requirement, while only nine Group 2 banks were non-compliant—seven of which are small institutions. The capital shortfall is limited to EUR 2.2 billion, which is all contributed to Group 2 banks. Overall, however, the analysis indicates that, for the majority of banks, the leverage ratio is a constraint beyond the risk-based capital requirements. On average, Group 1 banks (75%) are more frequently constrained by the leverage ratio requirement than Group 2 banks (56.8%; 68.0% for large ones). This remarkable constraint power of the leverage ratio holds even when the capital conservation buffer (additional CET1 2.5%) and G-SII/O-SII buffer are taken into account. While actual capital shortfall amounts are rather low, even under the more conservative scenario of the risk-based Tier 1 requirements (8.5%, incl. conservation buffer), capital requirements are constrained by the leverage ratio for 42.5% of Group 1 banks and 28.1% of Group 2 banks.

²¹ Please note that a common sample of banks that participated in the risk-based and leverage ratio parts of this exercise has been used to carry out the interaction analysis as shown in Table 5.

Table 5: Degree of binding power of risk-based versus leverage ratio Tier 1 capital requirements on banks

	Tier 1 leverage ratio minimum requirement			Tier 1 risk-based minimum requirement			Tier 1 risk-based minimum requirement plus conservation buffer and G-SII/O-SII buffer where applicable		
	Number of LR non-compliant banks	Proportion of LR non-compliant banks (%)	LR capital shortfall	Proportion of banks constrained by LR (%)	Proportion of LR non-compliant banks meeting risk-based ratio (%)	LR capital shortfall ²²	Proportion of banks constrained by LR (%)	Proportion of LR non-compliant banks meeting risk-based ratio (%)	LR Capital shortfall ²³
Group 1	—	—	—	75.0	—	—	42.5	—	—
Group 2	9	6.5	2.2	56.8	6.5	2.2	28.1	6.5	2.2
- Large	2	8.0	0.3	68.0	8.0	0.3	32.0	8.0	0.3
- Medium	—	—	—	59.3	—	—	33.3	—	—
- Small	7	8.0	1.9	52.9	8.0	1.9	25.3	8.0	1.9
Total	9	5.0	2.2	60.9	5.0	2.2	31.3	5.0	2.2
- G-SIIs/ O-SIIs	3	4.8	0.5	74.6	4.8	0.5	42.9	4.8	0.5

Source: EBA QIS data (December 2015)

²² LR capital shortfall assuming that banks had already raised enough capital to fulfil the risk-based ratios.

²³ See above.

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 of eligible capital elements.

The aggregate CET1 capital of Group 1 banks shows a decrease of 4.7%, while Tier 1 and total capital decrease by 8.8% and 9.4% respectively (Table 6). For Group 2 banks, the relative percentage changes in CET1, Tier 1 and total capital are 3.0%, 3.2% and 4.1% respectively. These figures suggest that Group 1 banks are more constrained regarding capital than Group 2 banks, which exhibit a considerably lower decrease in CET1, Tier 1 and total capital.

Table 6: Relative percentage change in capital by type and RWA (in %)

	Number of banks ²⁴	CET1	Tier 1	Total capital	RWA
Group 1	45	-4.7	-8.8	-9.4	-0.1
Group 2	168	-3.0	-3.2	-4.1	0.6
- Large	28	-3.5	-3.2	-3.8	0.9
- Medium	33	-2.1	-3.7	-4.1	0.1
- Small	107	-1.8	-2.4	-5.2	-0.0
Total	213	-4.4	-7.7	-8.4	0.0
- G-SIIs/O-SIIs	71	-4.6	-8.2	-8.9	0.0

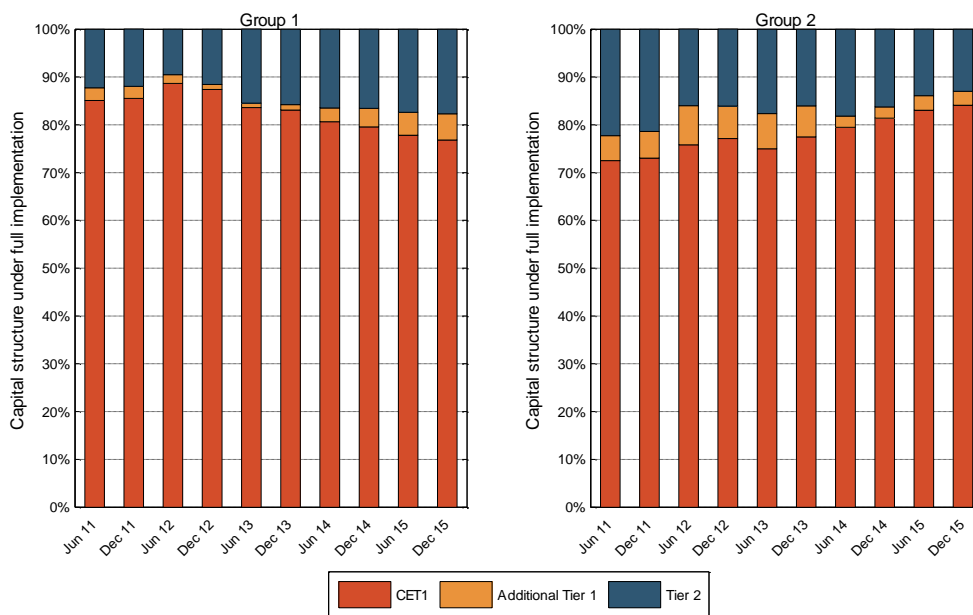
Source: EBA QIS data (December 2015)

²⁴ Several banks have submitted data on capital and RWA, but have not reported data on the EU leverage ratio exposure measure. As Table 6 only refers to data on capital and RWA, the number of banks included is higher than in other tables in this chapter.

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 on average for most Group 1 banks since June 2012. In contrast, the average share for Group 2 banks has been increasing on average since June 2011. However, for Group 1 banks, this is due to the increased accumulation of additional Tier 1 (which has more than doubled since June 2011) and Tier 2 capital compared to the accumulation of CET1 capital. As of December 2015, Group 1 banks' figures indicate that the share of fully implemented CET1 to total capital is about 77%. Additional Tier 1 and Tier 2 capital amount to about 5% and 18% of the total capital of Group 1 banks respectively. Group 2 banks hold a slightly higher share of CET1 capital, compared to Group 1 banks, under the assumption of full implementation of CRD IV – CRR. As of December 2015, this share amounts to approximately 84% of total capital, while the shares of additional Tier 1 capital (3%) and Tier 2 capital (13%) are correspondingly lower.

Figure 6: Evolution of capital structure over time



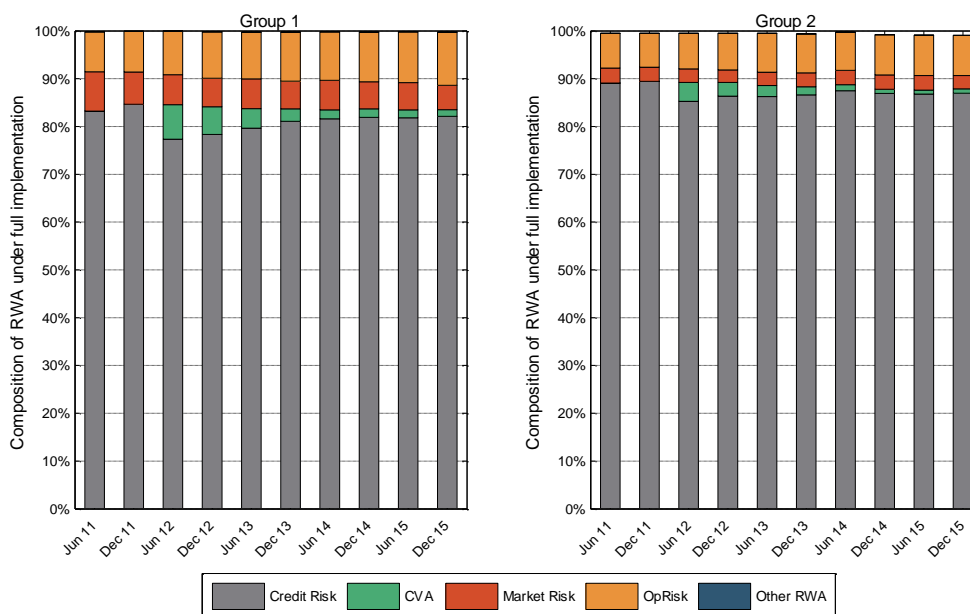
Source: EBA QIS data (December 2015)

2.5 Composition of RWA

After having analysed the different types of regulatory capital—i.e. the numerator of capital ratios—this sub-section deals with the RWA—i.e. the denominator of risk-sensitive capital ratios. Figure 7 shows under the fully phased-in CRD IV package that credit risk is the major component of RWA for both Group 1 and Group 2 banks. The share of credit risk in RWA is more than 80% for Group 1 banks and above 85% for Group 2 banks. After a drop in June 2012, the share of credit risk has increased again almost to the previous levels for both groups of banks.

The operational risk exhibits the second-highest share in the RWA for both groups of banks (around 10%). The share of RWA for the market risk category is roughly twice as high for Group 1 banks as for Group 2 banks. The declining share of RWA for CVA over time suggests that the new regulatory framework has had a direct impact on bank behaviour. Figure 7 also indicates that the introduction of the CVA capital charge resulted in portfolio adjustments and the cutting down of CVA positions, which contributed to the reduction in total RWA.²⁵

Figure 7: Evolution of the composition of RWA by risk category over time



Source: EBA QIS data (December 2015)

²⁵ The order and scales of magnitude for different risk categories observed in this monitoring exercise are very consistent with results of previous transparency exercises and supervisory disclosures for the European banking sector. See also the EBA’s aggregate statistics on the European banking sector, available at: <http://www.eba.europa.eu/supervisory-convergence/supervisory-disclosure/aggregate-statistical-data>.

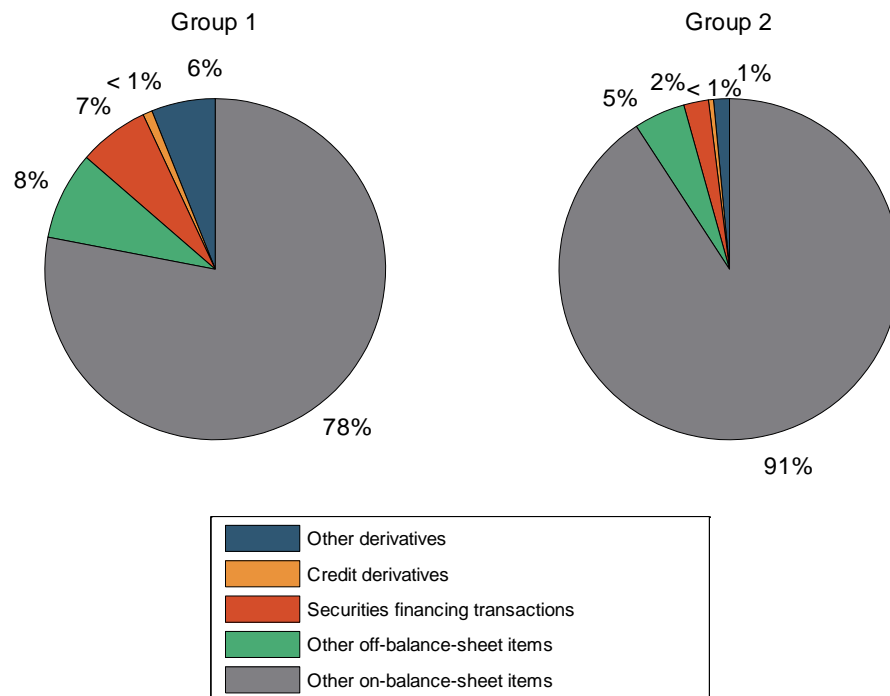
2.6 Composition of the leverage ratio exposure measure

This sub-section looks at the exposure measure as defined for the purpose as the denominator of the leverage ratio. Figure 8 shows the composition of the leverage ratio exposure measure by asset category. For both groups of banks, ‘other on-balance-sheet items’ are the main component of exposures. For Group 2, whose exposures are characterised by a more traditional bank business model, the ‘other on-balance-sheet items’ represent 91% of the leverage ratio exposure measure, while for Group 1 banks the exposures relating to derivatives, securities financing transactions and off-balance-sheet items represent around one quarter of their exposures. Note that the calculation of derivatives exposure is currently under review by the BCBS. According to footnote 5 of the Basel III LR framework, alternative approaches to the Current Exposure Method (CEM) are taken into account. The standardised approach for measuring counterparty credit risk, which will replace the CEM in the risk-based framework in January 2017, is under review for the purpose of the leverage ratio and is expected to have more impact on Group 1 than Group 2 banks.²⁶ Also, the EBA²⁷ is in the process of monitoring in order to assess whether the design and calibration of a minimum Tier 1 leverage ratio of 3% are appropriate for different types of business models over a full credit cycle.

²⁶ The final calibration of the leverage ratio is envisaged to be completed by 2017. Regarding those envisaged reviews, see also page 7 of the Basel III leverage ratio framework: <http://www.bis.org/publ/bcbs270.pdf>.

²⁷ See also European Commission: Call for Advice to the EBA for the purposes of the Net Stable Funding Requirements and the Leverage Ratio (2015).

Figure 8: Composition of the leverage ratio exposure measure by asset category (in %)



Source: EBA QIS data (December 2015)

The development and implementation of a leverage ratio is not intended to reduce any of the positive prudential effects of the risk-based capital requirements.²⁸ Therefore, the interaction between the leverage ratio and risk-based capital ratios is being monitored.

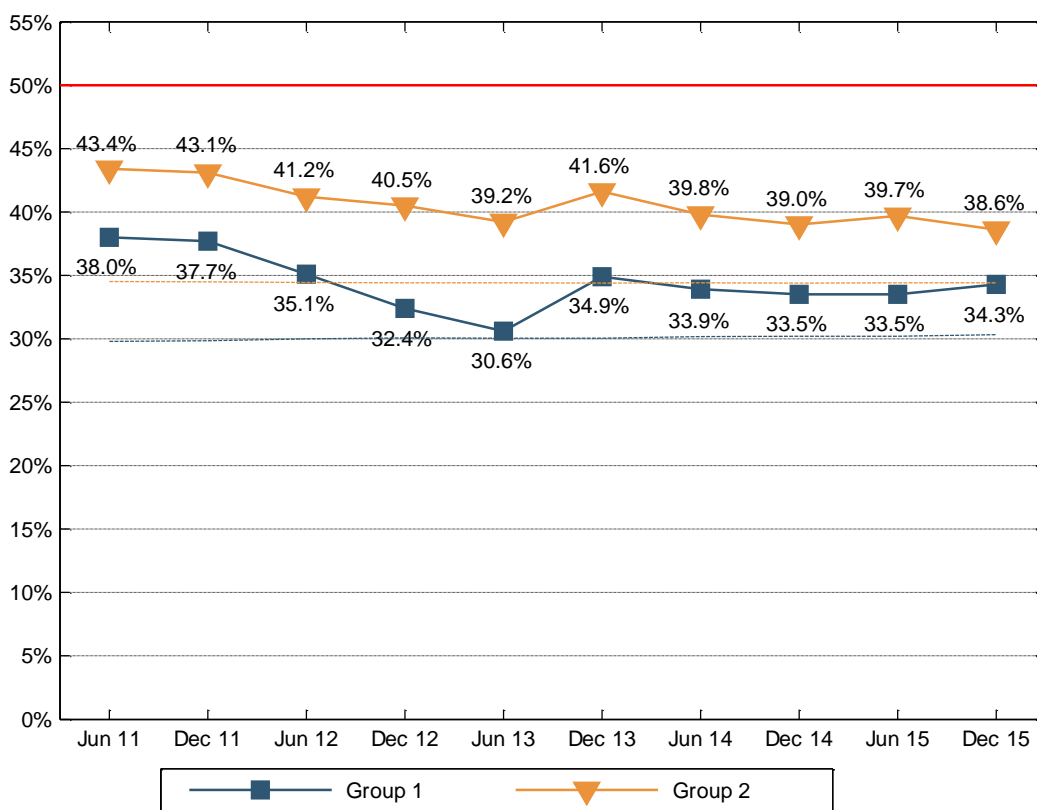
Figure 9 illustrates the development of the relationship between fully phased-in RWA and the leverage ratio exposure measure by bank group. If the quotient is below the dotted blue line (for Group 1 banks) or the yellow line (for Group 2 banks),²⁹ this implies that the leverage ratio, rather than the risk-based Tier 1 capital ratio of 8.5% (minimum requirement plus capital conservation buffer), would be, on average, a constraint. If the quotient is above the dotted line, this implies that the risk-based Tier 1 capital ratio rather than the leverage ratio would, on average, be a constraint. This quotient mostly decreased for the period of June 2011–June 2013, which was caused by a decrease in RWA coupled with an increase in exposure (in the sense that, on average, banks preferred to follow a de-risking rather than a de-leveraging strategy). In December 2013, compared to June 2013, an increase of 430 bps for Group 1 and 240 bps for Group 2 was observed. This change was caused by a decrease in the leverage ratio exposure measure, partially driven by the recalibration of the exposure definition. For the current reference date (December 2015), the ratio of RWA over the leverage ratio exposure measure has increased by

²⁸ For an argument about the benefits of the leverage ratio as a capital backstop over the financial cycle and across banks using internal models, see also BCBS: The regulatory framework—Balancing risk-sensitivity, simplicity and comparability (Working Paper July 2013) and BIS: The Leverage Ratio over the Cycle (Working Paper No 471, Nov 2014).

²⁹ Calculated as the quotient between the leverage ratio requirement (3%) and the risk-based Tier 1 capital ratio requirement (8.5%, plus G-SII/O-SII buffer where applicable).

80 bps for Group 1 banks and decreased by 110 bps for Group 2 banks compared to the previous reference date. The figures indicate that, on average, banks are more constrained by the risk-based Tier 1 ratio than by the leverage ratio requirement, which is particularly true for Group 2 banks. This result is in line with the findings under Table 5, which indicates that (i) leverage ratio is a constraint more for Group 1 banks than Group 2 banks and (ii) a higher share of Group 1 banks is constrained by leverage ratio rather than risk-based capital, and this ratio falls as the calculation accounts for capital buffers and the G-SII/O-SII buffer.³⁰

Figure 9: Relation of RWA to exposure



Source: EBA QIS data (December 2015)

³⁰ Also note that there are methodological differences between Table 5 and Figure 9. First, Table 5 is based on a cross-sectional sample, while Figure 9 is based on a time series sample. Secondly, the former investigates the share of banks, and the latter presents weighted averages that are subject to offsetting effects across banks.

3. Liquidity

3.1 LCR

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 stressful 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, with the adoption of the Commission Delegated Regulation (EU) No 2015/61 on the LCR in October 2014, the EU LCR framework introduced several features that differ from the Basel III LCR framework. Broadly, with respect to the Basel III framework, the EU LCR DA:

HQLA

- modifies the requirements for instruments already captured as HQLA under Basel III—e.g. preferential treatment of assets representing claims on or guaranteed by the central government, the central bank, regional governments, local authorities or PSEs of a Member State—and upgrades the liquidity quality of extremely high-quality covered bonds;
- increases the range of instruments that are not captured under Basel III—e.g. promotional banks' assets, covered bonds of certain credit quality, certain restricted-use committed liquidity facilities with the ECB, certain asset-backed securities, shares and units in collective investment undertakings (CIUs), and sight deposits that the credit institution holds with the central institution within an institutional protection scheme;
- amends the composition of the liquidity buffer by adding a new cap on liquid assets—i.e. a minimum of 30% of the overall liquidity buffer has to be held in Level 1 assets, excluding extremely high-quality covered bonds;

Outflows

- amends, within the calculation of outflows, the run-off rates of the outstanding balances of various categories or types of liabilities and off-balance-sheet commitments—e.g. more granular categorisation of the less stable retail deposits and respective run-off rates of 10%-20%; and

Inflows

- provides, subject to prior supervisory approval, partial or full exemption for certain institutions in the application of a 75% cap on inflows in the calculation of net cash outflows.

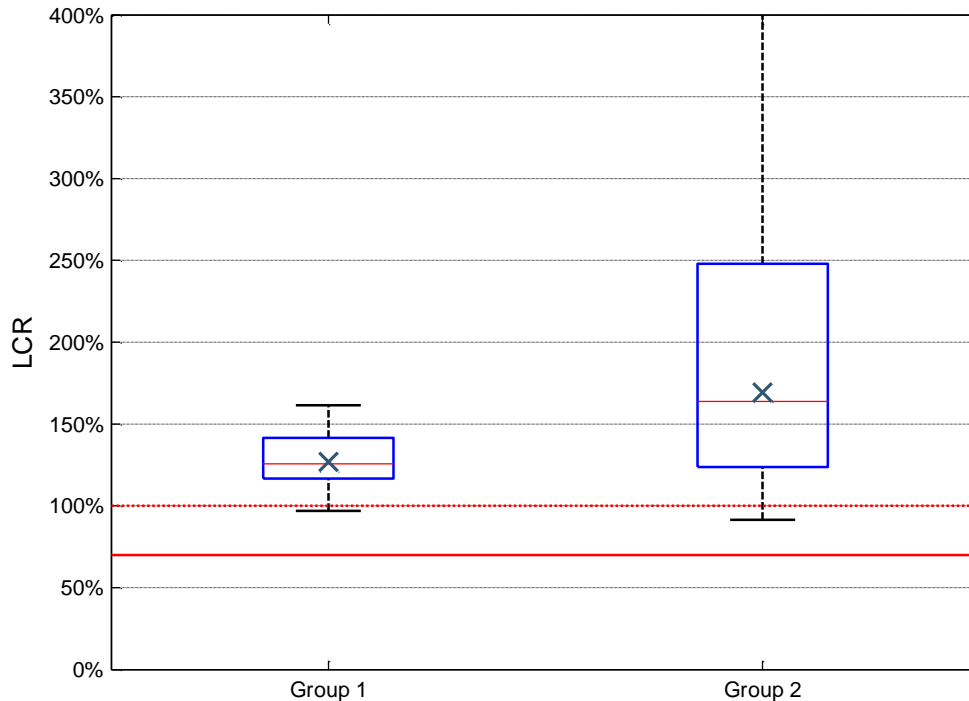
Furthermore, as defined in Article 38 of the EU LCR DA and in accordance with Article 460(2) of the CRR, the minimum requirement has been set at 60% from 1 October 2015 and will gradually increase to 100% by January 2018—i.e. the EU regulation requires a minimum of 100% one year before the Basel standard.³¹ This report presents EU-specific LCR analysis based on the framework of the EU LCR DA.

LCR and shortfall in liquid assets

Figure 10 provides an overview of the distribution of the LCR by bank group. As of December 2015, Group 1 banks exhibit a weighted average LCR of 126.8%, while Group 2 banks' LCR is 169.3%. All Group 1 banks already meet the 70% requirement of January 2016, and the vast majority of these banks already meet the 100% requirement—i.e. 32 out of 35 banks. Regarding Group 2 banks, three banks fail to meet the 70% minimum requirement, while the number of non-compliant banks at the 100% requirement is 13, or approximately 10% of the Group 2 sample.

Figure 10 also indicates greater variation in the level of LCR among Group 2 banks with respect to Group 1 banks. The values of LCR varies among Group 1 banks from 81.8% (minimum) to 267.5% (maximum), while among Group 2 banks this range is from 35.3% (minimum) to 5098.1% (maximum).

³¹ See the EBA's LCR Impact Assessment Reports (2016) to be published under Article 509(1) of the CRR for a detailed analysis of the comparison between LCR frameworks under the EU LCR DA and Basel III.

Figure 10: Distribution of LCR by bank group

Source: EBA QIS data (December 2015)

Table 7 illustrates the LCR and the LCR shortfall for different minimum ratios as defined in Article 38 of the Commission Delegated Regulation. The total LCR shortfall with regard to a minimum ratio of 100% is EUR 10.8 billion, of which EUR 7.6 billion corresponds to Group 1 and EUR 3.2 billion to Group 2 banks. The total shortfall represents 8.8% of the total HQLA (EUR 123 billion) of all non-compliant banks and 1.1% of total assets (EUR 974 billion) of all non-compliant banks. As of 31 December 2015, three Group 2 banks, of which one has also been classified as an O-SII, present a positive shortfall at the 70% minimum requirement. In order to comply with the minimum requirement of 80% in January 2017, the same three banks need an additional amount of EUR 1.5 billion in liquid assets.

The shortfall considered here is the gross value—i.e. the sum of the differences between the net outflows and the stock of HQLA for all banks with an LCR that falls below the minimum threshold of 70%, 80% or 100%. In other words, the calculation of shortfall does not account for the offsetting effect of the surplus arising from those banks that already meet and exceed the minimum requirement. Therefore, the reported shortfall amount represents a conservative proxy of institutions' actual shortfall, as it does not include any assumptions on the reallocation of liquidity between individual banks or within the system as such.

Table 7: LCR and LCR shortfall for different minimum ratios according to Article 460(2) of the CRR

	Number of banks	LCR	LCR shortfall (in billion EUR) at a minimum of:		
			70% (2016)	80% (2017)	100% (2018)
Group 1	35	126.8	—	—	7.6
Group 2	136	169.3	1.1	1.5	3.2
- Large	24	171.4	—	—	0.4
- Medium	26	183.7	0.9	1.2	1.9
- Small	86	150.6	0.2	0.3	0.9
Total	171	133.7	1.1	1.5	10.8
- G-SIIs/O-SIIs	59	129.9	0.2	0.3	8.4

Source: EBA QIS data (December 2015)

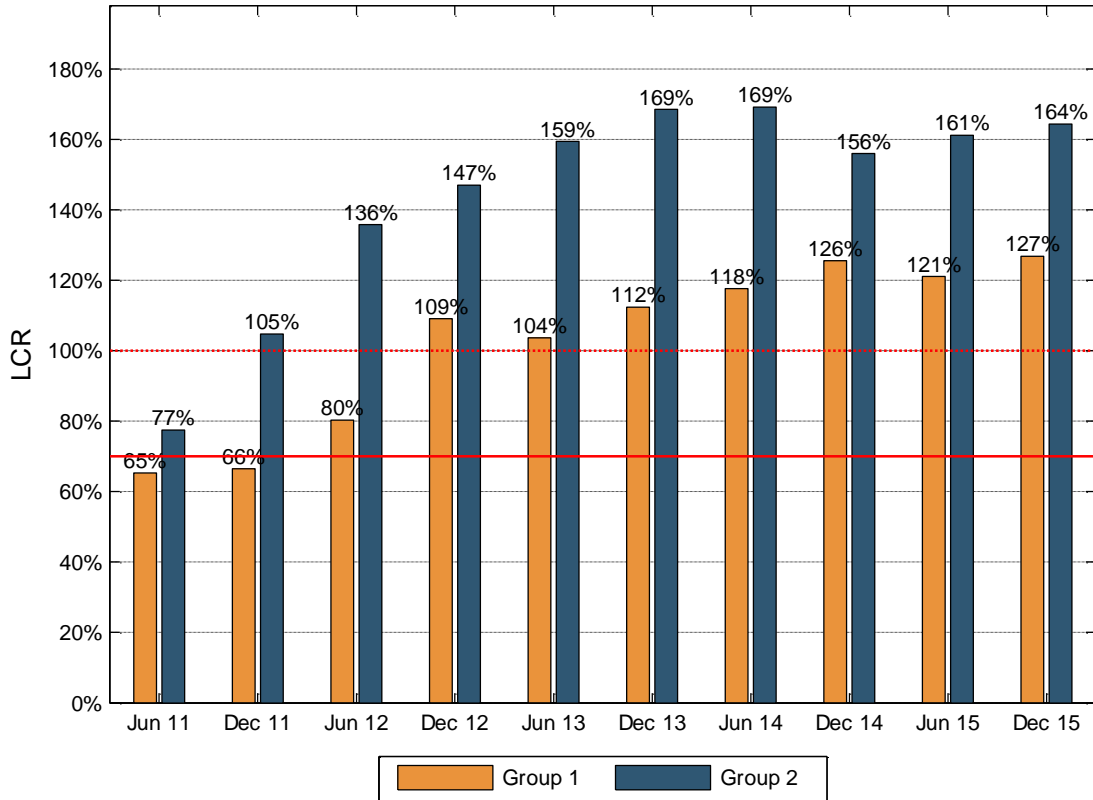
Evolution of the LCR over time

When analysing the evolution of the LCR over time, it should be noted that figures for periods before June 2015 are based on Basel III definitions—i.e. apart from structural changes, part of the change can also be attributed to differences between Basel III and the Commission Delegated Regulation.³² Some changes in the LCR between June and December 2012 are also driven by the recalibration of the Basel III LCR framework, published in January 2013. Nevertheless, banks have, on average, put significant effort into increasing their LCRs both by increasing their liquidity buffer and by decreasing their net cash outflows. Since June 2011, Group 1 and Group 2 banks have, on average, increased their LCRs by approximately 61.5 (Group 1) and 86.9 (Group 2) percentage points (Figure 11).

For Group 1 banks, on average, the main driver for the increase in the level of LCR over time is the increase in HQLA. In all instances, Group 1 banks increased their liquid asset buffers and reduced their net cash outflows at the same time, or the increase in the level of net cash outflows in HQLA buffers exceeded the increase in the level of net cash outflows—hence, the overall LCR increased.

³² See the EBA's LCR IA Reports (2016) to be published under Article 509(1) of the CRR for a detailed quantitative analysis on the differences between EU LCR DA and the Basel III framework.

Figure 11: Evolution of LCR by bank group (in %)

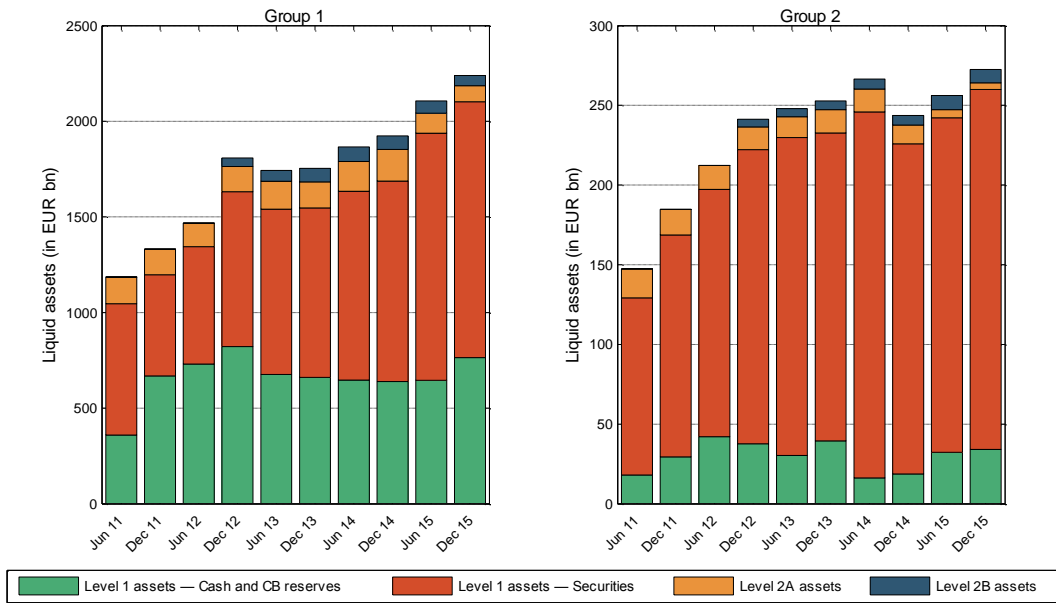


Source: EBA QIS data (December 2015)

During the period of June 2011–December 2012, both Group 1 and Group 2 banks increased mostly cash and central bank reserves to comply with the LCR regulation, and, from June 2013–June 2015, securities were the major drivers for compliance (Figure 12 and Figure 13). In the last reporting date, for Group 1 banks, ‘Level 1 assets—Cash and Central Banks (CB) reserves’ are the major drivers of the increase in LCR and, for Group 2 banks, this is ‘Level 1 assets—Securities’, which include sovereign bonds.³³

³³ See the EBA’s LCR IA Reports (2016) to be published under Article 509(1) of the CRR for a detailed analysis on the composition of the HQLA buffer.

Figure 12: Evolution of liquid assets over time



Source: EBA QIS data (December 2015)

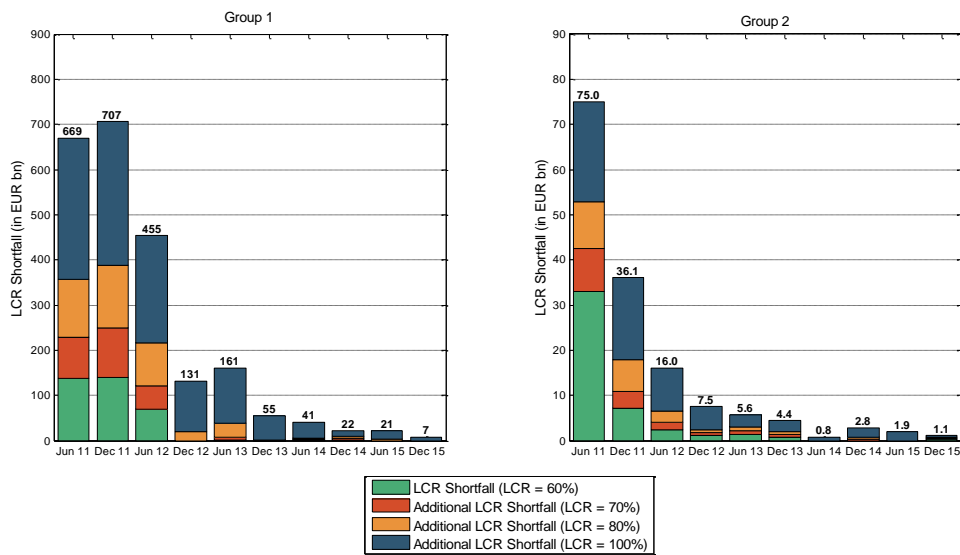
Figure 13: Evolution of liquid assets over time (relative to total assets)



Source: EBA QIS data (December 2015)

In line with the improvements in the LCR, the shortfall has been declining significantly both for Group 1 and Group 2 banks. Figure 14 shows the trend on LCR shortfall at different minimum requirements in the period of June 2011–December 2015.

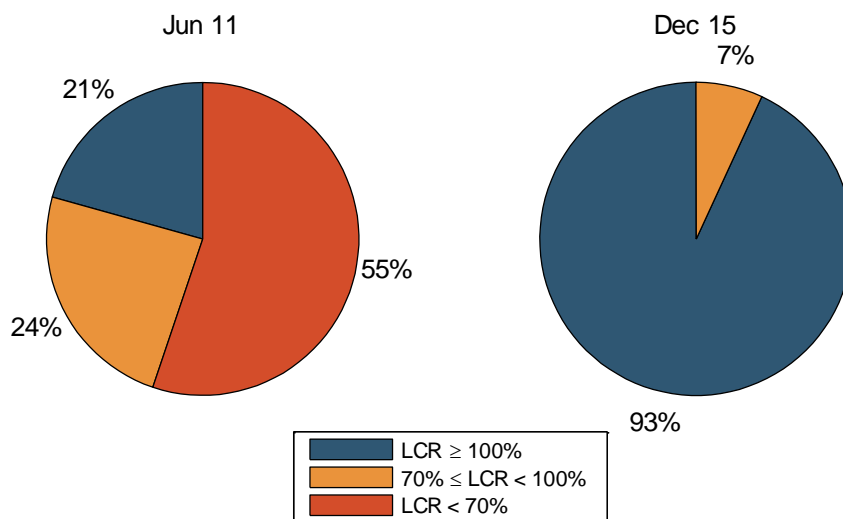
Figure 14: LCR shortfall over time



Source: EBA QIS data (December 2015)

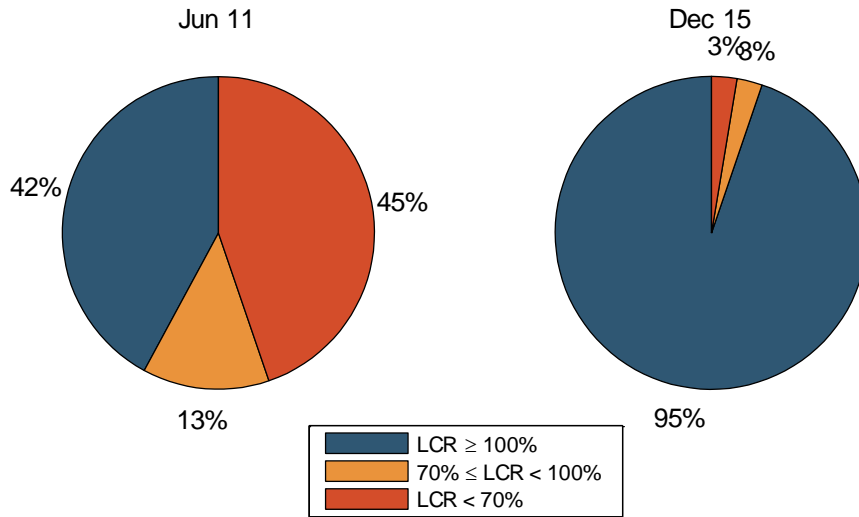
The positive trend in the evolution of the LCR is also reflected in the increase in the share of banks with an LCR above 100%, compared to the first data point (Figure 15 and Figure 16). As of June 2011, only 21% of Group 1 and 42% of Group 2 banks met the LCR minimum requirement of 100%. In contrast, 93% of Group 1 banks and 95% of Group 2 banks report an LCR above 100% in December 2015.

Figure 15: Distribution of LCRs: Group 1 banks



Source: EBA QIS data (December 2015)

Figure 16: Distribution of LCRs: Group 2 banks



Source: EBA QIS data (December 2015)

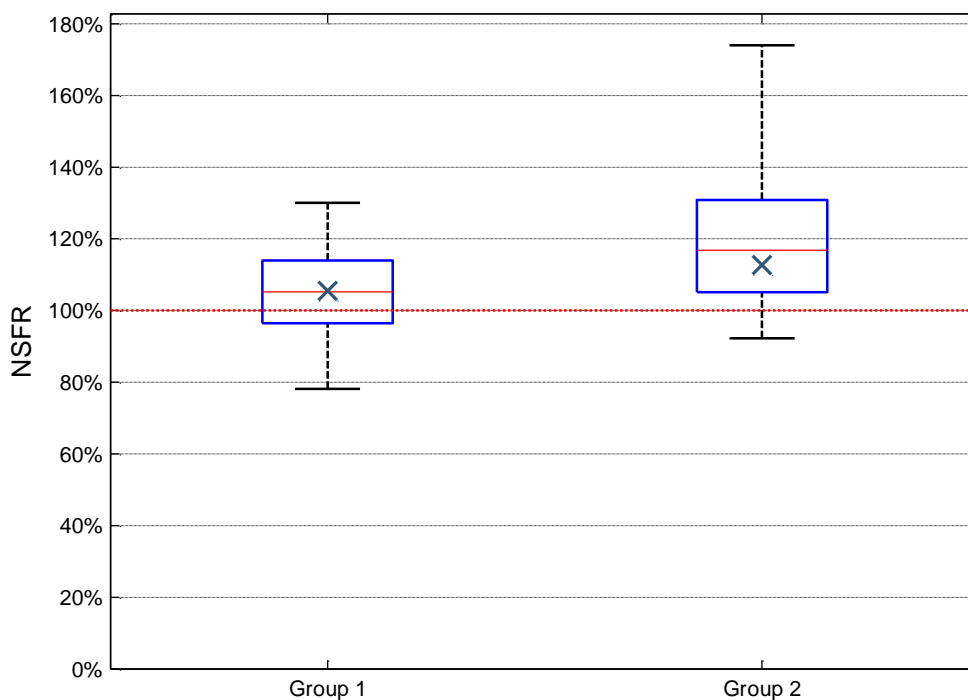
3.2 NSFR

The second liquidity standard is the NSFR—a longer-term structural ratio that addresses liquidity mismatches and provides incentives for banks to use stable sources to fund their activities. The NSFR is defined as the amount of ASF relative to the amount of 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 liquidity characteristics and residual maturities of the various assets held by that institution, as well as those of its off-balance-sheet exposures. At the EU level, the NSFR has not been finalised yet. In accordance with Article 510(3) of the CRR, the Commission is expected to submit a legislative proposal to the European Parliament and the European Council by 31 December 2016 on how to ensure that institutions use stable sources of funding. Therefore, the following results are based on the final Basel III NSFR framework as published in October 2014.

NSFR and shortfall in stable funding

Figure 17 provides an overview of the distribution of the NSFR by bank group. As of December 2015, the average NSFR for Group 1 and Group 2 banks is 105.5% and 112.7% respectively. Approximately 60% of Group 1 and 84% of Group 2 banks already fulfil the minimum NSFR requirement of 100%. Non-compliant Group 2 banks have, on average, a higher NSFR than the NSFR among Group 1 banks, and NSFR for the former group is closer to 100% than for the latter.

Figure 17: Distribution of NSFR by bank group



Source: EBA QIS data (December 2015)

The range of the NSFR across banks is smaller than that of the LCR in the overall sample. This somewhat reflects the differences in the nature and design of the two ratios—i.e. the short-term nature of the LCR and the long-term nature of the NSFR, and respectively the parameters included in their calculations. Furthermore, like for the LCR, the range of the NSFR is larger among Group 2 banks than Group 1 banks.

Overall, banks in the sample are in need of an additional stable funding of EUR 240.1 billion as of December 2015 (Table 8). The need for stable funding is 5.3% of total weighted ASF (EUR 4.5 trillion) and 2.6% of total assets (EUR 9.3 trillion) of all non-compliant banks participating in the NSFR-related part of this 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 the stable funding of banks whose NSFR is below the 100% requirement—and does not account for any surplus of stable funding observed in banks with an NFSR above the 100% requirement. Banks that are below the 100% minimum requirement are still able to take a number of measures between now and 2018 to meet the NSFR standard (e.g. lengthening their funding term or decreasing maturity mismatches in their balance sheet).

It should also be noted that the shortfalls in the LCR and the NSFR are not necessarily additive, as decreasing the shortfall in one standard may result in a similar decrease in the shortfall of the other, depending on the steps taken to decrease the shortfall.³⁴

Table 8: NSFR and NSFR shortfall in stable funding³⁵

	Number of banks	NSFR	NSFR shortfall
Group 1	43	105.5	206.1
Group 2	146	112.7	33.9
- Large	24	110.4	22.3
- Medium	30	117.4	4.1
- Small	92	115.9	7.5
Total	189	107.0	240.1
- G-SIIs/O-SIIs	68	106.3	225.9

Source: EBA QIS data (December 2015)

³⁴ For example, if a bank receives long-term (e.g. between six months and one year) stable funding (e.g. nine-month stable term deposits) and invests this in Level 1 HQLA, it increases: (i) its LCR position, since the liquidity buffer increases with no impact on the outflows; and (ii) its NSFR position. The NSFR position increases because an increase in the numerator dominates the increase in the denominator. The increase in the NSFR is due to 95% and 5% weights allocated to long-term stable funding and Level 1 liquid assets respectively.

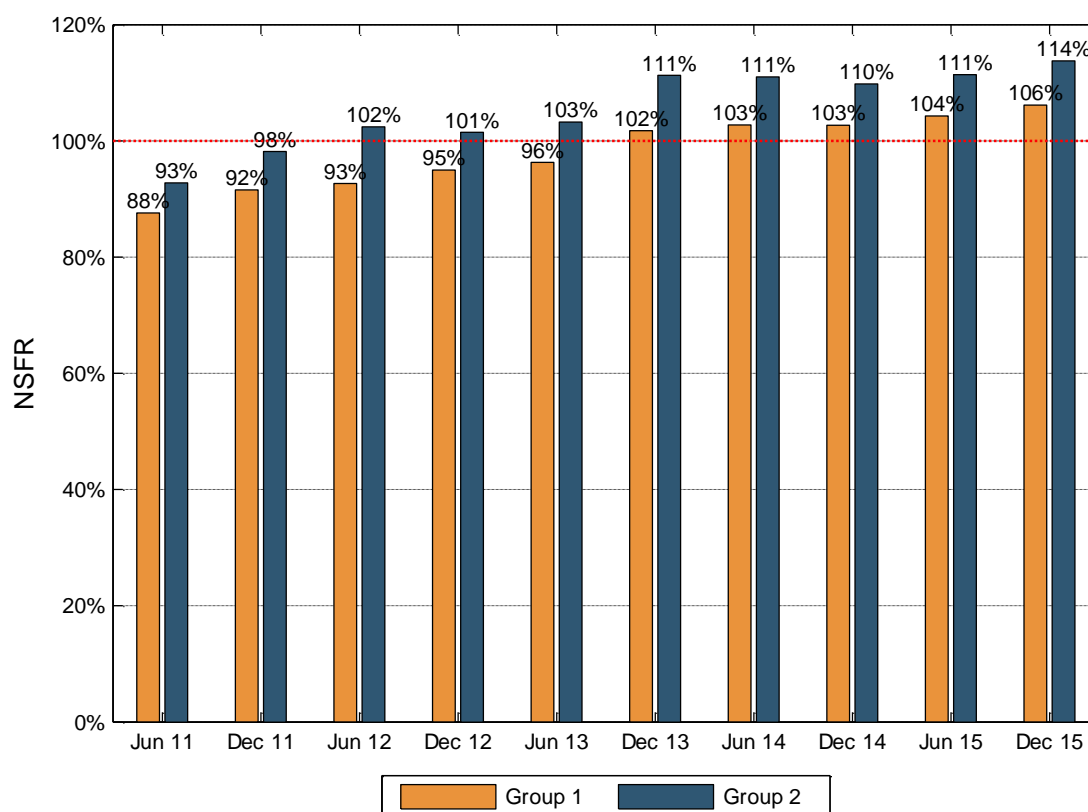
³⁵ The results shown in Table 8 differ from the results of Figure 18 and Figure 19 of this section because of different samples used for the analysis. The comparison with previous periods (Figure 18/Figure 19) is based on a consistent sample of banks, i.e. including only those banks which have consistently been reporting the relevant data for all sought reference dates,

Evolution of the NSFR over time

Figure 18 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 18.5 percentage points and 21.0 percentage points respectively. The significant increase in banks’ NSFRs in December 2013 may also be 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 driver of the increasing trend is mostly an increase in ASF rather than a decrease in RSF. For Group 1, on average, any increase between two reporting dates stems from the fact that an increase in ASF is greater than an increase in RSF (except in one instance in June 2013, where the increase in overall NSFR was due to the larger decrease in RSF that dominated the decrease in ASF). Such a pattern is less evident for Group 2 banks.

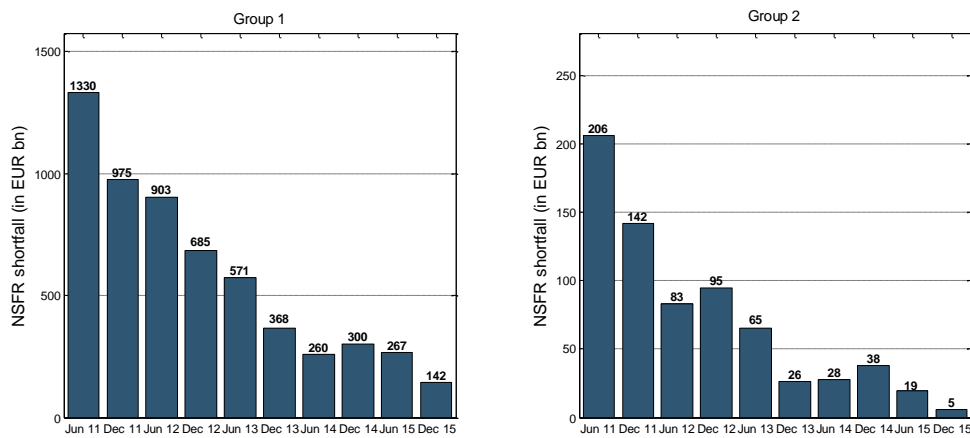
Figure 18: Evolution of NSFR by bank group (in %)



Source: EBA QIS data (December 2015)

The overall positive trend is also reflected in the reduction of the shortfall of stable funding needed to meet the 100% ratio requirement, which (compared to June 2011) has decreased by 89.3% for Group 1 banks and by 97.6% for Group 2 banks.

Figure 19: NSFR shortfall over time

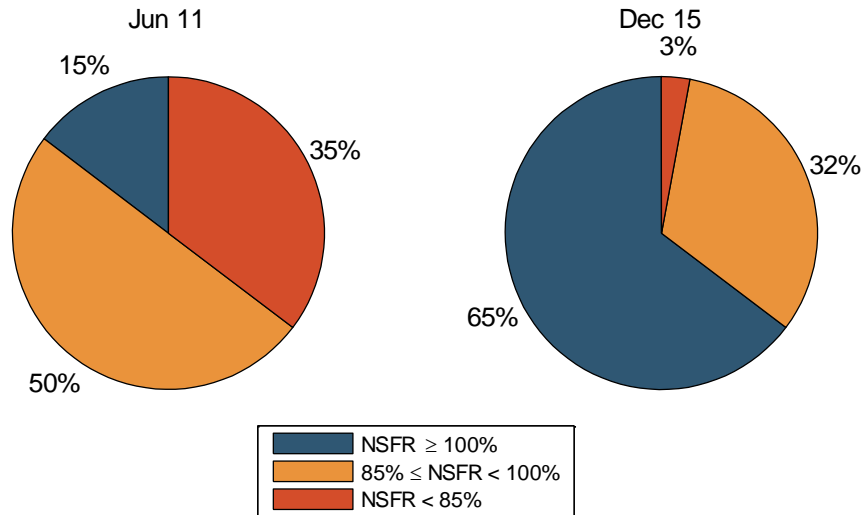


Source: EBA QIS data (December 2015)

The NSFR is less volatile than the LCR and cannot be adjusted easily in a short period of time. This is mainly due to the long-term nature of the parameters included in the calculation of the NSFR. Therefore, a special focus will be placed on those banks with a ratio below 85%.³⁶ As shown in Figure 20 and Figure 21, the share of banks with an NSFR below this threshold has decreased significantly since the beginning of this exercise, with only 3% of Group 1 banks and none of the Group 2 banks reporting an NSFR below 85% as of December 2015.

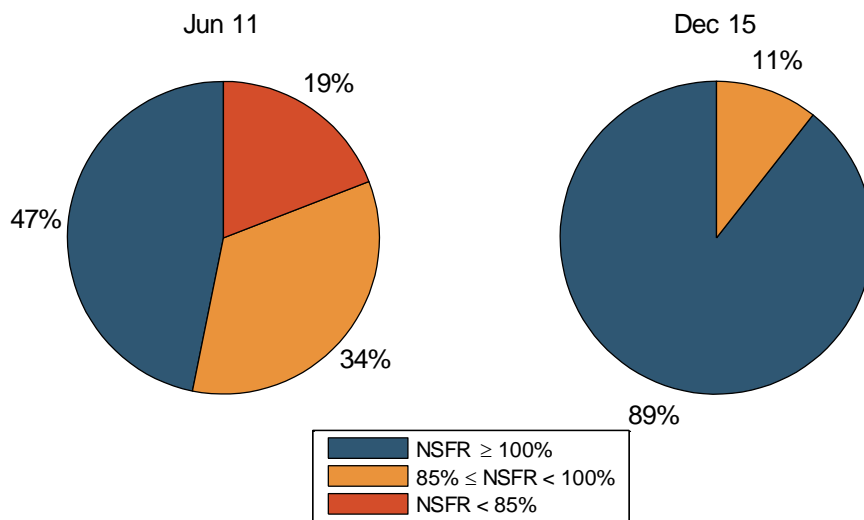
³⁶ Please note that the arbitrary threshold of 85% is based on the distribution of the NSFR in previous monitoring exercises and does not relate to any provision in the CRR.

Figure 20: Distribution of NSFRs: Group 1 banks



Source: EBA QIS data (December 2015)

Figure 21: Distribution of NSFRs: Group 2 banks



Source: EBA QIS data (December 2015)



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