

# RISK ASSESSMENT OF THE EUROPEAN BANKING SYSTEM

JUNE 2015

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## Addendum

This report is based on December 2014 data and the final production date for this report was **12 June 2015**. The report therefore does not cover the current challenges posed by the situation in Greece.

Nonetheless, the EBA has been disclosing bank-by-bank data on exposures towards Greek counterparties, including detailed sovereign exposures broken down by maturity, since 2011 as part of the EU-wide stress test and transparency exercises. Based on the most recent supervisory data, the exposures towards Greek borrowers by the 200 major non-Greek banks in Europe appears very limited at less than EUR20bn, or 1.4% of common equity tier 1.

The EBA has also been working with relevant competent authorities to monitor the current situation, coordinate information flows, and facilitate cooperation on contingency actions. Based on the direct exposure data and the pre-emptive actions taken the risks of direct contagion from the Greek situation appear to be somewhat limited. Nonetheless, indirect channels of contagion remain a concern and will need to be monitored closely. These channels include the impact on funding costs, asset prices, market liquidity, and counterparty credit quality elsewhere. Continued cooperation and ex-ante coordination of supervisory actions across all competent supervisory and resolution authorities in the single market is of utmost importance for the management of the current crisis.

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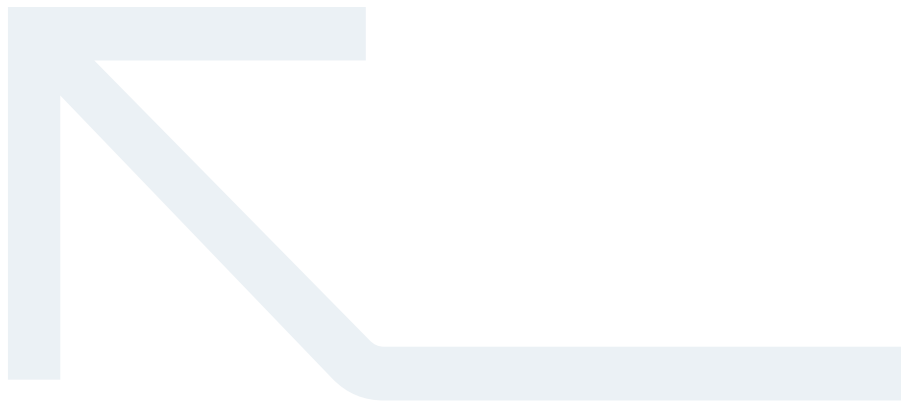
## Abbreviations

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<b>AQR</b>	asset quality review	<b>GDP</b>	gross domestic product
<b>AT1</b>	additional tier 1	<b>GL</b>	guideline
<b>BCBS</b>	Basel Committee on Banking Supervision	<b>IFRS</b>	International Financial Reporting Standard(s)
<b>BIS</b>	Bank for International Settlements	<b>IFRS</b>	International Financial Reporting Standard
<b>BRRD</b>	Bank Recovery and Resolution Directive	<b>IMF</b>	International Monetary Fund
<b>CAPM</b>	Capital Asset Pricing Model	<b>IRB</b>	internal rating-based
<b>CCP</b>	counterparty clearing party / parties	<b>IRRBB</b>	interest rate risk in the banking book
<b>CDS</b>	credit default swap	<b>KRI</b>	key risk indicator
<b>CDX</b>	CDS index	<b>LDP</b>	low default portfolio(s)
<b>CET1</b>	common equity tier 1	<b>LGD</b>	loss given default
<b>CoCo</b>	contingent convertible	<b>LIBOR</b>	London interbank offered rate
<b>CoE</b>	cost of equity	<b>LTRO</b>	long-term refinancing operation
<b>CRD</b>	Capital Requirements Directive	<b>MPO</b>	monetary policy and operations
<b>CRR</b>	Capital Requirements Regulation	<b>MREL</b>	minimum requirement for own funds and eligible liabilities
<b>CRE</b>	Commercial Real Estate	<b>NACE</b>	Nomenclature of Economic Activities
<b>CT1</b>	Core Tier 1 ratio	<b>NII</b>	net interest income
<b>DDoS</b>	Distributed denial of service	<b>NPE</b>	non-performing exposure
<b>EA</b>	Euro area	<b>NPL(s)</b>	non-performing loan(s)
<b>EBA</b>	European Banking Authority	<b>NSFR</b>	net stable funding ratio
<b>ECB</b>	European Central Bank	<b>OTC</b>	over the counter
<b>EDF</b>	expected default frequencies	<b>OpR</b>	operational risk
<b>EEA</b>	European economic area	<b>PD</b>	probability of default
<b>EMIR</b>	European Market Infrastructure Regulation	<b>P&amp;L</b>	Profit and Losses
<b>ESMA</b>	European Securities and Markets Authority	<b>QE</b>	quantitative easing
<b>ESRB</b>	European Systemic Risk Board	<b>RAQ</b>	risk assessment questionnaire
<b>EURIBOR</b>	Euro interbank offered rate	<b>RAR</b>	report on the risks and vulnerabilities of the European Banking System
<b>FBE</b>	forbearance exposure	<b>REA</b>	risk exposure amount
<b>FBL</b>	forbearance loan(s)	<b>RoA</b>	return on assets
<b>FED</b>	federal reserve (system) (of the US)	<b>RoE</b>	return on equity
<b>FX</b>	foreign exchange / foreign currency	<b>RWA</b>	risk-weighted assets
		<b>RW</b>	risk weights

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<b>SME</b>	small and medium-sized enterprises	<b>SRM</b>	single resolution mechanism
<b>SREP</b>	supervisory review and evaluation process	<b>TLAC</b>	total loss absorbing capacity
<b>SRB</b>	Single Resolution Board	<b>TLTRO</b>	targeted long-term refinancing operations
<b>SRF</b>	single resolution fund	<b>TOI</b>	Total operating income



## Executive summary

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The repair process of the European banking system since 2011 has led to a major strengthening of banks' capital position. EU banks increased their common equity tier 1 (CET1) ratio between December 2011 and December 2014 from 9.2 % to 12.1 %. On a Basel III fully loaded basis, EU banks report a 10.9 % CET1 ratio as of December 2014, 80 bps above March 2014 levels. The capital ratios of the major EU banks are now comparable, if not higher, to those of their US peers. The improvement of capital ratios has been achieved more through increases of common equity than decreases of risk-weighted assets (RWAs) and has been accompanied by a process of regulatory harmonisation of the definition of capital in the EU.

EU banks still face important challenges and vulnerabilities remain. Private and public debt overhang remains high, with aggregated values compared to gross domestic product (GDP) ranging between 175 % and 514 % for EU countries. Geopolitical risk, economic and financial uncertainties in some euro area countries (e.g. Greece), risks coming from emerging markets as well as general macro-economic uncertainty raise concerns on further instability, possible effects on sovereign bond markets and potential future deterioration of asset quality. The search for yield in a low inflation and low interest environment might contribute to potential asset price bubbles while also low interest rates pose challenges for bank profitability in the medium term. In addition to asset quality and profitability concerns, the results of the supervisory review and evaluation process (SREP) showed heightened concern about operational risks (like litigation and IT risks) among supervisors. Market analysts also consider these factors as possible sources of further uncertainty in banks' market sentiment according to the results of the European Banking Authority's (EBA) risk assessment questionnaire (RAQ).

On the asset side, the deleveraging trend has plateaued with some signs of growth in total assets and loan volumes. After an initial sta-

bilisation, total asset volumes increased by 5.9 % as of December 2014 on a yearly basis. Gross loan volumes grew by 2.6 %. The overall deleveraging trend in the sector — predominant in the past years — has stopped, although banks are still reducing exposures in certain regions or sectors, such as investment banking. Views expressed by analysts and banks in the RAQ confirm this trend and point to a general recovery of banks' traditional business and a return to plain vanilla products. Despite a progressive reduction of impairments on financial assets, asset quality remains a concern, albeit mainly linked to uncertainties in specific geographies with action needed to move along the resolution of non-performing exposures. The SREP results confirm that credit and counterparty risk remains one of the supervisors' key concerns.

Funding markets and deposit bases showed a stable and partially even positive picture in the second half of 2014 and the first quarter of 2015. Despite some volatility in issuance volumes, there has been no real shortage of market funding. Cumulative issuance volumes for secured and unsecured instruments in 2014 were higher than in 2013. Banks have also issued a significant volume of subordinated debt instruments. The demand side has been positively influenced by investors in search of yield, especially since the announcement of the quantitative easing (QE) programme. Spreads have, on average, slightly decreased for secured as well as unsecured euro-denominated funding instruments during the second half of last year, although showing certain volatility, for example at times of heightened public discussions about euro area coherence. Deposit bases, in general, also increased, supporting the overall positive evolution of funding.

Regardless of generally benign funding conditions, financial markets remain overall fragile and volatile. Persisting vulnerabilities are linked to funding in foreign currencies, including USD, subdued cross-border inter-bank markets, and from raising concerns



about trading market liquidity. Central bank based funding as well as asset encumbrance levels remain high. It shows that trust across banks in the single market is not yet fully restored, and that funding markets have not yet returned to pre-crisis conditions. Finally, banks remain vulnerable to any snap back in risk appetite that could make it more expensive or difficult to access term funding and / or raise Additional Tier 1 (AT1) or Tier 2 instruments.

**EU banks still face important challenges to profitability.** The return on equity (RoE) as of December 2014 was 3.6 %, the highest year-end value since 2011. The main drivers for this modest increase are the growth of the net interest income and a decline of impairments of financial instruments. The positive trend of net interest income during 2014 is partially explained by a growth of total loans and debt instruments as well as a decrease in funding costs. On the other hand, asset quality remains a drag and conduct-related charges and litigation costs pose a significant toll on banks' profitability. RoE remains thus subdued and insufficient to cover the cost of equity (CoE) for many banks, which may encourage disproportionate risk taking or cost cutting in an effort to increase profitability. Moreover, there are doubts on the sustainability and viability of certain banks' business models while there is little clarity on what strategies banks have in place to return to adequate levels of profitability as they

move away from official funding. Plans of EU banks to return to traditional lending business might determine increasing competition and, in turn, further pressure on margins.

**Further changes to business models might arise.** The regulatory reforms already implemented and the essential restructuring process of the EU banking sector initiated after the crisis have triggered important changes to banks' business models as well as a consolidation in the sector. Still profound changes are likely to occur, mainly linked to resolvability of banks envisaged in the context of the bank recovery and resolution directive (BRRD), and to the structural separation of banks' business proposed in the Liikanen report. Banks' plans would reflect the 'back-to-basics' trend, refocusing on core activities and markets.

**Segmentation within the single market persists both on the asset and on the liability side.** The levels of impairments still show a wide range between the countries, partially influenced by local laws in some jurisdictions that slow the recovery process for non-performing loans. Consolidated foreign claims for EU banks decreased during 2014, giving evidence of subdued levels of cross-border lending. Further efforts for ensuring convergence of approaches and methodologies for the supervision of banks are a precondition for restoring confidence in the single market.



# Introduction

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This is the seventh semi-annual report on risks and vulnerabilities of the European banking sector published by the EBA. This report describes the main developments and trends that have affected the EU banking sector since mid-2014 and provides the EBA's outlook on the main micro-prudential risks and vulnerabilities looking ahead <sup>(1)</sup>. This report is based on qualitative and quantitative information collected by the EBA. This report is based on five main exclusive data sources, namely:

- (a) EBA key risk indicators (KRI);
- (b) EBA Supervisory Reporting;
- (c) the EBA RAQ for banks;
- (d) the EBA RAQ for market analysts; and
- (e) micro-prudential expertise and college information-gathering.

The EBA KRI are a set of 53 indicators collected on a quarterly basis by national supervisors, from a sample of 55 European banks in 20 European economic area (EEA) countries from 2009 onwards. The banks in the sample cover at least 50 % of the total assets of each national banking sector. The reference date for the data is 31 December 2014. Information about the sample and descriptive statistics of the latest KRI can be found in the annex. The weighted average ratios are described unless stated otherwise. In the country-by-country comparison and respective statistics the name of a country is only given if there are three or more reporting banks from this country. Since KRI are collected at a point in time, they tend to be backward-looking in nature. They are thus complemented with various forward-looking sources of information and data, such as semi-annual and ad hoc surveys.

The harmonised supervisory reporting framework based on the EBA implementing technical standard (ITS) on supervisory

reporting came into force during 2014 <sup>(2)</sup>. The EBA started collecting harmonised supervisory data based on the ITS from 192 banks from 29 EEA countries <sup>(3)</sup>. The sample of banks covers at least three banks from each country and in addition all large banks. Due to the lack of historical information, the new data and enlarged sample have been used in this report only in specific sections on non-performing and forborne loans and on asset encumbrance. Similarly to KRIs, country averages are shown when at least three banks have reported data. Due to the varying scope of the ITS requirements this may vary especially for financial information for which there are not always three banks reporting in the sample. The cut-off date for KRIs and extended Supervisory Reporting is 30 April 2015.

The RAQ is a semi-annual survey conducted by the EBA, asking banks and/or their financial supervisors a number of multiple-choice questions. Information from the questionnaire completed in March 2015 and comparisons with previous responses from a representative sample of 39 European banks (Annex I) are used in this report. In addition, the EBA conducted a survey (RAQ for market analysts) asking market analysts (29 respondents) a number of questions in a multiple-choice format with responses reflecting the degree of agreement with a given statement.

The report also analyses information gathered by the EBA from the European colleges of supervisors and from informal discussions as part of the regular risk assessments and ongoing dialogue on risks and vulnerabilities of the EU banking sector. The report is organised as follows.

Chapter 1 looks at the external environment and processes by which EU banks' assets and liabilities are developing in a given market sentiment and macroeconomic environment, taking into account the regulatory developments and structural and institutional reforms at EU level. Chapter 2 focuses on the asset side, explaining the ongoing de-risking

<sup>(1)</sup> With this report, the EBA discharges its responsibility to monitor and assess market developments and provides information to other EU institutions and the general public, pursuant to Regulation (EU) No 1093/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Banking Authority), and amended by Regulation (EU) No 1022/2013 of the European Parliament and of the Council of 22 October 2013.

<sup>(2)</sup> <http://www.eba.europa.eu/regulation-and-policy/supervisory-reporting>, [http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL\\_2014\\_191\\_R\\_0001](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2014_191_R_0001).

<sup>(3)</sup> <http://www.eba.europa.eu/risk-analysis-and-data;jsessionid=32D6610C3D1FB0CC13ECA43D0B13A20F>.

process, the respective influence in banks' business models and risk appetite and the dynamics of asset quality. Chapter 3 considers in more detail the liability side, presenting the evolution of funding conditions. It also discusses the development of asset encumbrance and highlights remaining structural fragilities and challenges. Chapter 4 provides an overview of the banks' capital positions and respective trends, taking into account the banks' efforts to progress towards strong capital buffers. Chapter 5 describes banks'

income and profitability and the significant headwinds during 2014 and beginning of 2015 and future evolution. Chapter 6 touches on aspects of banks' operational and IT risks, consumer issues and reputational concerns, business conduct, effective and potential financial costs stemming from mis-selling and other unfair past business practices. Finally, Chapter 7 presents policy implications and possible measures to address the prudential issues mentioned in the previous chapters.



# 1. External environment

## 1.1 Market sentiment and macroeconomic environment

### Growth is increasing steadily although it remains fragile and fragmented

During the second half of 2014, growth in the EU was slightly stronger than originally expected. However, it remains fragile and fragmented. Actual real GDP growth rates in 2014 were 1.4 % in the EU and 0.9 % in the euro area <sup>(4)</sup>. Forecasts for this year and the next are above these growth rates but still low. Annual GDP growth in the EU is projected at 1.8 % (2.1 % in 2016), while growth in the euro area is expected to be 1.5 % (1.9 % in 2016).

Growth in the EU would be positively influenced by lower oil prices, a depreciation of the euro, generally improved financial conditions as well as expansive monetary policies. In the euro area an expected increase in demand for loans by households and corporates, according to the ECB's lending survey for Q1/2015, might also underpin growth going forward.

<sup>(4)</sup> Economic data is based on the European Commission's 'Spring 2015 Economic Forecast', [http://ec.europa.eu/economy\\_finance/eu/forecasts/2015\\_spring\\_forecast\\_en.htm](http://ec.europa.eu/economy_finance/eu/forecasts/2015_spring_forecast_en.htm), if not otherwise indicated.

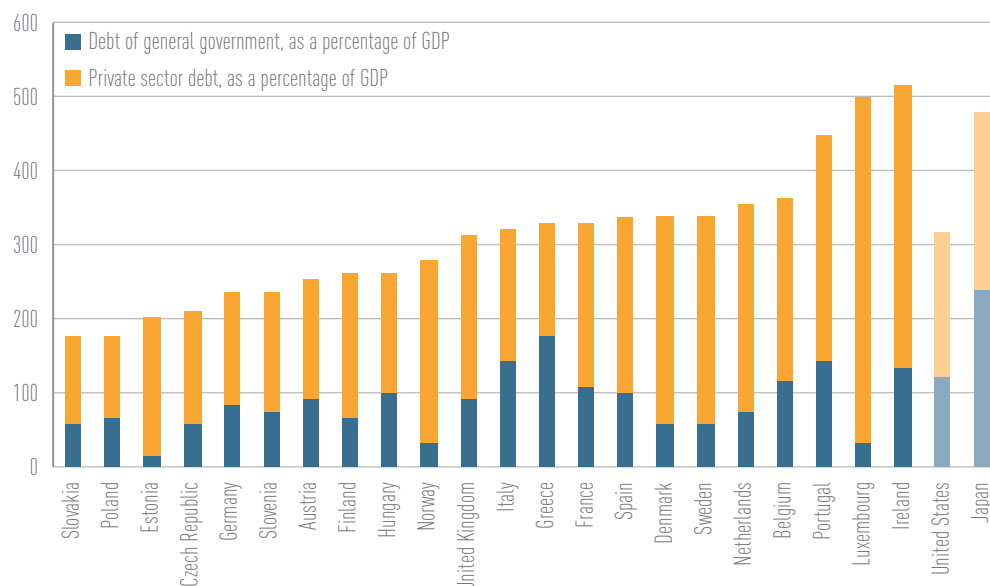
On the other hand, private and public debt overhang remains at worryingly high levels and might still be weighing on the recovery of growth. The aggregate of general government and private sector debt (non-financial corporations and households) compared to GDP in EU countries fluctuated between 175 % and 514 % as of the end of 2013 (Figure 1).

Inflation remains low. It is expected to decrease from 0.6 % in 2014 to 0.1 % in 2015 in the EU and from 0.4 % in 2014 to 0.1 % for the euro area (harmonised index of consumer prices, forecasts for 2016 are 1.5 % for both the EU and euro area). The unemployment rate is expected to decrease at a slow pace, from 10.2 % in 2014 to 9.6 % in 2015 (EU, 2016 — 9.2 %) and from 11.6 % to 11.0 % (euro area, 2016 — 10.5 %). Benign employment growth and low inflation rates might deter consumers and investors spending and put further downward pressure on growth. On the other hand, the announcement by the ECB in January 2015 of its QE programme, aimed at fulfilling the ECB's price stability mandate and addressing the risks of an over-prolonged period of low inflation, should have a positive effect on inflation and growth <sup>(5)</sup>. Current economic and financial

<sup>(5)</sup> For economic trends as well as comments on it see also the IMF's world economic outlook, April 2015.

**Figure 1: Debt of general government and private sector debt as a percentage of GDP (EU–OECD countries, USA and Japan, end of 2013)**

Source: OECD statistics, EBA calculations.



uncertainties regarding the negotiations over the long-term trajectory of the Greek fiscal position could lead to further instability and may affect sovereign bond markets.

Market parameters indicate that confidence in the EU banking sector is gradually being restored and that market sentiment is improving

During the second half of 2014 and the first quarter of 2015, CDS spreads of EU banks remained stable at rather low levels. Also, banks' equity market showed a positive evolution

during the first quarter of 2015 after a volatile slight downturn trend during 2014 (STOXX® Europe 600 Banks, Figure 2).

Despite some volatility and a slightly increasing dispersion during the first four months of 2015, EU banks' expected default frequencies (EDFs) remain at low levels compared to recent years (Figure 3) <sup>(4)</sup>.

<sup>(4)</sup> Moody's KMV EDF is a measure of the probability that a company will fail to make scheduled debt payments over a specified period — typically one year.

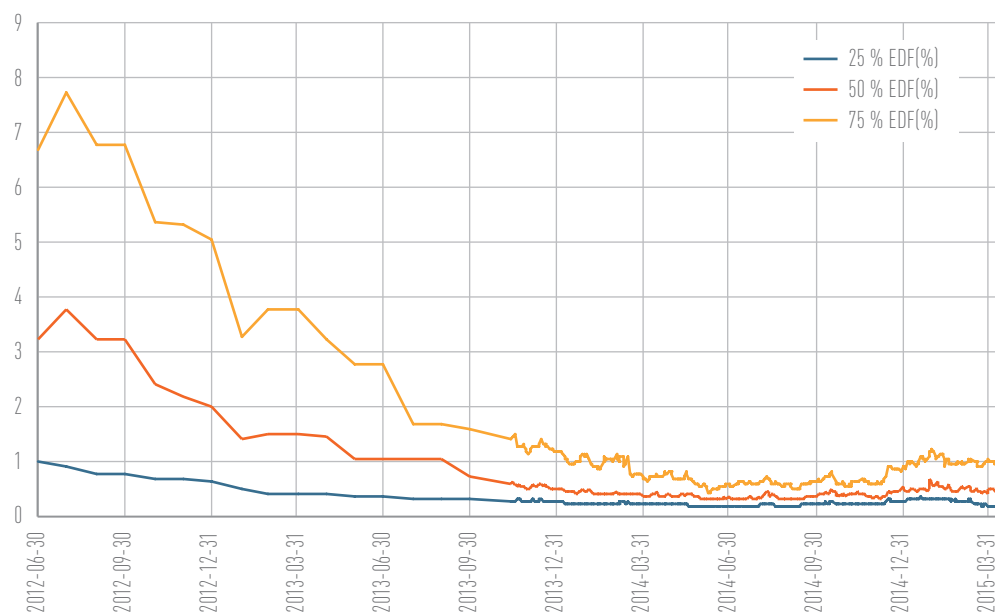
**Figure 2: Stock index — STOXX® Europe 600 Banks share price index and weighted average of EU bank CDSs spread by market capitalisation (average December 2011 = 100)**

Source: Bloomberg, EBA calculations.



**Figure 3: Expected default frequencies**

Source: EBA KRI banks — listed; Moody's Credit Edge. EBA calculations.



Stable CDS spreads, recovery of the banks' share prices and low EDFs for EU banks indicate that confidence in the EU banking sector is gradually being restored and that market sentiment is improving, even though volatility remains high.

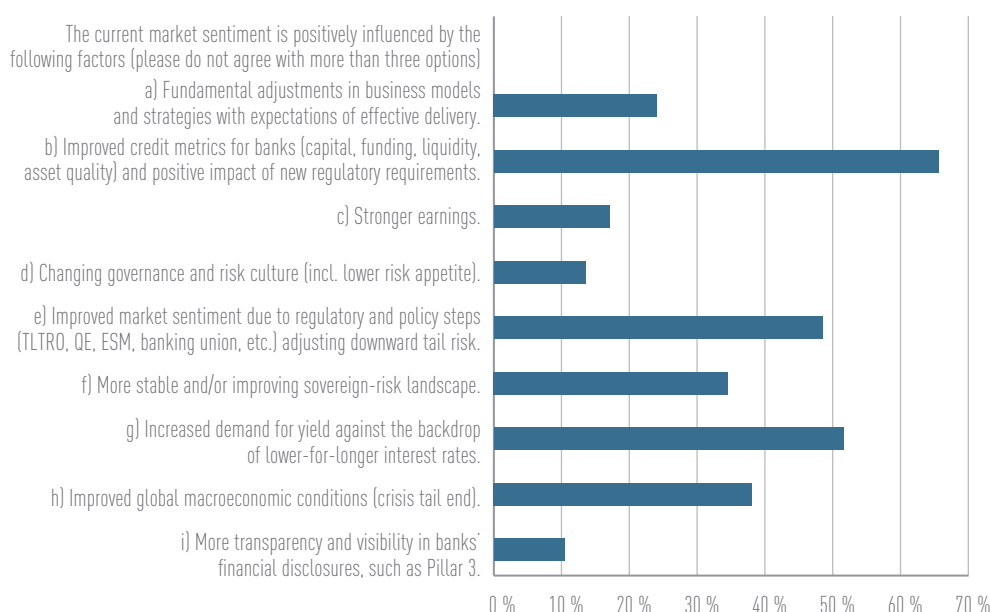
Market analysts also consider that there are reasons for optimism and that certain factors are having a positive impact on market sentiment. In their answers to the RAQ, they indicate that general market sentiment is positively influenced by banks' improved metrics (more than 60 % agree-

ment) and by the impact of new regulatory and policy steps (almost 50 % agreement) (Figure 4).

On the other hand, main drivers that, according to market analysts in the RAQ, are still influencing market sentiment negatively are geopolitical risks (about 80 % agreement), litigation risks (about 70 % agreement), decreasing liquidity in trading markets and a re-emergence of the euro area crisis (almost 40 % agreement in both cases) and emerging market risks (30 % agreement) (Figure 5).

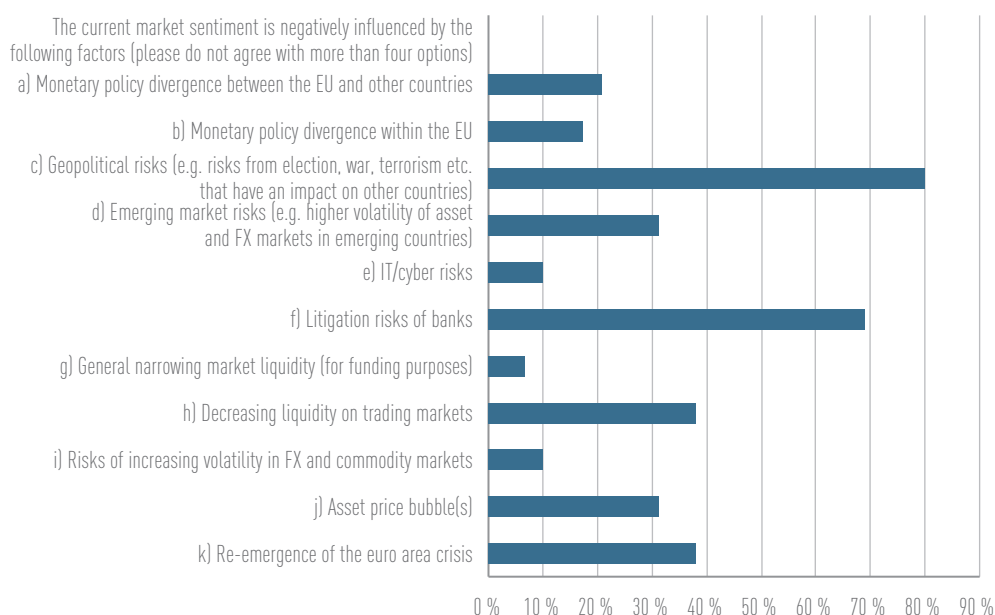
**Figure 4: Market sentiment: Positive influence**

Source: EBA RAQ for market analysts.



**Figure 5: Market sentiment: Negative influence**

Source: EBA RAQ for market analysts.



Banks from some EU countries report significant exposures to emerging markets, while certain factors point out the increasing riskiness of these exposures

Real GDP forecasts predict negative or subdued growth in some emerging markets <sup>(7)</sup>. Asset quality deteriorated during 2014 and the first quarter of 2015 in these geographies, and there are expectations that deterioration will continue to increase and expand to more countries. Besides, the decline and volatility in oil prices might have an additional negative impact in those emerging-market countries that are oil exporters. Deterioration of economic conditions in emerging markets might have an important effect on balance sheets and asset quality of EU banks: banks from seven EU countries report exposures to emerging-market countries representing more than 25 % of their total foreign claims (Figure 6).

Almost 50 % of banks responding to the RAQ agree that risks linked to emerging markets are an important source of risks for their institutions. They are specially concerned about geopolitical risks (more than 30 % of respondents), followed by deterioration of

asset quality in these markets and by the risk of contagion from these markets to the global economy (Figure 7). Market analysts are mainly preoccupied with deterioration of asset quality, with more than 50 % of agreement of the respondents to the RAQ (Figure 7).

## 1.2 Regulatory developments

At the European level, the implementation of a new regulatory framework with common rules for banks in all 28 Member States set out in a single rulebook is going ahead. Following the adoption of the core provisions of Basel 3 through the capital requirements directive and regulation (CRD/CRR), the EU has also implemented another major pillar of the international reform effort — the Financial Stability Board's key attributes of effective resolution regimes, through the BRRD (published in June 2014). In June 2014, the recast directive on deposit guarantee schemes (DGS) was also published in the EU Official Journal with the aim to strengthen the protection of citizens' deposits in case of bank failures.

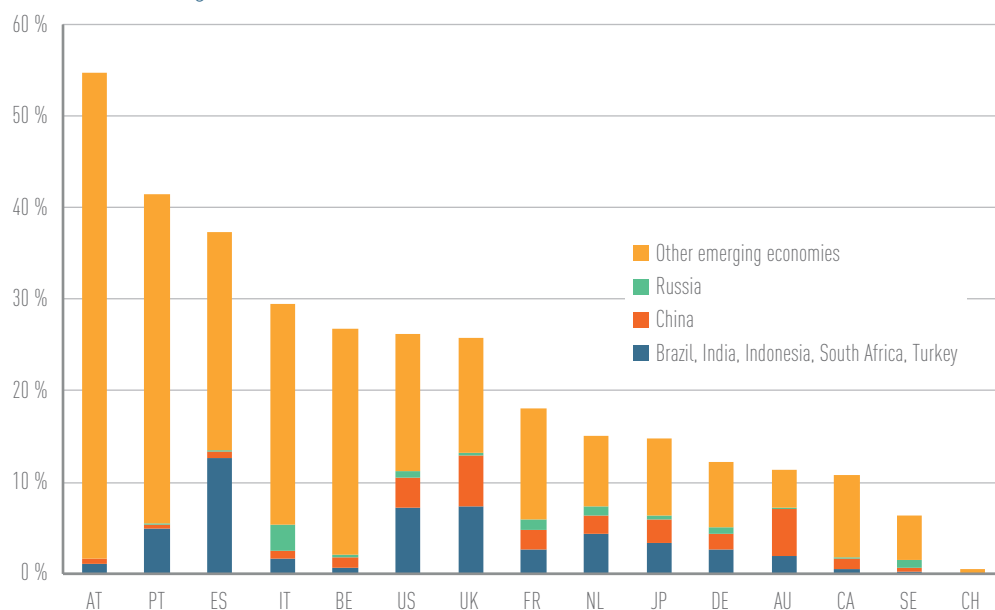
At the euro area level, the banking union institutions will be in charge of the implementation of those rules. First, in November 2014, the European Central Bank (ECB) became the supervisor of the banks in the euro area in the framework of the Single Supervisory Mechanism (SSM). Secondly, the Single Resolution Mechanism (SRM) applies to all institutions covered by the SSM. For cross-border and significant institutions,

<sup>(7)</sup> The International Monetary Fund (IMF) real GDP forecast for Russia is – 3.8 % for 2015, for Brazil – 1.0 % and for China 6.8 % (which is lower than the real GDP growth in any of the last eight years), according to the IMF's world economic outlook (April 2015).

<sup>(8)</sup> Some countries do not report certain counterparties (of those shown separately, e.g. Russia) separately. In such cases respective exposures are part of 'other emerging countries'.

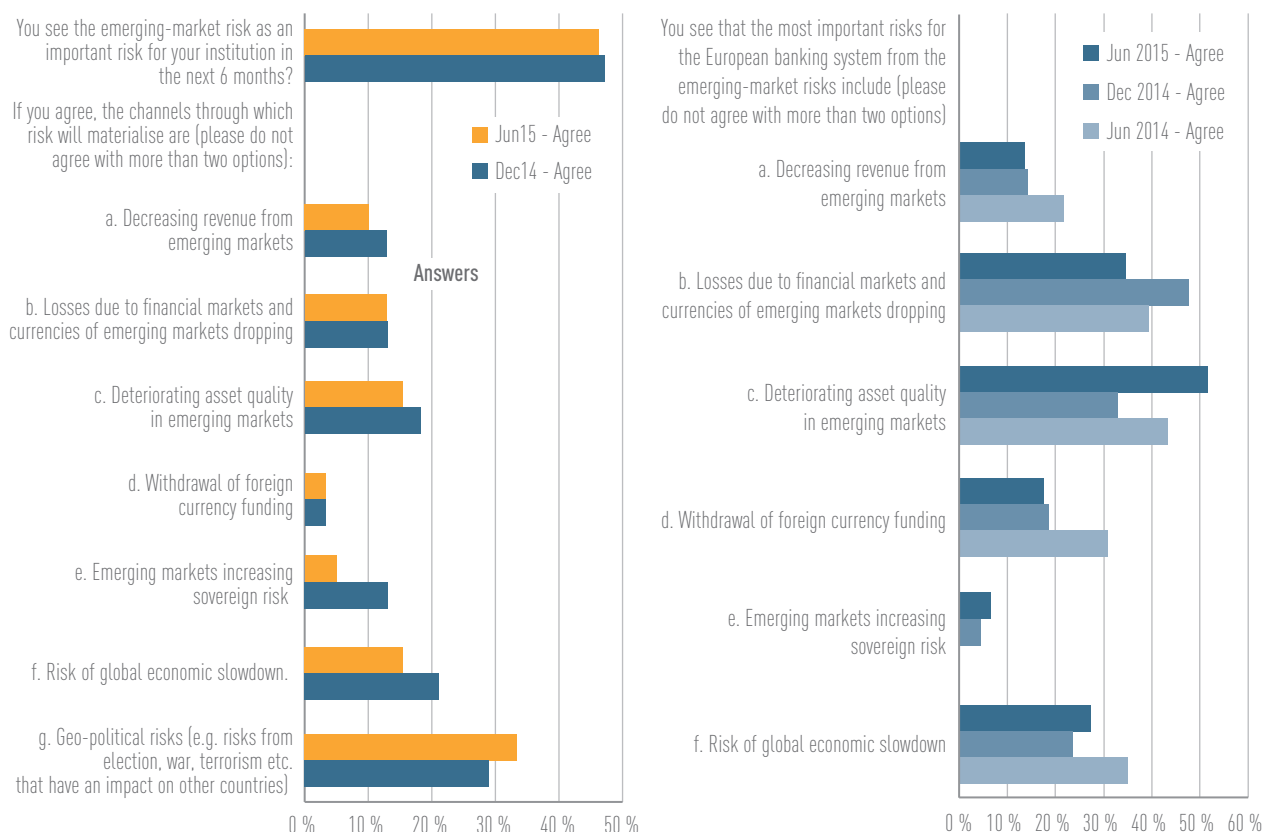
**Figure 6: Banking system exposures to emerging markets — percentage of total foreign claims — consolidated data on an ultimate risk basis (data as of Q4/2014)**

Source: Bank for International Settlements (BIS), EBA calculations. Definitions of group of emerging countries according to the BIS <sup>(8)</sup>.



**Figure 7: Emerging-market risk**

Source: EBA RAQ for banks. EBA RAQ for market analysts.



resolution planning and, from 2016, the resolution of the bank in the event that it fails, will be directly managed by the Single Resolution Board (SRB), which is also responsible for a Single Resolution Fund (SRF) financed by the banking sector.

With the objective of promoting regulatory and supervisory convergence across the Union, the EBA continues to make progress in the development of a single EUwide rule book. So far, the EBA has issued more than 90 technical standards, and another 50 are in the pipeline, 40 (29 regulatory technical standards (RTS), and 11 implementing technical standards (ITS)) of which are to be issued during 2015 (Figure 8). During the first half of 2015, the EBA has been especially active in credit risk (internal ratings-based (IRB) models) and recovery and resolution.

In March 2015, the EBA launched a discussion paper on the regulatory measures needed to ensure a robust and clear framework for IRB models, seeking stakeholders' feedback on both how to implement the necessary measures in a consistent way and how to bring forward future changes to the current approach. During 2015, the EBA issued or plans to issue seven additional RTS on IRB

models and 1 RTS and 1 ITS on supervisory benchmarking.

With the aim to guarantee a coordinated approach to measures that ensure resolvability of institutions and to the setting of the minimum required eligible liabilities, and with the objective of achieving consistency on the resolution plans for cross-border groups, and free flow of capital and liquidity within the single market and across participating countries, the EBA was also busy during the second half of 2014 and the first quarter of 2015 filling out the BRRD framework with technical standards and guidelines (GL), working with supervisors and resolution authorities. During 2015, the EBA will issue 12 RTS and four ITS on recovery- and resolution-related topics.

On liquidity risks, the EBA published in January this year its impact assessment report for liquidity coverage requirements. Overall, this analysis points to improvements of EU banks' compliance with liquidity coverage ratio (LCR) requirements and shows that the implementation of the LCR is not likely to have a negative impact on the stability of financial markets and the supply of bank lending. The EBA is currently also working on a report to the Commission



on whether and how it would be appropriate to ensure that institutions use stable sources of funding, including an assessment of the impact on EU institutions, financial markets

and the economy and bank lending. Since December 2014, supervisors have been receiving institutions' reporting on asset encumbrance and, from July 2015, institutions will also start

**Figure 8: Regulatory technical standards and implementing technical standards developed or to be developed by the EBA during 2015**

Source: EBA 2015 work programme 2015.

RTS Title	Source	Article	Paragraph	Topic
RTS on risk-mitigation techniques for OTC derivative contracts not cleared by a CCP	EMIR	11	15	OTC derivatives
RTS on CSDs' capital requirements	CSD	47	3	CSD
RTS on additional risk-based capital surcharge for CSDs	CSD	54	9	CSD
RTS on prudential requirements applicable to credit institutions designated to provide banking type of ancillary services	CSD	59	5	CSD
RTS on mortgage lending value	CRR	124	4	IRB
Two RTS on risk weights for mortgage lending	CRR	124	4	IRB
	CRR	164	6	IRB
	CRR	144	2	IRB
Three RTS on assessment methodology for IRB approach	CRR	173	3	IRB
	CRR	180	3	IRB
	CRR	153	9	IRB
RTS on risk weights for specialised lending exposures	CRR	312	4	Operational risk
RTS on the assessment methodology	CRR	382	5	Market risk
RTS on exclusion of CVA for third country NFC	CRR	422	9	Liquidity risk
RTS on criteria for intragroup outflows	CRR	425	5	Liquidity risk
RTS on benchmarking exercise	CRD	78	7	
RTS on conditions group financial support (group 1)	BRRD	27	5	Early intervention
RTS on independence of valuers	BRRD	36	14	Resolution
RTS on valuation methodology	BRRD	36	15	Resolution
RTS on MREL criteria	BRRD	45	2	Resolution
RTS on valuation of derivatives	BRRD	49	5	Resolution
RTS on minimum elements and reports on business reorganisation plan	BRRD	52	12	Resolution
RTS on business organisation plan	BRRD	52	14	
RTS on contractual recognition of bail-in	BRRD	55	3	Resolution
RTS on requirements to maintain detailed records of financial contracts	BRRD	71	8	Resolution
RTS on ex post valuation	BRRD	74	4	Resolution
RTS on notification requirements	BRRD	82	3	Resolution
RTS on operational functioning of resolution colleges	BRRD	88	7	Resolution
RTS on central contact points	AMLD	42	8	AML

ITS title	Source	Article	Paragraph	Topic
3 ITS on mapping of external credit assessments	CRR	136	1	ECAls
	CRR	136	3	ECAls
	CRR	270	1	ECAls
Update on ITS on LCR reporting	CRR	415		Liquidity risk
Update on ITS on reporting of the leverage ratio	CRR	430	2	Leverage ratio
Update on ITS on disclosure of the leverage ratio	CRR	451	2	Leverage ratio
ITS on benchmarking exercise	CRD	78	7	
ITS on templates for notifications on simplified obligations	BRRD	4	11	Recovery and resolution
ITS on procedures; minimum forms and templates resolution plans	BRRD	11	3	Resolution
ITS on disclosure group financial support agreement	BRRD	26	2	Resolution
ITS on MREL reporting templates	BRRD	45	17	Resolution

reporting information on additional liquidity monitoring metrics, including a contractual maturity ladder of their funding instruments and information on concentration of funding.

On other topics, in December 2014, the EBA published an opinion on how to improve the well-functioning of the securitisation market, making a series of recommendations to ensure increased transparency, legal certainty of compliance with the retention rules as well as prevention of any potential regulatory arbitrage.

### IRB model development in Europe

On 4 March 2015, the EBA published a discussion paper on the planned regulatory changes in the area of IRB models in order to solicit feedback on how to revise the IRB framework, as this will require substantial efforts by institutions, supervisory authorities and the EBA.

The concept of an IRB approach for credit risk was first introduced by Directive 2006/48/EC of 14 June 2006, later replaced by Regulation (EU) No 575/2013 (CRR). The CRR introduced a number of mandates for the EBA to develop technical standards and guidelines to supplement the primary legislation in order to ensure a more harmonised application of the IRB requirements. Additionally, the EBA conducted a study starting in 2011 on the comparability of the risk estimates and capital requirements stemming from IRB approaches, including an analysis of the factors that contribute to discrepancies in calculations among institutions. The results of this study were presented in the report on the comparability and pro-cyclicality of capital requirements issued by the EBA in December 2013 in accordance with Article 502 of the CRR. The outcome of the analysis revealed significant discrepancies in the risk estimates and capital requirements that are not linked to differences in the underlying risk profiles of institutions. With the aim to overcome these differences and achieve real harmonisation, the EBA will issue a number of guidelines in addition to the mandates included in the CRR.

The EBA in this matter will focus on the aspects of the IRB approach that require more harmonised application within the CRR requirements. However, in the longer term a more fundamental review of the IRB approach will probably be carried out through the legislative changes to the CRR. It is therefore necessary to steer the possible direction of these changes, including aspects that are already being discussed at a global level.

The EBA envisages that in order to ensure a higher degree of comparability of IRB models across institutions, the regulatory and supervisory response must rely on three areas:

- a regulatory review of the IRB framework and approach, where modelling options should be limited and definitions harmonised in addition to a more fundamental review, which is currently being undertaken at the international level;
- ensuring supervisory convergence: this includes, for instance, the use of annual benchmarking exercises which will provide detailed information about the differences in capital requirements across banks and will allow a deeper understanding of those differences;
- stronger transparency requirements: the Basel Committee has strengthened the disclosure requirements, which gives a good indication of the necessary information. Transparency requirements should be accompanied with clear and well defined templates and definitions.

The discussion paper is set in a European context and takes the CRR as the natural starting point. A main concern of the discussion paper is to set out the sequencing of the development and implementation of the planned regulatory products in the area of the IRB approach, which is all done within the current framework. The EBA recognises that a coordinated implementation is necessary and expects that a phased-in approach of various regulatory deliverables across specific aspects of the IRB models is possible.

### Recovery and resolution legislation continues to progress

Directive 2014/59/EU (the bank recovery and resolution directive (BRRD)) on crisis prevention, management and resolution assigns to the EBA the task to develop a wide range of binding technical standards, guidelines and reports on key areas of recovery and resolution, with the aim of ensuring effective and consistent procedures across the Union, in particular with respect to cross-border financial institutions. The ultimate objective of this framework is to enhance financial stability, reduce moral hazard, protect depositors and critical financial services, save public money and ensure the smooth functioning of the internal market for financial services. This framework is complemented by the review of the 'deposit guarantee directive', which also assigns rulemaking tasks to the EBA, and by other forthcoming regulatory initiatives on financial institutions other than banks.

During the second half of 2014 and first half of 2015, the EBA finalised regulatory recovery- and resolution-related products that should allow the competent authorities, the SRB and the national resolution authorities to develop their activities in a more harmonised environment within the single market. Greater cooperation and coordination between authorities are also sought to overcome obstacles to the application of resolution actions on a cross-border basis, including third countries.

- The EBA GL on the circumstances under which an institution shall be considered as 'failing or likely to fail', complement the EBA GL on early intervention triggers and the EBA GL on common procedures and methodologies for the SREP. The three GL form a set of supervisory guidance linking ongoing supervision, early intervention and resolution.
- The draft RTS further specifying the criteria to set the minimum requirement for own funds and eligible liabilities (MREL) laid down in the BRRD aims at achieving an appropriate degree of convergence in how these criteria are interpreted and applied across the EU to ensure a level playing field. Institutions with similar risk profiles, resolvability and other characteristics in any Member State should have similar levels of MREL.
- The draft RTS on resolution planning, the draft RTS on the content of 'business reorganisation plans and progress reports' and GL on the assessment of these plans, the draft ITS on procedures, forms and templates for resolution planning and the final GL on measures to reduce or remove impediments to re-

solvability specify contents of resolution plans for EU institutions and develop the elements of the plans. They also set the criteria for the assessment of resolvability, and specify further the minimum criteria for a plan to be approved through resolutions and competent authorities across the EU.

- The draft RTS on notifications and notice of suspension aims at harmonising the process and content of notifications and notices of suspension arising from a determination that a firm is failing or likely to fail.
- The EBA also issued advice to the European Commission on the resolution framework for EU banks, covering the definition of critical functions and core business lines, as well as rules for the exclusion of liabilities from the application of the bail-in tool.
- The EBA's RTS on valuation in recovery and resolution aims to provide a common structure to decisions made by resolution authorities and independent valuers.

In 2015, the EBA will also finalise RTS, ITS or GL on the following BRRD-related topics: independent valuers, valuation of liabilities arising from derivatives, simplified obligations, information provided for the purpose of resolution plans, contractual recognition, treatment of liabilities in bail-in, treatment of shareholders in bail-in, rate of conversion of debt to equity in bail-in, sale of business tool and asset separation tool, necessary services and RTS specifying a minimum set of information on financial contracts that should be contained in the detailed records.



## 2. Asset side

During 2014, EU banks' balance sheet totals moved from deleveraging to stabilisation and even growth, indicating a turnaround in the evolution of total assets, including loans, with the latter growing at a slower pace than the former.

Asset quality stabilised during the year. The ratio of impaired and past due (> 90 days) loans to total loans remained relatively stable at 6.6 % in the second half of 2014. Compared to 2013 it slightly decreased (December 2013 – 6.8 %). Significant differences in asset quality remain depending on the size of the banks as well as their home country.

The stabilisation and slight improvement in asset quality is in line with banks' expectations, expressed in the RAQs, despite concerns about specific exposures, like exposures to emerging markets. Risks that might impact the asset side and asset quality are linked to increasing price volatility, resulting from a decrease in trading market liquidity.

### 2.1 Volume trends

#### Turnaround from deleveraging to stabilisation and even growth

Stabilisation in total asset volumes described in the December 2014 *Risk assessment report* (RAR) turned during the second half of 2014 into growth (despite some volatility during the year). Gross loan volumes also grew, but at a slower pace (2.6 % increase in loan volume versus 5.9 % increase in total as-

sets, year over year, Figure 9). This indicates a turnaround in EU banks' balance sheet evolution from deleveraging to stabilisation and even growth, despite some cases where banks are still reducing their exposures to certain sectors or regions. It is the case of some large European banks that are still materially cutting back their investment banking and proprietary trading activities and/or their global presence.

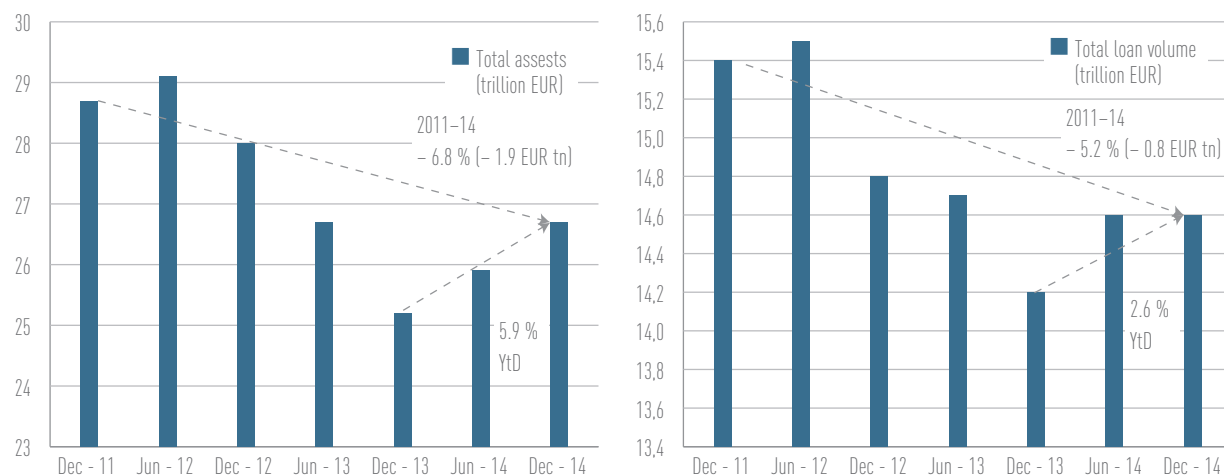
#### De-risking goes in parallel with deleveraging

Between 2011 and 2014, there was an overall reduction not only of EU banks' total assets but also of RWAs that confirms that general deleveraging during the period has been accompanied by de-risking of banks' balance sheets. However, since December 2013, growing balance sheet volumes and growing RWAs indicate a reversal in their former trend. During the time of balance sheet reductions, RWAs showed a more rapid decrease than total assets, whereas during the time of balance sheet growth, RWAs showed a slower increase (in absolute and relative terms). This might indicate that de-risking is going beyond deleveraging and that banks have moved towards less risky assets, but it also might result from some optimisation of banks' risk-weighted asset calculations that need continuous monitoring.

Off-balance sheet items, like financial guarantees or loan commitments, have followed a trend similar to balance sheet totals in terms of deleveraging/growth since Decem-

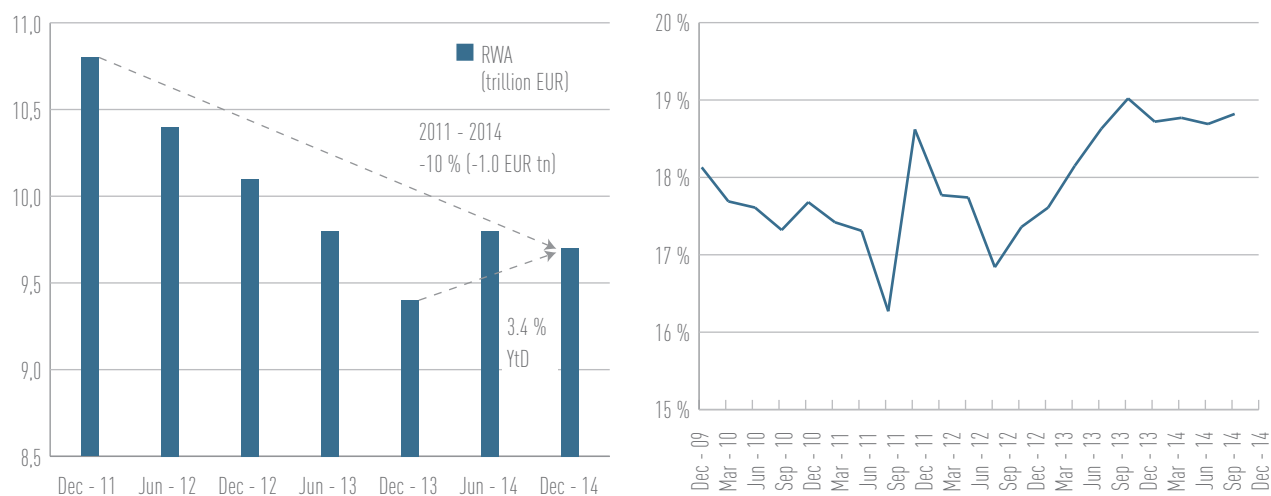
Figure 9: Total asset and loan volumes (trillion EUR)

Source: EBA KRI and EBA calculations.



**Figure 10: Risk-weighted assets (trillion EUR) and ratio of off-balance sheet items to total assets**

Source: EBA KRI and EBA calculations.



### Comparability of risk-weighted assets

The EBA started its work on the comparability of RWAs across EU banks in 2011 as part of its efforts to address possible inconsistencies and to restore confidence in EU banks' capital and internal models. Currently, the analysis is focused on the low default portfolios (LDP, central governments, credit institutions, and large corporations). The main objective is to identify material differences in banks' assessments of risks and RWA outcomes and to understand the main drivers of such differences. Significant differences and divergence may signal that the methodologies used for estimating risk parameters require, in some cases, further analysis and will be considered in EBA's work on the regulatory side. The overall results will also contribute to harmonising supervisory and banks' practices and to enhancing consistency.

During the first half of 2015, the EBA published its final draft RTS and ITS that specify in detail the framework for EU institutions and competent authorities to carry out the annual supervisory benchmarking foreseen by Art. 78 of the CRD. The regular benchmarking exercises will allow an assessment of differences in RWAs across EU institutions and the identification of potential underestimation of capital requirements.

The policy responses that the EBA considers as particularly important for addressing concerns about RWA consistency are the following:

- enhancing disclosure and transparency of RWA-related information;
- supporting competent authorities (CA) in properly implementing the single rule book (these include the important benchmarking work on RWA parameters that supervisors can use to assess model outcomes);
- developing additional guidance that specifically addresses and facilitates consistency in supervisory and banks' practices (e.g. uniform default definitions; treatment of defaulted assets; risk parameters; etc.).

The EBA considers that the understanding, transparency and consistency of RWAs will help to restore market confidence in risk-sensitive measures of capital adequacy. The first benchmarking exercise conducted under the ITS and RTS framework will be based on data referred to Q4/2015 observations. Banks shall report the information by 11 April 2016.

ber 2011 (ratio of off-balance sheet items compared to total assets remains steady during the period, with values oscillating between about 17 % and 19 %, Figure 10).

**Traditional lending is expected to grow, replacing complex business and sovereign exposures that will likely shrink**

The banks' responses to the RAQ show a split picture about future asset growth, with nearly 50 % of them planning an overall increase of their balance sheet volume in the next 12 months. The results from the market analysts confirm such a split between approximately 50 % of respondents who agree with an increase of the balance sheet total compared to about 50 % who disagree (Figure 11).

There is a broad agreement among market analysts that banks will be moving towards plain-vanilla lending in the near future. In parallel, banks would wind down more complex businesses and decrease their sovereign exposures. In this vein, market analysts expect increases in volumes of lending to small and medium-sized enterprises (SMEs) as well as growth of residential mortgage and consumer credit loans (agreement between ca. 50 % and nearly 80 %). On the other side, they are expect-

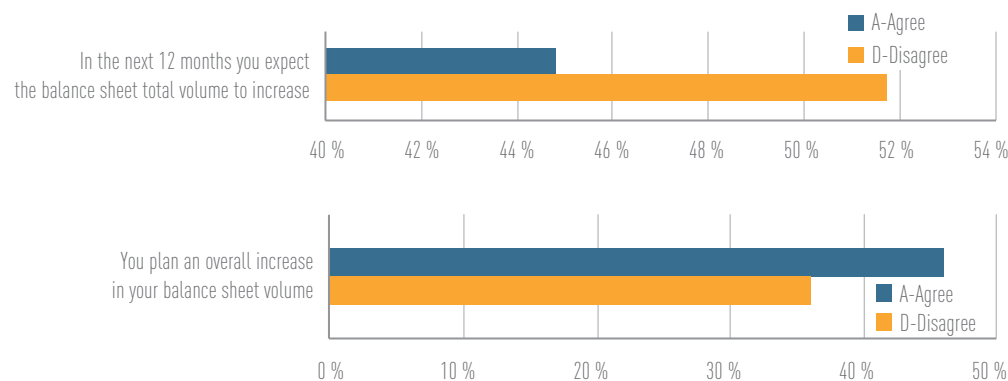
ing volume decreases in trading activities, commercial real estate (CRE) and structured finance exposures (agreement between ca. 40 % and ca. 50 %). Volumes of sovereign exposures and institutions' financing are also expected to decrease according to market analysts' responses to the RAQ (agreement of ca. 50 %; Figure 12).

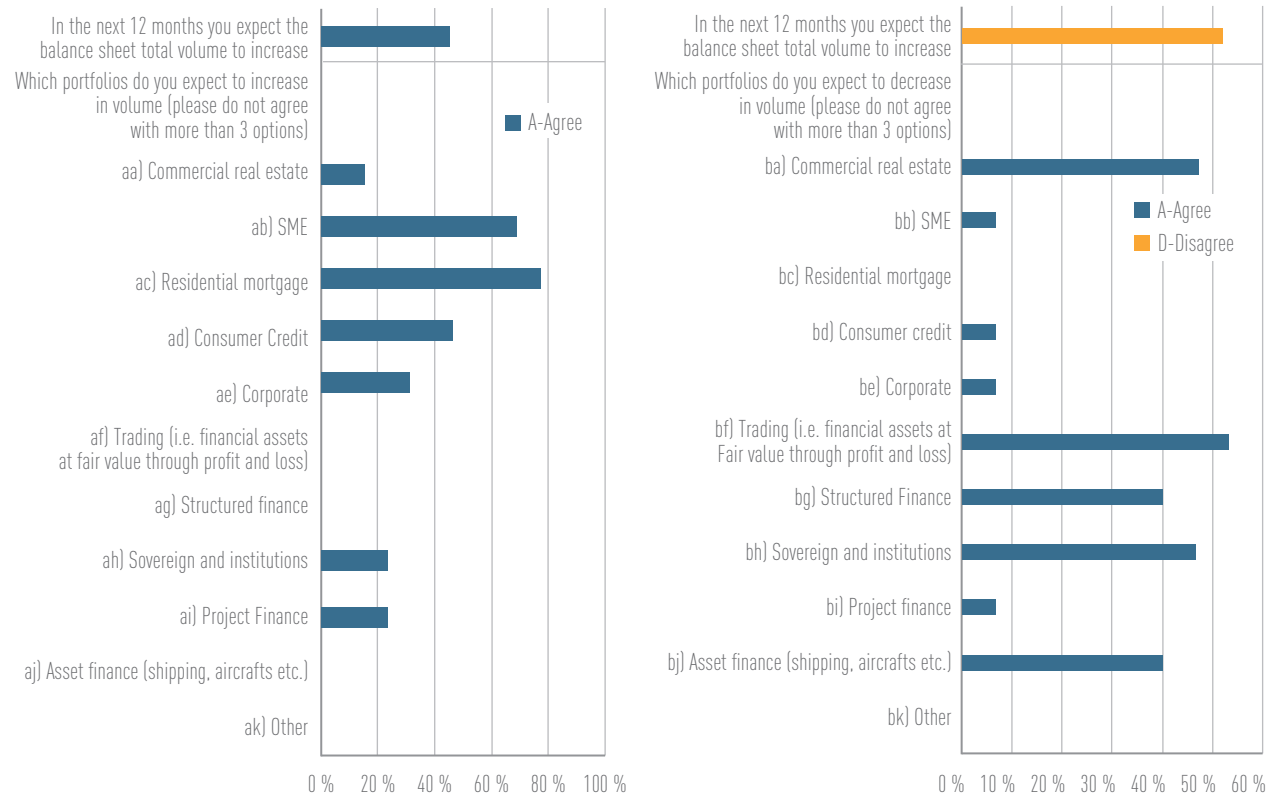
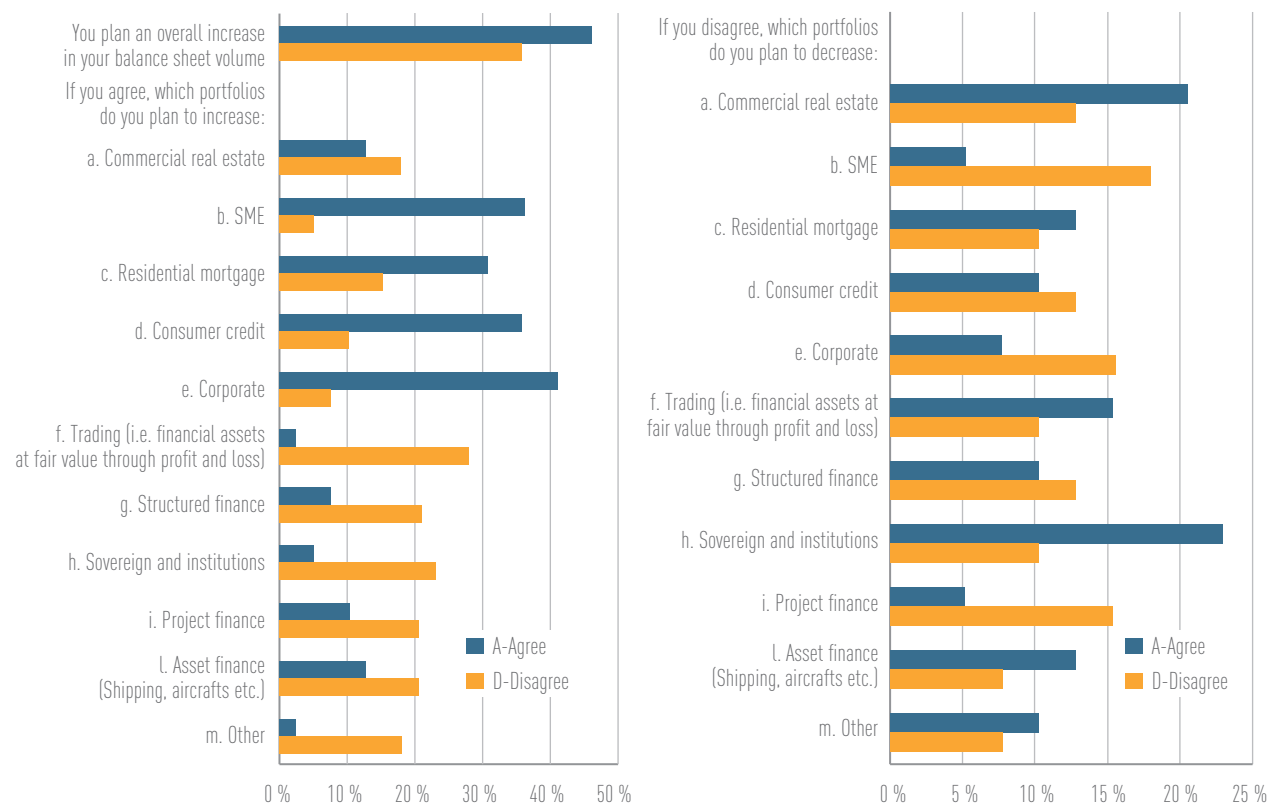
Similar to the analysts' view, there is broad agreement among banks that the trend is towards an increase of classical bank lending instead of complex business or sovereign financing. According to the RAQ results, banks are planning to increase their exposures in SME lending, residential mortgage loans, consumer credit and corporate lending (agreement between 30 % and 40 % each). On the other side, banks are planning to decrease their trading exposures as well as their exposures to CRE and to sovereigns and institutions (agreement between 15 % and 25 % each; for all figures no comparisons available; Figure 13).

Responses to RAQ also indicate a trend towards a reduction of European banks' global footprint. International business, both inside and outside the EU, might undergo material changes going forward. Conversely, banks do not envisage material changes to their domestic business (Figure 14).

**Figure 11: Expected further growth in balance sheet total**

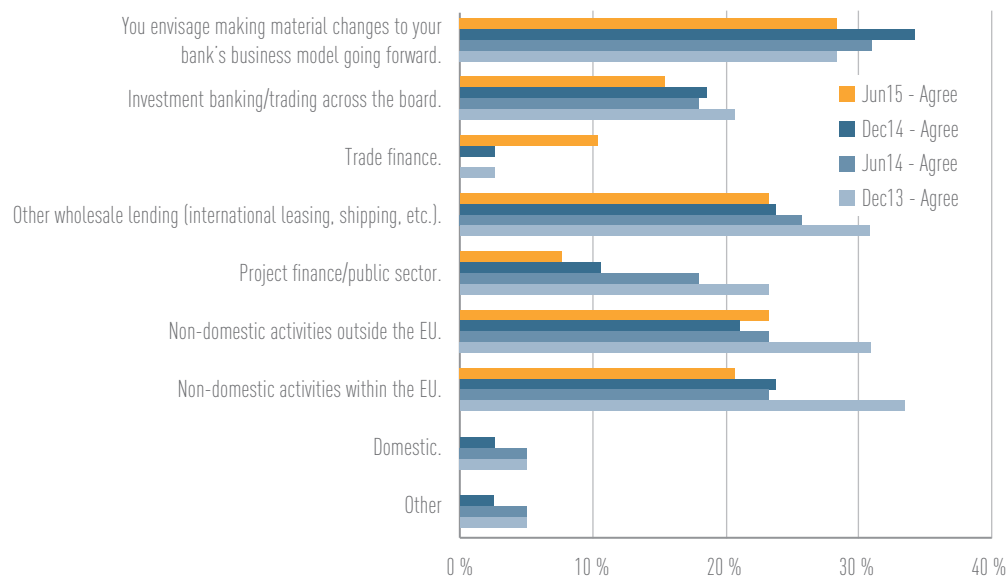
*Source: EBA RAQ for market analysts and for banks (no historical comparison available).*



**Figure 12: Portfolios considered for growth and for deleverage***Source: EBA RAQ for market analysts (no historical comparison available).***Figure 13: Portfolios considered for growth and for deleverage***Source: EBA RAQ for banks (no historical comparison available).*

**Figure 14: Business lines to be scaled down**

Source: EBA RAQ for banks (no historical comparison available).



### Regulation as a driver for deleverage and de-risking

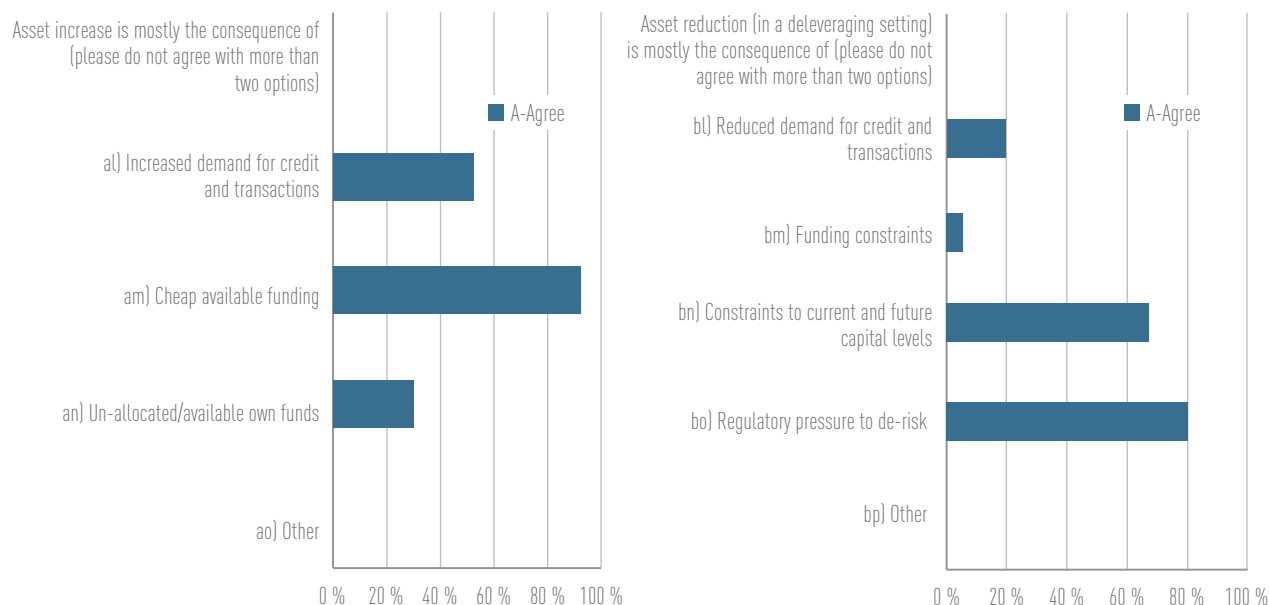
Constraints due to current or future capital levels and regulatory pressure to de-risk are considered as the main drivers of asset reduction by market analysts in the RAQ (about 70 % and 80 % agreement respectively, Figure 15). Market analysts also consider that the main drivers leading to asset growth, rather focused on plain-vanilla business, are loan demand and cheap available funding. These results provide

evidence that regulation is contributing to a shift from the more complex to plain-vanilla business.

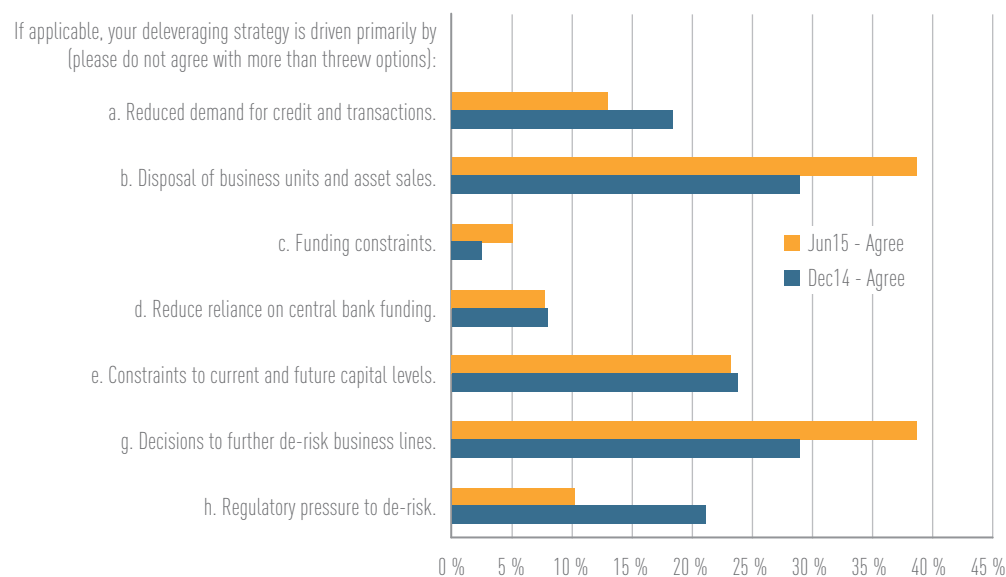
Banks also claim that constraints to current and future capital levels are one of the main reasons for deleverage, together with strategies to de-risk business lines (Figure 16). Strategies to de-risk business lines have their origin in the financial crisis that proved that weak business models and weak business lines were most exposed to increased costs of risks.

**Figure 15: Reasons for asset growth and deleverage**

Source: EBA RAQ for market analysts (no historical comparison available).



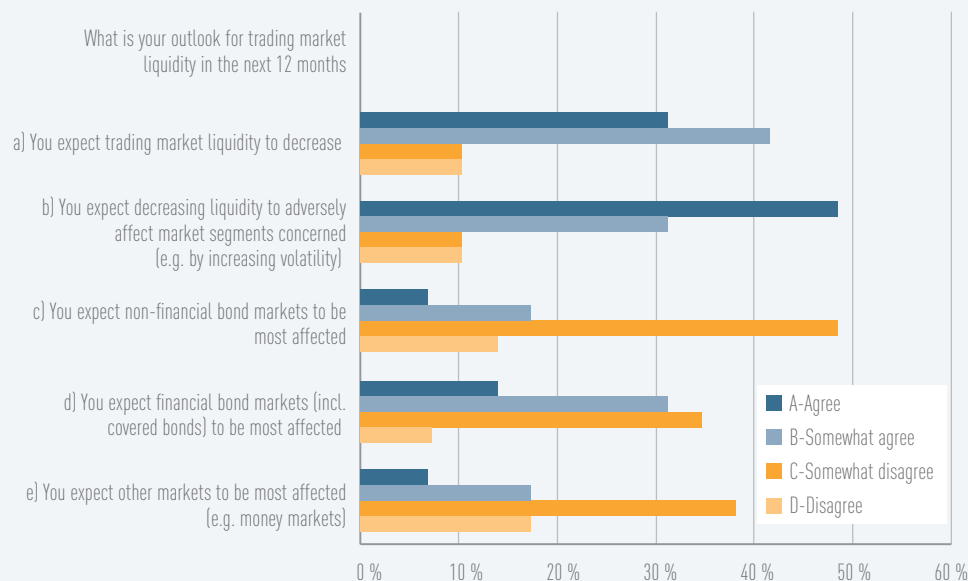


**Figure 16: Main drivers for deleveraging***Source: EBA RAQ for banks.*

#### Growing vulnerability from a potential decline in trading market liquidity

There is a growing concern about declining trading market liquidity. Such a decline would be strongly linked with increasing price volatility. Even though no significant such incidence has occurred during the second half of 2014 and first quarter 2015, a decrease in trading market liquidity imposes a significant systemic risk.

There does not seem to be one unique reason for the decrease in trading market liquidity, but most probably it is influenced by both the market and regulatory environment. Reasons include the high cost of market making in a low yield environment, the general trend to deleverage, tighter bank internal risk limits and regulatory requirements (including RWA requirements, leverage ratio, additional MREL and TLAC linked requirements and structural reforms). Risks and vulnerabilities from a potential decrease in trading market liquidity go beyond banks, having an impact

**Figure 17: Trading market liquidity***Source: EBA RAQ for market analysts.*

on asset managers or issuers themselves (which would include banks again, but also corporate or sovereign issuers).

RAQ results confirm these views. Slightly more than 70 % of the market analysts 'agree' or 'somewhat agree' in the RAQ with an expected decrease in trading market liquidity (no comparison with former periods available). The highest agreement ('agree'

or 'somewhat agree') in respect of potentially affected markets is with the financial bond markets. Nearly 50 % of the market analysts 'agree' and 'somewhat agree' with the assumption that financial bond markets will be most affected, whereas 25 % 'agree' and 'somewhat agree' that non-financial or other markets (e.g. money markets), respectively, will be most affected (Figure 17).

## 2.2 Asset quality

Since 2012, the ratio of impaired financial assets to total assets has remained relatively stable, at 2 %. This was influenced by a decreasing impairment ratio for debt instruments since 2012, on the one hand, and a — first, increasing and, later on, slightly decreasing — ratio of impaired loans and loans past due (> 90 days) to total loans, on the other hand (Figure 18).

Asset quality of loan's portfolio has slightly improved in 2014 and should improve further going forward

During the second half of 2014, the ratio of impaired and past due (> 90 days) loans to total loans remained relatively stable at 6.6 %, improving slightly compared to 2013 (6.8 %). Despite the slight improvement observed during 2014, the ratio is still far from the — already high — December 2009 levels (5.1 %). The interquartile range of the ratio remained relatively stable during 2014. However, banks above the 95th percentile showed a ratio above 40 % (Figure 19).

During the third quarter of 2014, impaired loans experienced a sharp increase, probably

motivated by the results of the asset quality review (AQR) process.

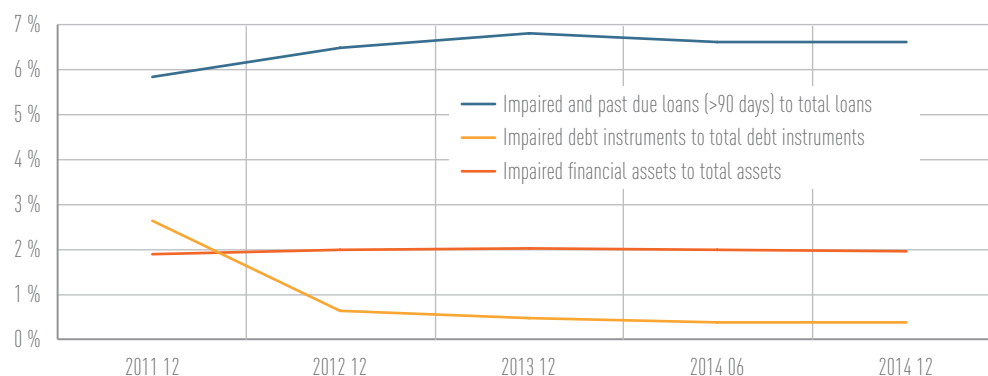
Going forward, the expectations are that asset quality will improve. New business replacing legacy assets should improve banks' average asset quality, reducing impairment ratios and the need for provisioning. Responses to RAQ from market participants are in line with these expectations. Market analysts expect that asset quality will stabilise and improve in the next 12 months (almost 90 % of respondents) (Figure 20). Banks' answers to the RAQ confirm these expectations.

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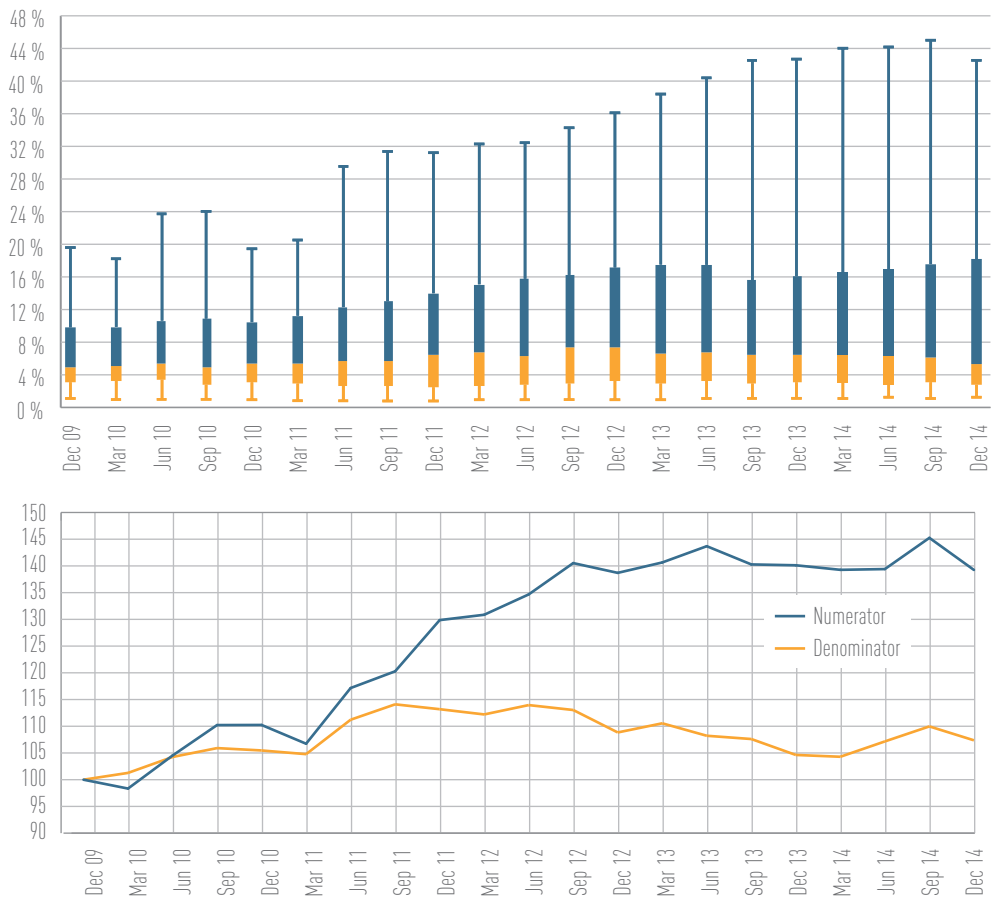
Despite the improving impairment ratios and enhanced expectations on asset quality, the results of the supervisory review and evaluation process (SREP) of 23 closely monitored banking groups in the second half of 2014 have proven that asset quality remains a concern. In the SREP, asset quality, together with operational risks, was considered as a key risk.

**Figure 18:** Ratios of impaired and past due assets to total assets, loans and debt instruments (weighted average)

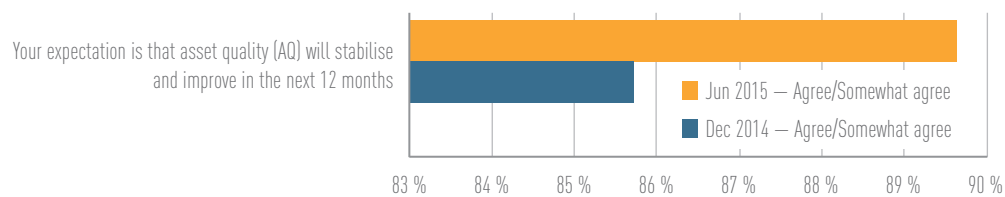
Source: EBA KRI.



**Figure 19:** Impaired loans and past due (> 90 days) loans to total loans — 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)  
Source: EBA KRI.



**Figure 20:** Expected evolution of asset quality  
Source: EBA RAQ for market analysts.



### Main risks identified from the SREP: 2014 joint risk assessments and joint decisions

The SREP represents one of the cornerstones of the regulatory and supervisory framework. By employing the SREP, the supervisory authorities across Europe evaluate the risks to which individual credit institutions and their groups are or might be exposed to, and, in a wider sense, assess the risks that credit institutions pose to financial systems they operate in. The latest SREPs for the largest European groups carried out throughout 2014 provide profound insights into which risks are the main concern of supervisors.

Based on prevailing scores assigned to individual risk categories, the risk identified in SREPs can be grouped into three categories:

- risks viewed as medium-high;
- risks viewed as medium-low to medium-high;
- risks viewed as medium-low.

#### Risk viewed as medium-high

Credit and counterparty risk and operational risk are considered the most important risks. Credit and counterparty risk remains a concern given the high level of non-performing loans (NPL) and also the pure fact that it makes up the major part of the total risk exposures amount (REA) in all groups.

On the side of operational risk, the supervisory assessment revealed high concerns about the overall quality and robustness of operational risk (OpR) management frameworks, deficiencies in IT infrastructure, litigation costs, the complex nature of groups, and restructuring activities. The assessments carried out by the national authorities showed that the overall quality of the OpR management framework and deficiencies in IT systems are viewed as the weakest parts. Combined with recent one-off issues (low-frequency, high-impact events such as litigation costs including regulatory fines), operational risk attracts high supervisory attention.

### Risks viewed as medium-low to medium-high

Risks stemming from business models (viability and sustainability) and internal governance arrangements are seen as medium-low to medium-high. As far as business models are concerned, the national supervisory authorities see significant risks in the execution of new strategies in difficult economic environments and questionable viability of subsidiaries in countries seriously hit by the economic difficulties, on the one hand. The low interest rate environment and low demand for credit products are, in particular, challenging in this respect. On the other hand, supervisors acknowledge a progress in the adaptation to the new economic and regulatory environment.

Risks in internal governance arrangements include a wide variety of topics the national supervisory authorities find important to be addressed — weaknesses in control and compliance frameworks, risks emanating from changes in organisational structures and new strategic plans and lacking adjustments in governance frameworks. Many issues arise from new strategic plans and restructuring activities.

#### Risks viewed as medium-low

Risks viewed as medium-low include risks to liquidity, interest rate risk in the banking book (IRRBB) and market risk. On the whole, risks to liquidity were predominantly assessed as medium-low risks on account of less stressed market conditions, solid liquidity positions of the groups, compliance with liquidity ratios and increasingly stable long-term funding sources.

Most supervisory authorities viewed IRRBB as medium-low risk due to the low risk appetite and low utilisation of risk limits. On the other hand, some authorities stressed important points for attention including heterogeneous methods for risk measurement within groups and the uncertain impact of structural changes in balance sheets on IRRBB positions.

With some exceptions, market risk was assessed as medium-low taking into account the facts that exposures to market risk are limited and also the utilisation of risk limits is low.

### Material differences in asset quality between countries and sizes of banks remain

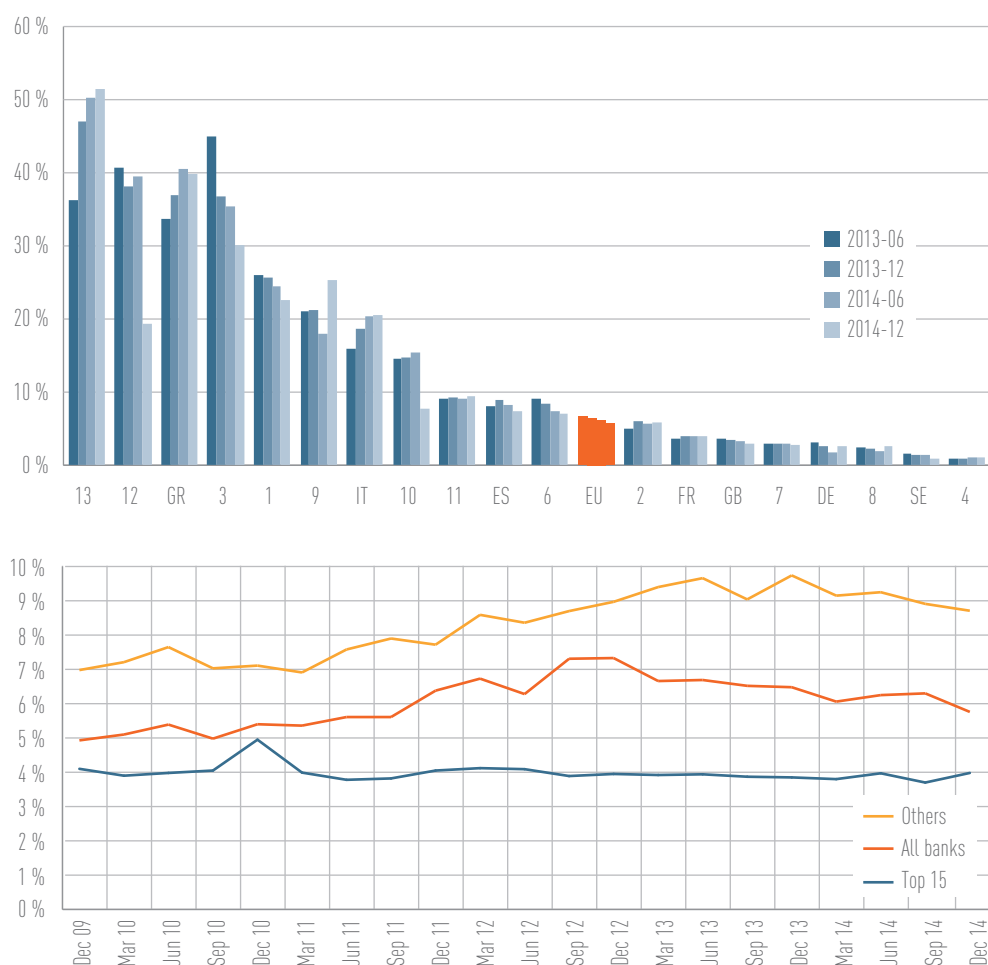
The quality of assets is uneven across countries. Dispersion remains wide, with banks from financially stressed countries reporting the highest ratios. The ratio for the largest banks remains significantly below the one for the other banks (Figure 21).

Deleveraging via asset / portfolio sales can contribute to improve asset quality. Material volumes of loan portfolio transactions took place during the second half of 2014 again, assisted by the search for yield. However, asset disposal has different relevance across the countries.

The country breakdown of asset quality data (Figure 21) shows that the level of impairments depends not only on the level of financial distress endured by the country but also on the degree of progress in the restructuring of legacy asset portfolios. Impairment ratios keep deteriorating and are higher in those countries in which loan portfolio transactions and other measures to address problem loans have not yet gained the momentum needed to contribute to an improvement in asset quality.

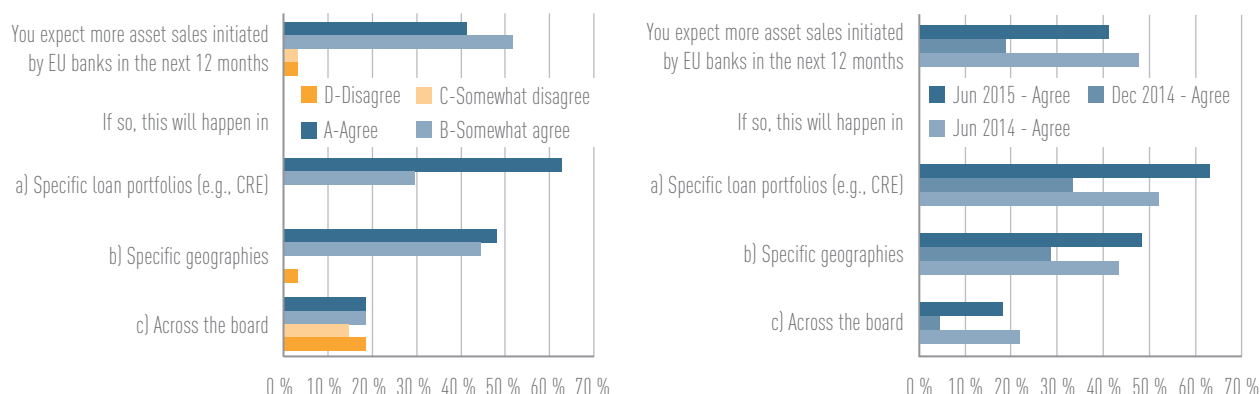
According to the RAQ, market analysts' expect an increase in asset sales in the next 12 months (from about 20 % agreement in December last year to about 40 % in the latest RAQ, Figure 22). Banks also consider disposals of business units or asset sales as part of their strategy to deleverage (agreement ca. 40 %, Figure 16).

**Figure 21: Impaired loans and past due (> 90 days) loans to total loans — medians by country and by size class; banks by size class according to their average total assets**  
Source: EBA KRI.



**Figure 22: Expectations in respect of asset sales initiated by EU banks**

Source: EBA RAQ for market analysts.



### Non-performing loans based on the EBA definition

The EBA introduced harmonised definitions of non-performing (NPE) and forborne (FBE) exposures in 2014. Banks reported NPE (covering loans and debt securities except held for trading, plus off-balance sheet commitments) based on this newly introduced definition for the first time in September 2014. This analysis provides the first publicly available overview of the level of NPE and FBE across the EU, aggregating data from 160 banks <sup>(9)</sup>. It focuses on loans and advances both at amortised cost and fair value (in the following non-performing loans).

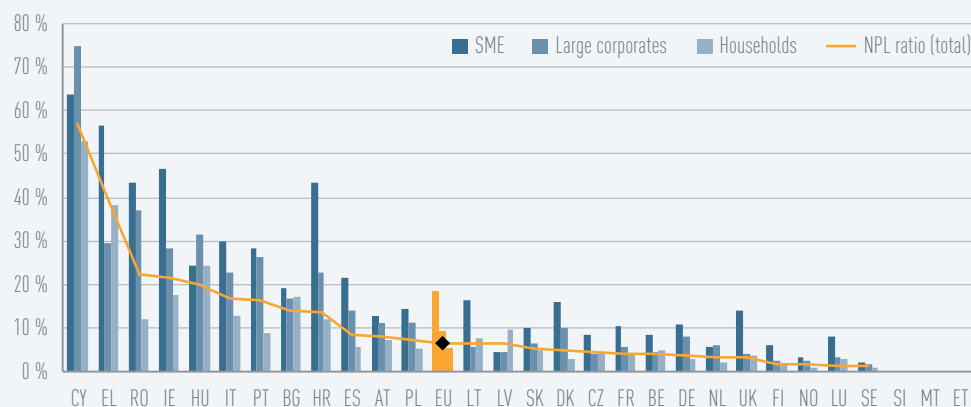
The reporting is now based on the fully implemented definition of NPE and it is not fully comparable with the KRI that shows the ratio of impaired loans and past due (> 90 days) loans to total loans. However, the two parameters, in general, show similar trends.

The EU weighted average NPL ratio was 6.5 % in December 2014 after a small decrease from September (6.9 %) with a similar trend for most countries. Financially stressed countries, in general, show the highest NPL ratios. This results from the general economic crises from 2008 onward, but might also be directly influenced by differences in legal systems of the countries (e.g. bankruptcy law and its influence on time to recovery for NPLs or on the possibility to sell NPLs or write them off after collateral repossession, Figure 23).

The non-financial corporates' NPL ratio was 11.5 % and the households' one was 5.3 %. Household loans show for the EU average as well as for most countries a lower NPL ratio than non-financial corporates. Restructuring (including the time until final write-off after restructuring) or recovery might be faster, compared to SME loans, for

**Figure 23: Non-performing loans by sector (Q4/2014)**

Source: EBA Supervisory Reporting.



<sup>(9)</sup> The data for figures of this textbox are based on the extended Supervisory Reporting, reported the first time in the second half of 2014. See also respective description in Chapter 1 — Introduction about the new ITS on data reporting.

example. Of course, there might be several more reasons that explain such trends.

Within non-financial corporates, large corporates' NPL ratio is 9.3 % and SMEs' NPL ratio is 18.6 %. The high NPL ratio for SMEs might indicate that these loans suffer more in times of a crisis and restructuring may be more challenging and prolonged (e.g. in the case where a small business experiences financial difficulty, it may be more difficult to restructure it). Accordingly, this might also be a factor why SME loans are less often considered in transactions to sell NPLs.

The distribution of non-financial corporates' loan portfolios across sectors (by nomenclature of economic activities (NACE) codes) shows that real estate, manufacturing, wholesale and retail trade as well construction are the most material ones in terms of total exposure volumes to non-financial corporates (Figure 24).

Considering the four largest sectors, real-estate activities, manufacturing and wholesale, and retail trade all have an aggregated NPL ratio slightly above 10 %. However, construction activities cover only 8 % of total loans to non-financial corporations but have an NPL ratio of 30.5 %, counting for 20 % of the total amount of NPLs of non-financial corporations' portfolios.

A combined analysis by sector and by geography shows that in all sectors, NPLs are particularly high for counterparties

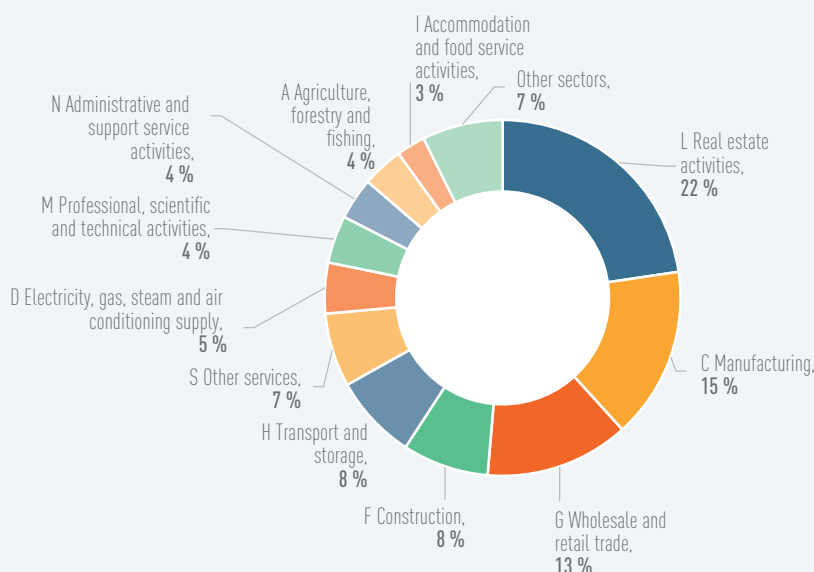
located in jurisdictions having experienced or experiencing financial and/or economic stress — the highest NPL ratios are to be found for these counterparties regardless of the portfolio considered.

The analysis shows that, from the perspective of EU banks, jurisdictions may be affected differently by the issue of non-performance depending on the sector considered. For the manufacturing and wholesale and retail activities sectors, exposures and respective NPLs borne by EU banks seem to be more widely spread throughout countries, whereas for the construction sector they are more concentrated to a smaller number of countries. Real estate activities as the largest sector have higher volumes, more diversity in counterparty countries and, on an aggregated basis, much lower NPLs than construction activities, even though in some financially distressed countries the level of NPLs is similar between the real estate activities and the construction sector (Figure 25).

In general, the analysis confirms that different economic conditions in specific markets lead to banks in different jurisdictions being variably impacted by NPLs, and NPLs being concentrated in different sectors in different jurisdictions (despite some observable concentration on real estate and construction activities). Regardless of the sector considered, NPLs seem to affect more exposures to SMEs than other types of exposures. However, further analysis is needed to identify in more detail the reason why loans to

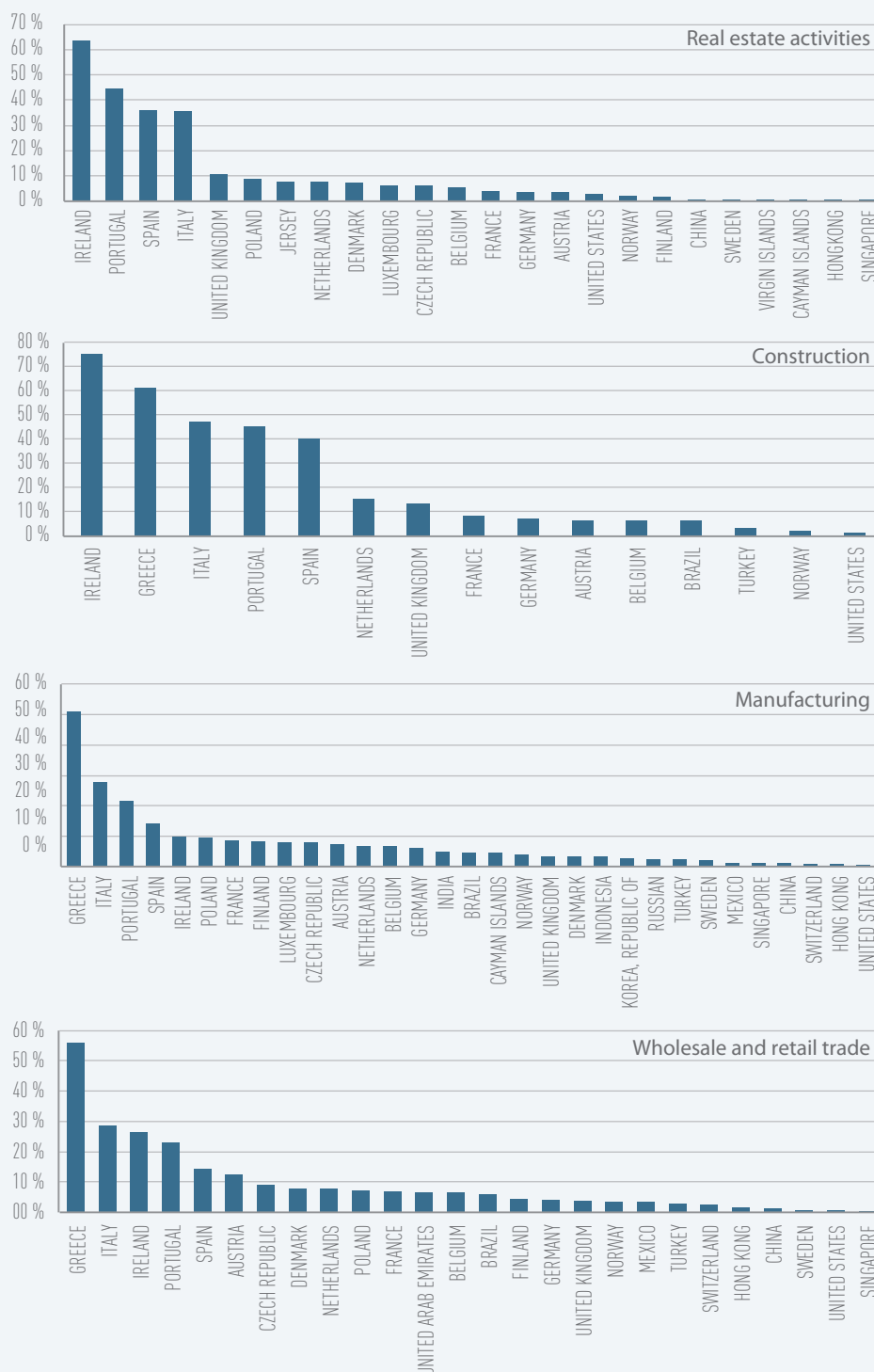
**Figure 24:** Share of loans to business sectors of non-financial corporates (Q4/2014)

Source: EBA Supervisory Reporting.



**Figure 25:** Share of non-performing loans of EU banks' exposures by country of counterparty for the most exposed sectors as identified above (countries to which EU banks' total exposures larger than 5 billion EUR) (Q4/2014)

Source: EBA Supervisory Reporting.



SMEs show the highest NPL ratios. Meanwhile, this finding shows that resolution strategies — including restructuring with appropriate recognition of the riskiness of

restructured exposures — for NPEs should be more focused on the SMEs segment, and on exposures to the real estate and construction sectors.



### Ongoing growing divergence in coverage ratios

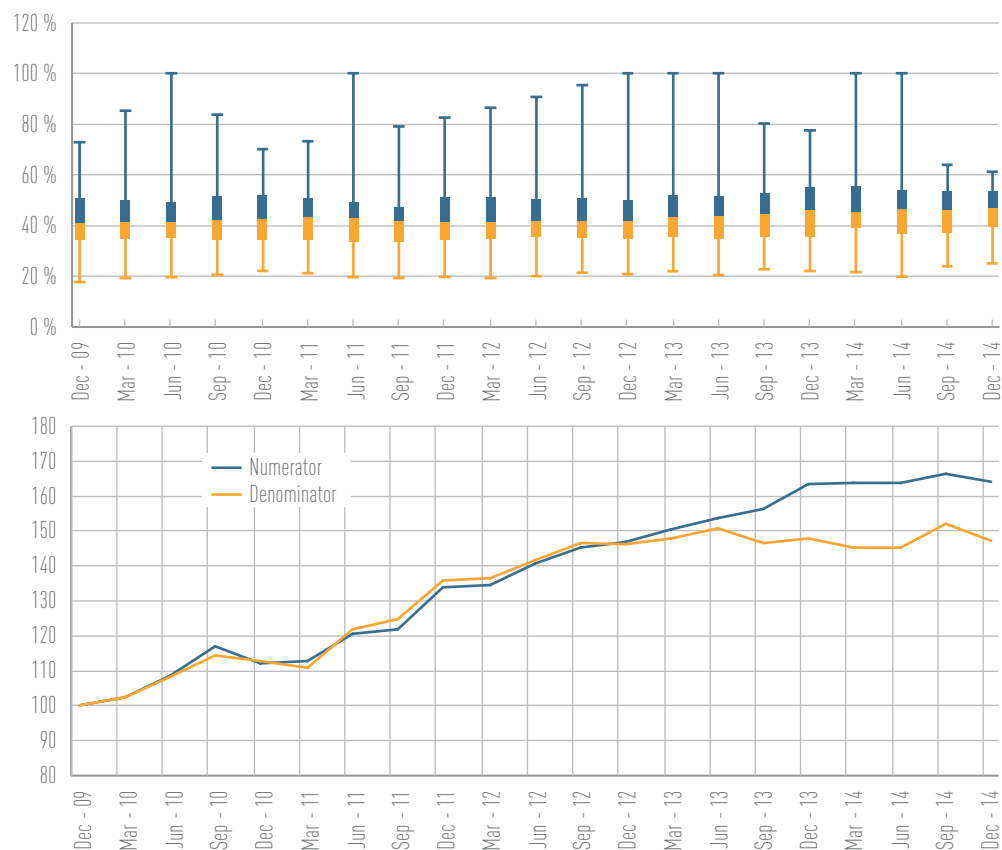
Coverage ratios have remained stable since December 2013 (December 2013 – 46.0 %, December 2014 – 46.4 %) with the numerator and denominator moving in parallel. The interquartile range was unchanged last year (Figure 26).

Material differences remain among countries, with country coverage ratios ranging between 30 % and up to 70 %. For several countries the coverage ratio increased again, for some of them even significantly. As it could mean a correct provisioning strategy,

a high coverage ratio might indicate poor collateral values. An increase of the ratio would in such a case result from declining collateral values. However, a high coverage ratio might also result from conservative provisioning. Especially if prices for loans in NPL transactions show significant differences to loans' net book values, an increase in loan loss provisioning (and as such in coverage ratio) might motivate banks to sell loans. In contrast, low coverage ratios might indicate collateral of high quality. Decreasing coverage ratios in such a case would indicate an increase of their price. The gap in terms of coverage ratios between banks of different size class has narrowed (Figure 27).

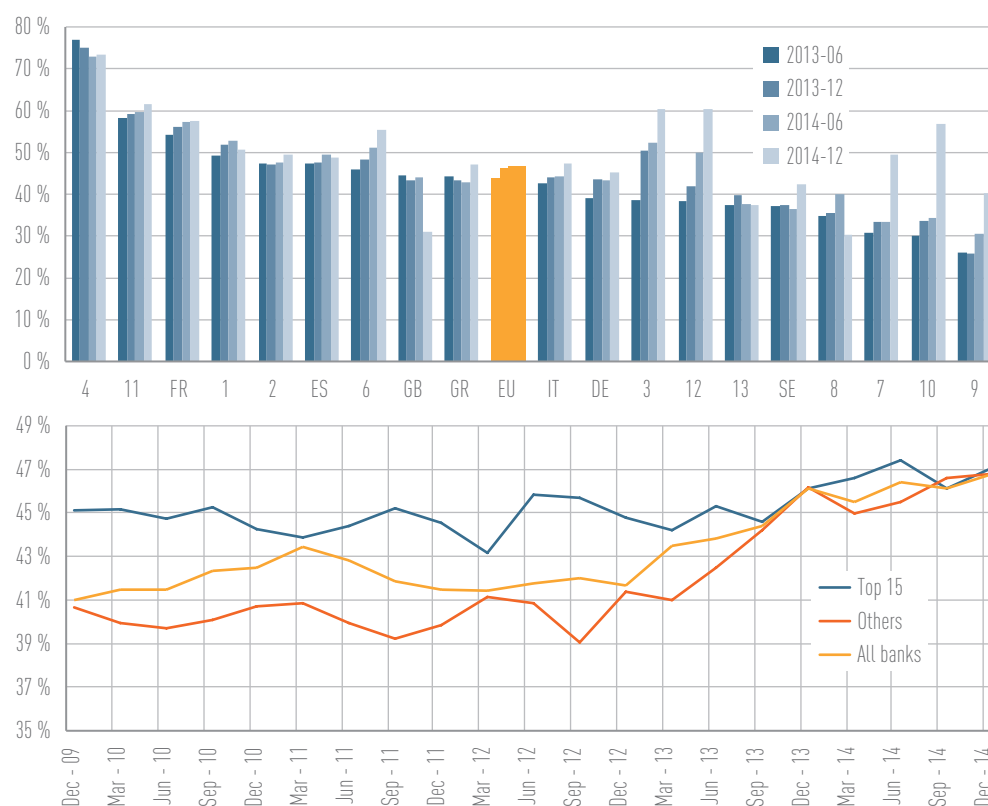
**Figure 26:** Coverage ratio — specific allowances for loans to total impaired gross loans — 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)

Source: EBA KRI.



**Figure 27: Coverage ratio — specific allowances for loans to total gross loans — country dispersion — medians by country and by size class; banks by size class according to their average total assets**

Source: EBA KRI.



### Analysis of forborne loans

Besides the detailed reporting of non-performing exposures, banks also started reporting FBE in September 2014. FBE covers loans and debt securities except held for trading, plus off-balance sheet commitments. The following analysis is based on these newly reported data as of Q4/2014, covering 160 banks <sup>(10)</sup>. This analysis focuses on loans and advances both at amortised cost and fair value.

The EU weighted average forborne loan ratio (FBL) was 3.9 % in December 2014, with forbearance measures consisting mainly (73 %) in modifications of the terms and conditions of the contract (or, in case these modifications were combined with other measures, they had the most impact on cash flows). Data show that forbearance was mostly used in jurisdictions having experienced financial stress and/or the most

severe consequences of the financial crisis on its real economy (in jurisdictions with higher levels of NPLs, see below). These jurisdictions have FBL ratios significantly higher than the EU average.

Forbearance regards mainly loans to non-financial corporations and household sectors with very limited measures on financial and public sectors (Figure 28).

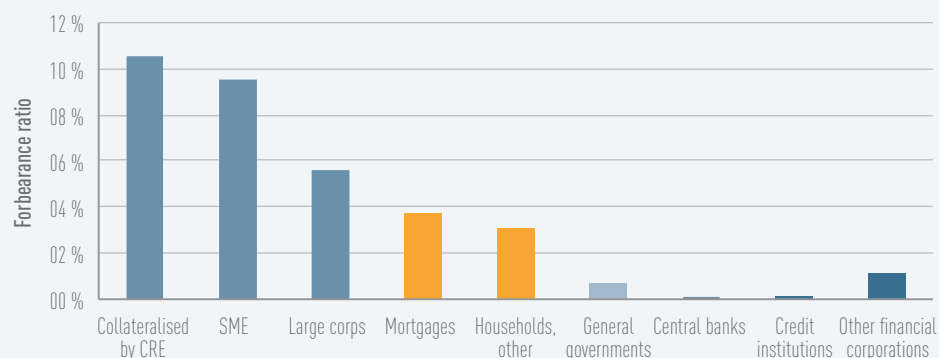
For the EU, 40 % of forborne loans are classified as performing and 60 % are classified as non-performing. The largest proportion of forborne exposures are classified as non-performing exposures in nearly all EU jurisdictions.

Banks in some jurisdictions show a higher tendency than the EU average to consider their forborne loans as performing. It might indicate that in these countries forbearance is considered at an early stage at which loans are 'not yet' non-performing. It might also indicate early restructuring efforts of the banks to address pre-emptively financial difficulties of their customers. Other less positive factors might explain the high rate of performing forborne

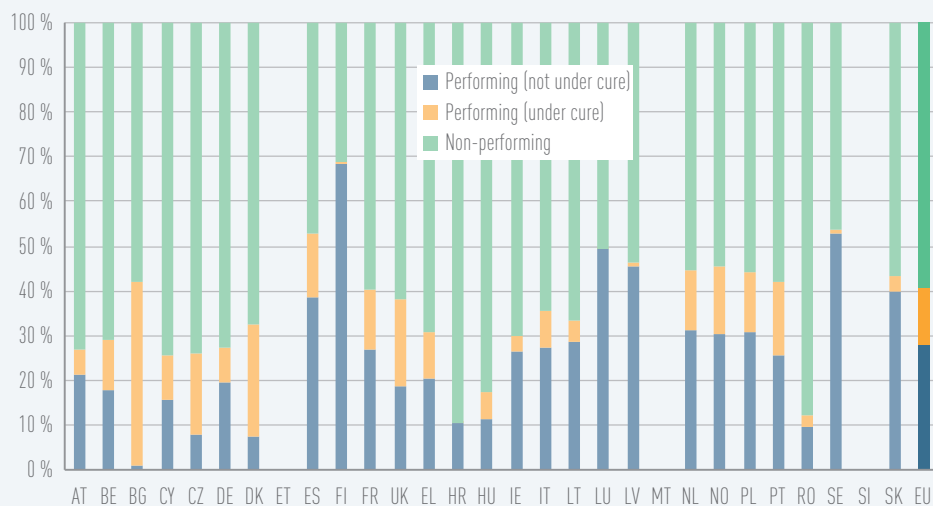
<sup>(10)</sup> The data for figures of this textbox are based on the extended Supervisory Reporting, reported the first time in the second half of 2014. See also respective description in Chapter 1 — Introduction about the new ITS on data reporting.

**Figure 28:** Forbearance ratios for different product and client segments (Q4/2014)

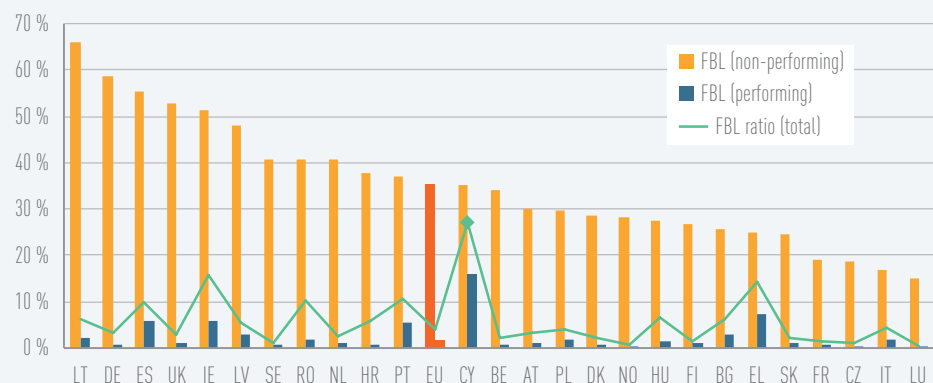
Source: EBA Supervisory Reporting.

**Figure 29:** Share of forborne loans (FBL) classified as performing and non-performing by country (Q4/2014)

Source: EBA Supervisory Reporting.

**Figure 30:** Share of forborne performing loans of total performing loans, share of forborne NPLs of total NPLs and total FBL ratio (share of forborne loans to the total of performing and non-performing loans), by country (Q4/2014)

Source: EBA Supervisory Reporting.



exposures, such as a more progressive approach in reclassifying forborne loans from non-performing to performing and a less conservative assessment of the incidence of restructuring on the payment

abilities of the debtor. In addition, pre-emptive use of forbearance might also indicate that there is a certain delaying of marking certain groups of loans as non-performing (Figure 29).

The FBL ratio is, for the EU, on average, and on the level of individual countries, by far higher for NPLs (FBL ratio of 34.5 %) than for performing exposures (FBL ratio of 1.7 %). There are significant differences between the jurisdictions in the forbearance ratio of the non-performing portfolio and the performing portfolio. Forborne loans as a share of performing loans are higher for financially stressed countries than for other countries (Figure 30). This may indicate that loans in these jurisdictions might owe their performing status to forbearance measures. By contrast, jurisdictions with a high forbearance ratio and a high proportion of forborne loans within their NPLs may prove that forbearance is an early warning for NPL.

A country-by-country analysis confirms a high correlation between the NPL and forbearance ratios. An increasing NPL ratio goes, in general, in parallel with an increasing forbearance ratio (Figure 31). When focusing on forbearance of non-performing exposures, it can be observed that several countries with low overall NPL

ratios show high forbearance ratios of non-performing loans (Figure 32).

The relationship of the NPL and the forbearance ratios is complex as respective classification practices of banks may have a significant impact on how to interpret data. A combination of high NPL ratios with low forbearance ratios for NPL could indicate that the use of restructuring for NPL faces challenges or various impediments. If this situation occurs when the total forbearance ratio is high, this could show a trend of banks to forbear loans before they reach the NPL status (even though granting forbearance may make the loan an NPL), instead of waiting for the loan to be an NPL.

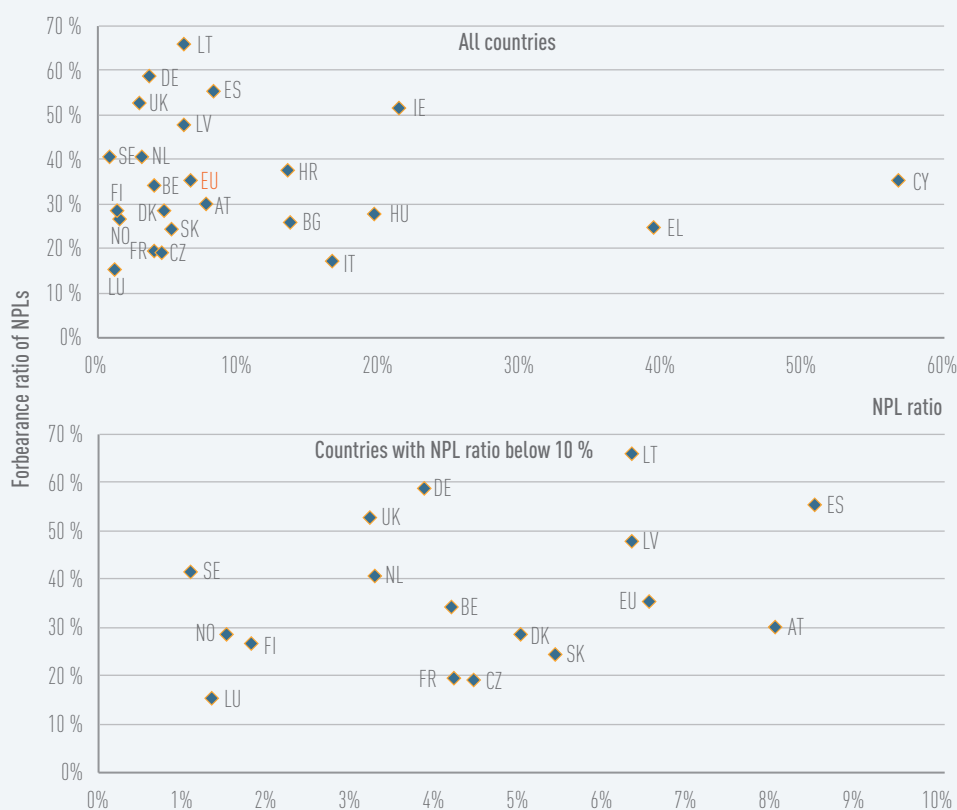
It therefore stresses the importance for supervisors of assessing the forbearance practices of banks to make sure that forbearance measures are always aimed at improving the situation of a borrower rather than purely avoiding the recognition of the NPL status. It should also be ensured that the riskiness of forborne exposures is appropriately reflected in their valuation, impairment and/or risk-weighting.

**Figure 31: Correlation between the non-performing loans ratio and total forbearance ratio, country-by-country analysis (Q4/2014)**  
Source: EBA Supervisory Reporting.



Figure 32: Correlation between the non-performing ratio and the forbearance ratio of non-performing loans, country-by-country analysis (Q4/2014)

Source: EBA Supervisory Reporting.



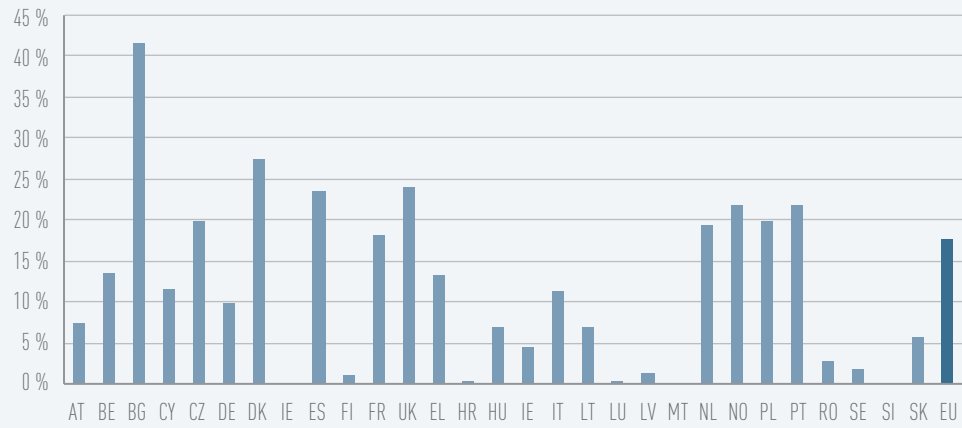
An important issue of the granting of forbearance is indeed whether these measures suffice to address the financial difficulties of the debtor. If so, forbearance can be considered as successful. If not, forbearance would have perhaps provided short-term relief to a borrower, but would have not changed fundamentally its situation. The share of successful forbearance at a given point of time can be approximated by looking at the amount of forbore exposures that have been reclassified from the non-performing to the performing category (described as loans under probation) and by computing a respective ratio (reclassified forbore loans/reclassified forbore loans plus non-performing forbore loans, Figure 33).

On average, the ratio of loans under probation is about 18 %, and several countries show a ratio close to or slightly higher than 15 %. This might indicate that forbearance measures are taken for loans which are expected to recover and to tackle temporary financial difficulties of debtors. The different ratios of loans under probation might also be explained by different practices of

reclassifications of forbore loans from non-performing to performing. Reclassification practices depend on the timing (e.g. before or after default) or the types of forbearance measures (e.g. payment delay vs. write-off). However, further analysis of forbore loans shows significant variation between countries on the ratio. This figure has to be taken with caution at this point in time. Indeed, an accurate ratio of loans under probation would consider the reclassified loans to the forbore loans by date of forbearance measures (for instance, all reclassified forbore loans that were forbore in 2008 compared to the amount of forbore loans classified as NPL in 2008).

In addition, some countries report hardly any loans under probation while in others a material share of their performing forbore loans has been reclassified from the non-performing category (Figure 33). As explained, this difference in practices regarding the classification of forbore exposures as performing may proceed from positive and less positive reasons, including lack of available data at this stage.

**Figure 33:** Ratio of forborne loans under probation (a loan is considered under probation when it is reclassified from the non-performing category to the performing category) to the sum of loans under probation and NPLs with forbearance measures, by country (Q4/2014)  
*Source: EBA Supervisory Reporting.*



### 3. Liability side

#### Benign funding market conditions for banks

Bank funding markets' sentiment, in general, has been benign since the publication of the December 2014 RAR. As in the first half of last year, there was no real shortage of market funding. Cumulative issuance volumes for secured and unsecured instruments in 2014 were higher than in 2013. There was also a significant issuance volume of subordinated debt instruments (AT1 and Tier2). Secondary market conditions were also benign during most of the period considered, although trading market volumes were low at times.

The first quarter of 2015 was, in particular, positively influenced by the start of the ECB's sovereign bond purchase programme and a very low interest rate environment. Positive economic indicators and an improving economic outlook, in general outweighing concerns about coherence in the euro area, further contributed to benign market funding conditions. Deposit bases, in general, increased in volumes, supporting the overall positive evolution of funding.

The figures on balance sheet funding instruments support this view. The share of bonds and debt certificates as well as of client deposits in the overall funding mix increased during 2014. Per year-end 2014, nearly 50 % of the funding mix was made up of customer deposits, followed by deposits from credit institutions, followed by deposits from credit institutions, followed by deposits from credit institutions. Market financing through bonds and debt certificates represent about 21 % of the funding mix (Figure 34).

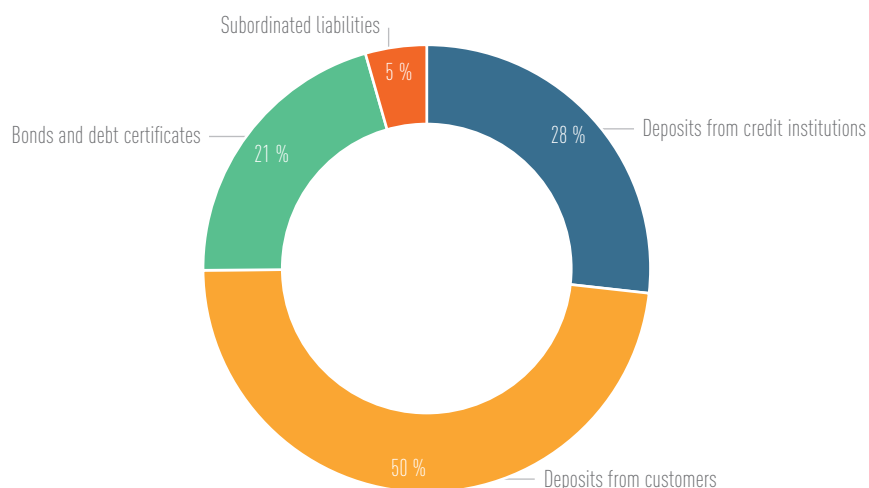
The demand side was positively influenced by investors in search of yield, especially since the announcement of the QE programme. Following the trend of the first half of 2014, spreads, on average, slightly decreased for secured as well as for unsecured euro-denominated funding instruments during the second half of the year. They showed some volatility in between, for example, at times of intensified public discussions about euro area coherence. Subordinated debt instruments displayed higher volatility than senior debt instruments. Deposit rates were at relatively low levels, too. In a few instances they even turned negative for certain groups of deposit clients. Negative interest rates could also be seen for Eonia rates and for Euribor benchmark rates for certain terms.

The total funding volume through the ECB's long-term refinancing operations (LTRO) remained stable in the second half of 2014 and the first quarter of 2015. The evolution within the period showed volatility at times, which was mainly driven by maturing LTRO tranches and new allocations of targeted LTRO (TLTRO).

Similarly to the first half of 2014, monetary policy measures and central banks' engagement in unconventional policies to support macroeconomic stability and bank funding materially contributed to a positive market sentiment. Regardless of benign funding conditions in general, financial markets remain in an overall fragile state. Vulnerabilities from funding in foreign currencies,

Figure 34: Funding mix (weighted average) per year end 2014

Source: EBA KRI.



subdued cross-border interbank markets, and further raising worries about liquidity of trading markets are persisting.

### 3.1 Funding

#### Refinancing needs during 2015 should not pose major challenges to banks

Throughout 2014 the focus of new issuances was on unsecured funding. Issuance volumes of euro-denominated unsecured funding were above the volumes of 2012 and 2013, although they continued to be net negative. The positive trend was similar in the first quarter of 2015. Euro-denominated covered bonds showed the same dynamics again.

The maturing debt volumes in the current year are relatively similar for 2014 and 2015. In January 2014, the debt maturing during 2014 accounted for about EUR 750 billion, while in 2015, the debt maturing this year accounted for about EUR 780 billion. Assuming that funding conditions remain stable, it can be expected that banks should be able to cover this year's refinancing needs (Figure 35).

#### Potentially increasing maturity mismatch raises concerns

Market data also shows that debt maturity is less evenly split over time in 2015. Debt maturing within the two following years is significantly higher in 2015 than it was in 2014. As of January 2015, debt maturing in 2016 and 2017 is about EUR 700 billion each year. As

of January 2014, debt maturing in 2015 and 2016 was about EUR 650 billion and EUR 500 billion respectively. As the asset side of the balance sheet is to a great extent long-term driven, the increase in short-term market debt raises concerns about further maturity mismatches.

The RAQ results confirm that such concerns might be justified. Nearly 80 % of the banks agree that their average maturities of future funding shall remain about the same compared to their average asset maturity. The rate of agreement with a lengthening of the funding maturity decreased according to the latest RAQ results to less than 20 % (from nearly 40 % in December 2014, Figure 36).

#### Markets will have to prove that they are prepared to absorb further material AT1 issuance volumes

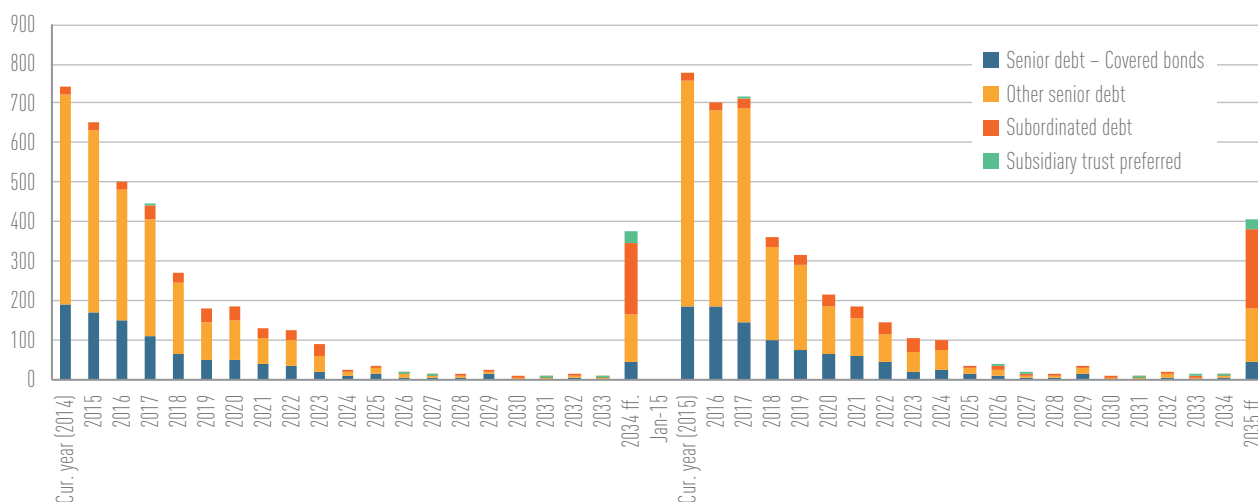
The previous trend of significant AT1 issuances — however volatile — continued in the second half of 2014 and in the first quarter of 2015. Banks will have to issue further such instruments, driven in many cases by the MREL requirements under the BRRD. Markets will have to prove that they are prepared to absorb further material issuance volumes of these instruments and banks remain vulnerable to any snap back in risk appetite that could make it more expensive or difficult to access AT1 instruments.

According to the RAQ, market analysts are optimistic that banks will be able to issue qualifying debt instruments (more than 80 % 'agree' plus 'somewhat agree'). Similarly, out of those market analysts who expect changes in the banks' funding mix, more than 80 % as-

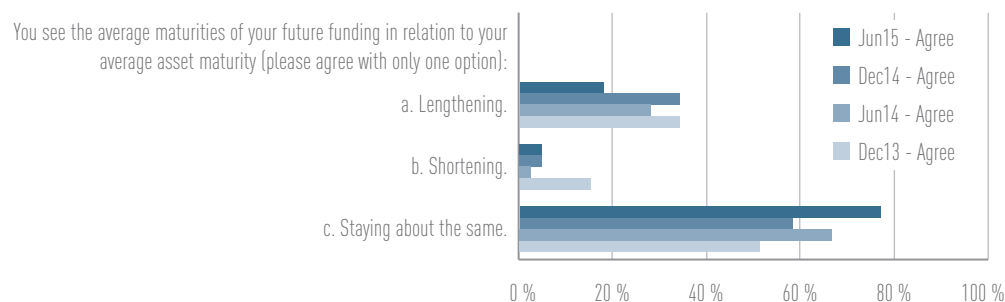
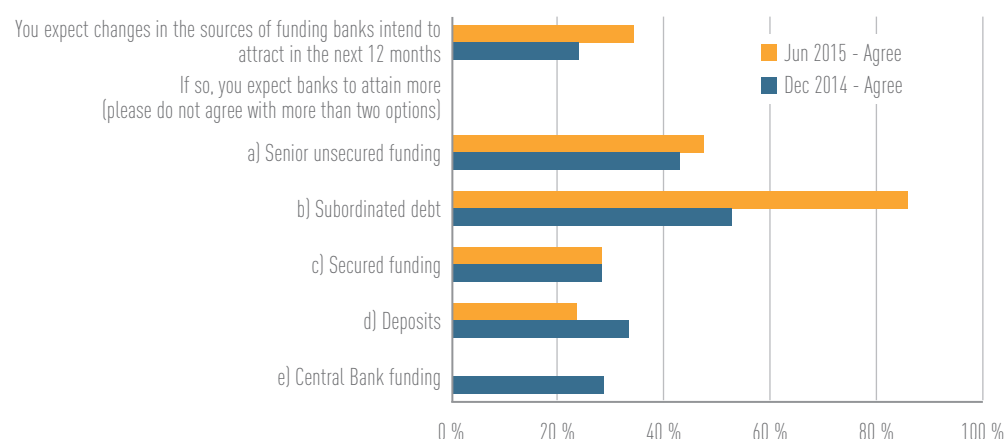
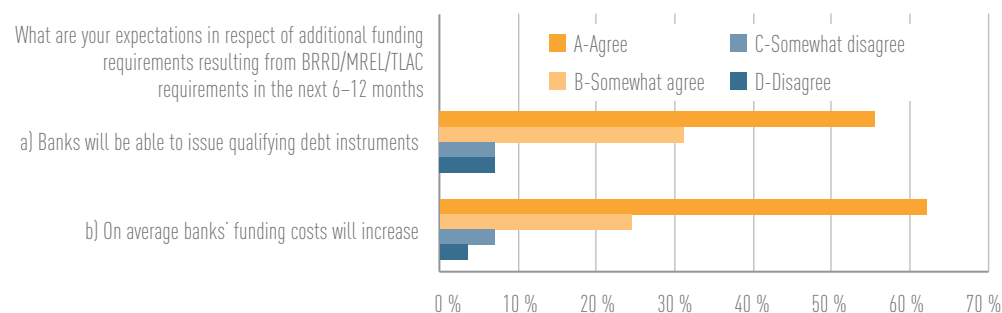
<sup>(1)</sup> The debt maturity profiles include debt in the form of listed securities. All data are euro-denominated and they have been aggregated for 43 banks.

Figure 35: Bonds — aggregated debt maturity profile — 20-year breakout as of beginning of January 2014 (left side) and as of beginning of January 2015 (right side, billion EUR)

Source: SNL financial data, EBA calculations<sup>(1)</sup>.





**Figure 36: Term matching between asset and liability side***Source: EBA RAQ for banks.***Figure 37: Expected trends of the funding mix***Source: EBA RAQ for market analysts.***Figure 38: Expectations in respect of BRRD/MREL/TLAC conform funding***Source: EBA RAQ for market analysts.*

sume an increase in subordinated debt issuances. There is significantly less agreement on the potential impact of other refinancing instruments on the banks' funding mix (Figure 37). Market analysts expect that, on average, banks' funding costs most likely increase accordingly (more than 80 % 'agree' plus 'somewhat agree', Figure 38).

There are also concerns on potential vulnerabilities to the banks' refinancing capacity linked to decreasing trading market liquidity. This decline in liquidity might have a direct impact on the banks' asset side, on the one hand (through volatility in asset pricing, see

Chapter 2), but also on refinancing volumes and conditions, on the other hand.

### Funding spreads remain low, but volatile

During the second half of 2014 and the first quarter 2015, spreads of all market funding instruments remained volatile, although at relatively low levels that could already be observed in the first half of 2014. Spreads of senior unsecured issuances and covered bonds decreased, on average, even further compared to the first half of 2014. The spreads' tightening was, to some extent, driven by the ECB's asset purchase programme which has included

covered bonds since October 2014. Spreads of issuances from banks in financially stressed countries were still higher compared to the ones of their peers in other countries.

Itraxx data for European financials for both senior unsecured and subordinated debt indicated widened spreads in the middle of October before the announcements of the 2014 EU-wide AQR and stress test results. During the second half of November and mid-December, spreads again widened, according to Itraxx data, mainly due to the resurgence of concerns about euro area coherence. These concerns were also the main driver for peaks of spreads during January and February this year. Itraxx data for March provide indications that markets seem to have accommodated these concerns (which could be seen through flattening Itraxx spreads with less peaks during March). The start of the QE programme might have contributed to this decline in volatility (Figure 39).

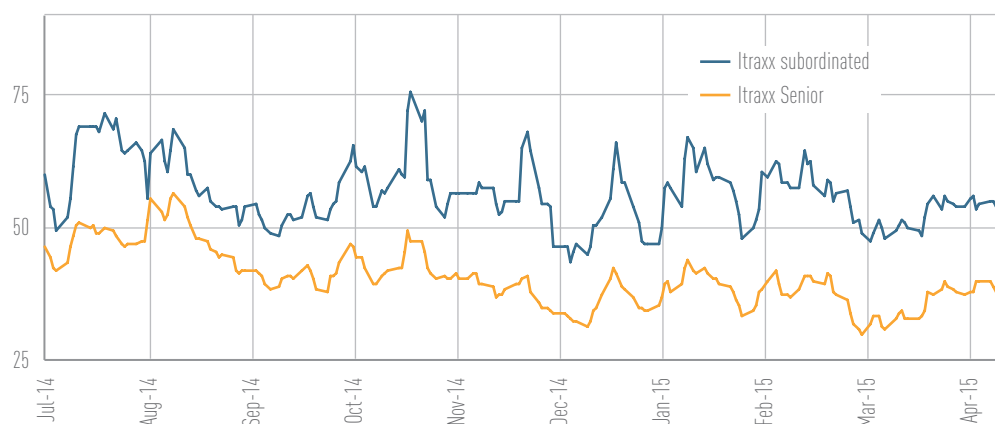
Like the spreads, the basis rates for euro funding declined. In contrast to the three months' Euribor, the three months' Libor for US dollar funding remained relatively stable during the same period. It indicates the divergence in interest rates between the euro and US dollar, also driven by the European and US central banks' monetary policies (Figure 40).

#### Limited cross-border lending

The general confident sentiment at funding markets is not necessarily reflected in banks' cross-border lending. The former positive trend in cross-border lending of European banks turned into the negative in the second half of 2014. Consolidated foreign claims of European banks have decreased for the counterparties considered in the sample (Figure 41). This trend points to increasing fragmentation of the financial markets. There are also strong signs that the cross-border

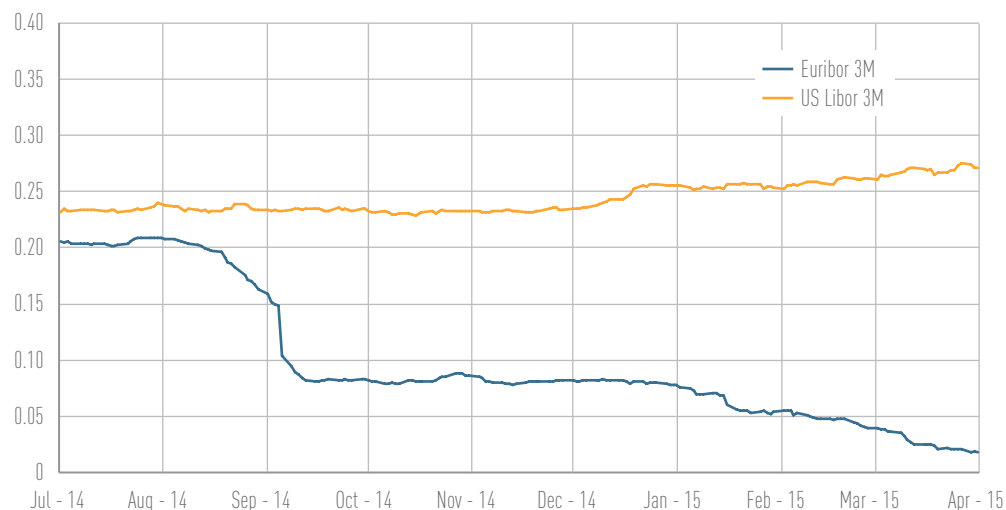
**Figure 39: Itraxx financials (Europe, senior and subordinated, five years, bps)**

Source: Bloomberg, EBA calculations.



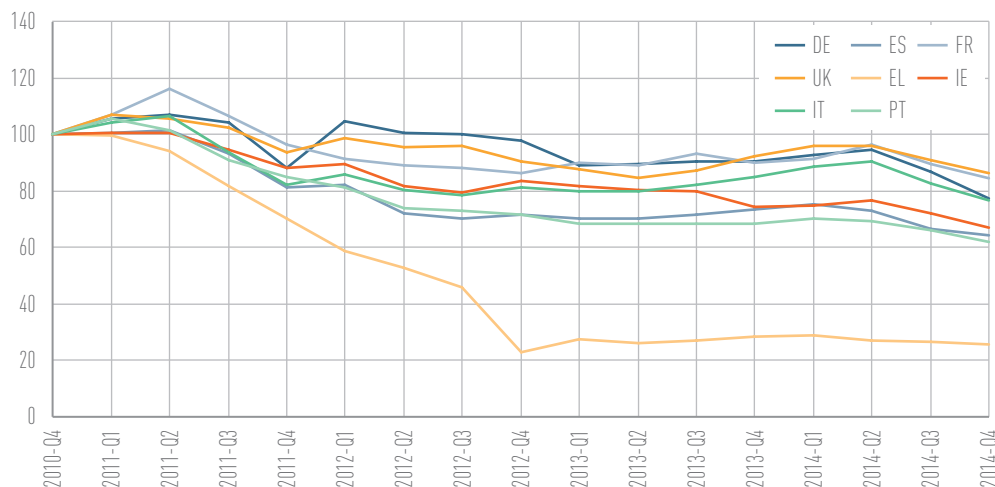
**Figure 40: Euribor and Libor rates**

Source: Bloomberg, EBA calculations.



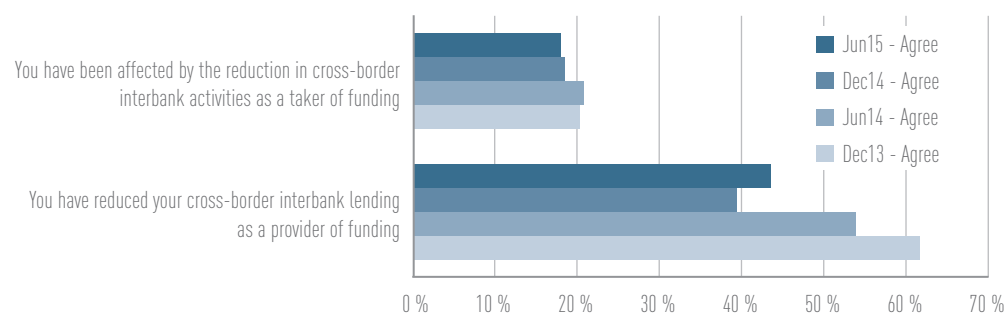
**Figure 41:** Consolidated total foreign claims (ultimate risk basis) of reporting European banks vis-à-vis selected countries, Q4/2014 = 100

Source: BIS, EBA calculations.



**Figure 42:** Cross-border borrowing and lending

Source: EBA RAQ for banks.



lending which has been extended is mainly through secured and not through unsecured funding instruments. This supports the idea that confidence throughout the entire EU banking system has not been fully restored.

The results of the RAQ for banks show that cross-border interbank lending remains subdued. The share of banks indicating that they have been affected by reductions in cross-border borrowing — as a receiver of funding — remains at about 20%. On the other side, banks that agree with the argument that they have reduced cross-border lending as a provider of funding are nearly unchanged, now slightly above 40% (Figure 42).

#### No acute concerns about foreign currency funding

Based on market data, about 20% of the EU banks' market funding is denominated in US dollars. US dollar funding for European banks has been stable without material frictions since the financial crisis in the years 2008 and 2009. Increased volatility in exchange rates, the general decrease in market liquidity, but also the ongoing fragmentation of cross-border lending might contribute to sudden fund-

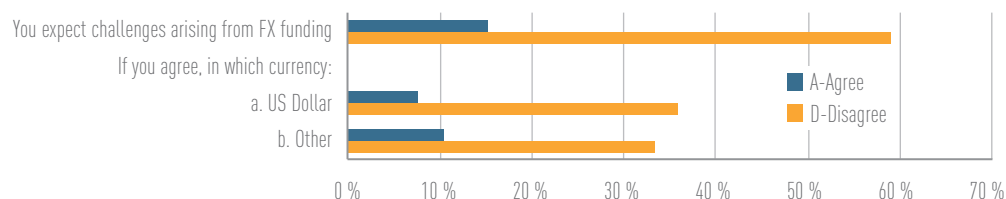
ing gaps in US dollars and other foreign currencies. However, funding markets in 2014 and in the first quarter of 2015 did not show any serious signs of distortions. According to the RAQ results there is also a big share of banks that do not expect potential challenges arising from FX funding, neither in US dollars nor in other foreign currencies, what might also include EUR funding for EU banks outside the euro area (Figure 43).

Nor do banks expect challenges from monetary tightening in the USA and EU countries. In the RAQ, more than 50% of the banks 'disagree' or 'somewhat disagree' with a potential negative impact on their funding from central bank measures 'in some EU countries' or from tapering of the US Federal Reserve System (FED, Figure 44) [12]. This seems to be a rather optimistic view, and certain direct and indirect risks arise from monetary tight-

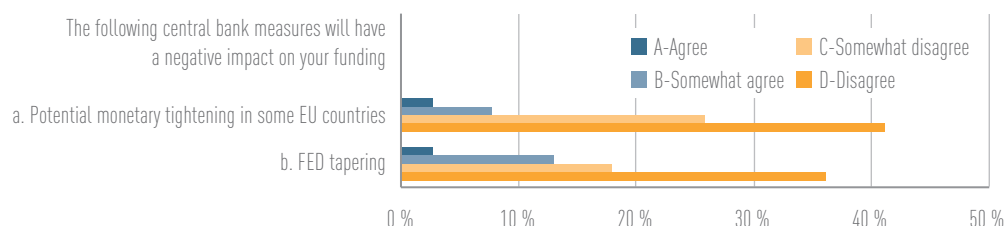
[12] The question was about a potential direct impact on banks' funding from e.g. monetary policy in the USA. It was not about respective impact on their country exposures on the asset side, e.g. emerging-market exposures. Emerging-market exposures might suffer from an increase in US dollar interest rates, resulting in higher default rates, for example, and as such have a negative indirect impact on banks' funding.

**Figure 43: Funding in foreign currencies**

Source: EBA RAQ for banks.

**Figure 44: Central bank measures outside the home country**

Source: EBA RAQ for banks.



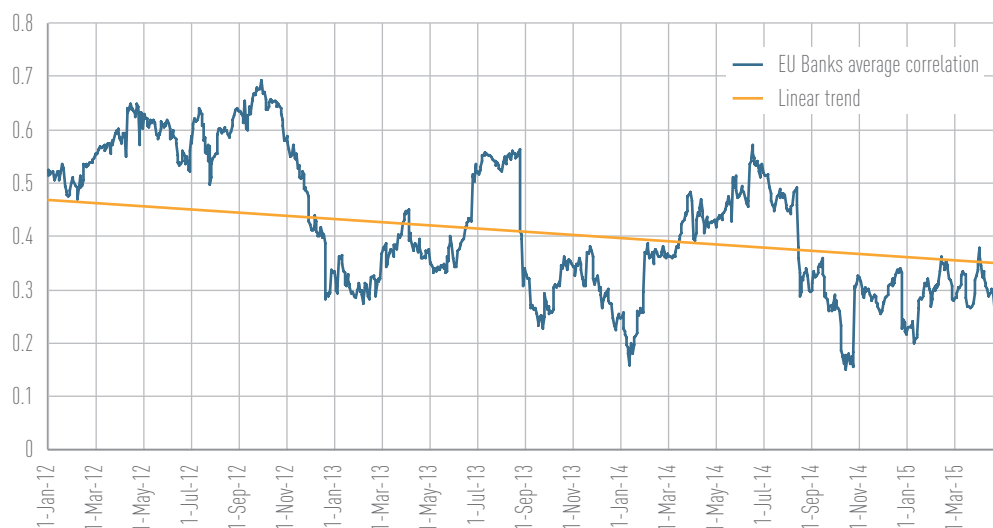
ening in the USA also for European banks. This might include the effect that investors then focus on potentially higher yields in the USA, reducing demand in euro-denominated issuances. It might also result in a temporary pricing gap between the asset and liability side, when refinancing in US dollars will become more expensive and the price increase might not immediately be passed through to the banks' asset side.

#### Correlation between sovereigns and banks loosening further

The correlation between sovereign and bank CDS spreads decreased during the second half of 2014 and the first quarter of 2015. This means that links between banks and the sovereigns they are domiciled in are loosening (Figure 45). However, there are still differences among countries, with financially stressed countries showing considerable correlations between sovereigns and banks, still higher than before the financial crisis.

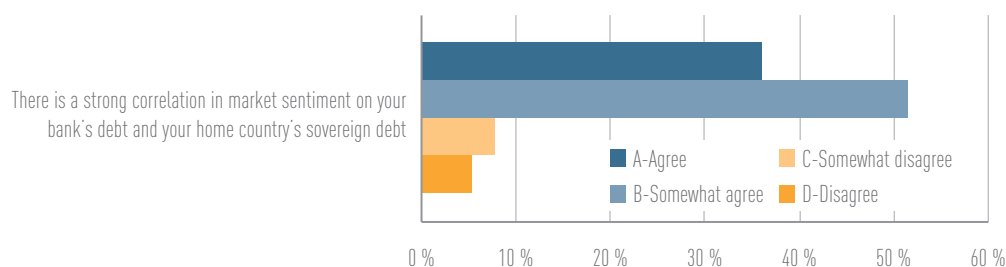
**Figure 45: Average correlation of CDSs for 17 major EU banks and respective sovereigns — 60day rolling window**

Source: Bloomberg data, EBA calculations.



**Figure 46:** Correlation of market sentiment on banks' and their home country debt

Source: EBA RAQ for banks.



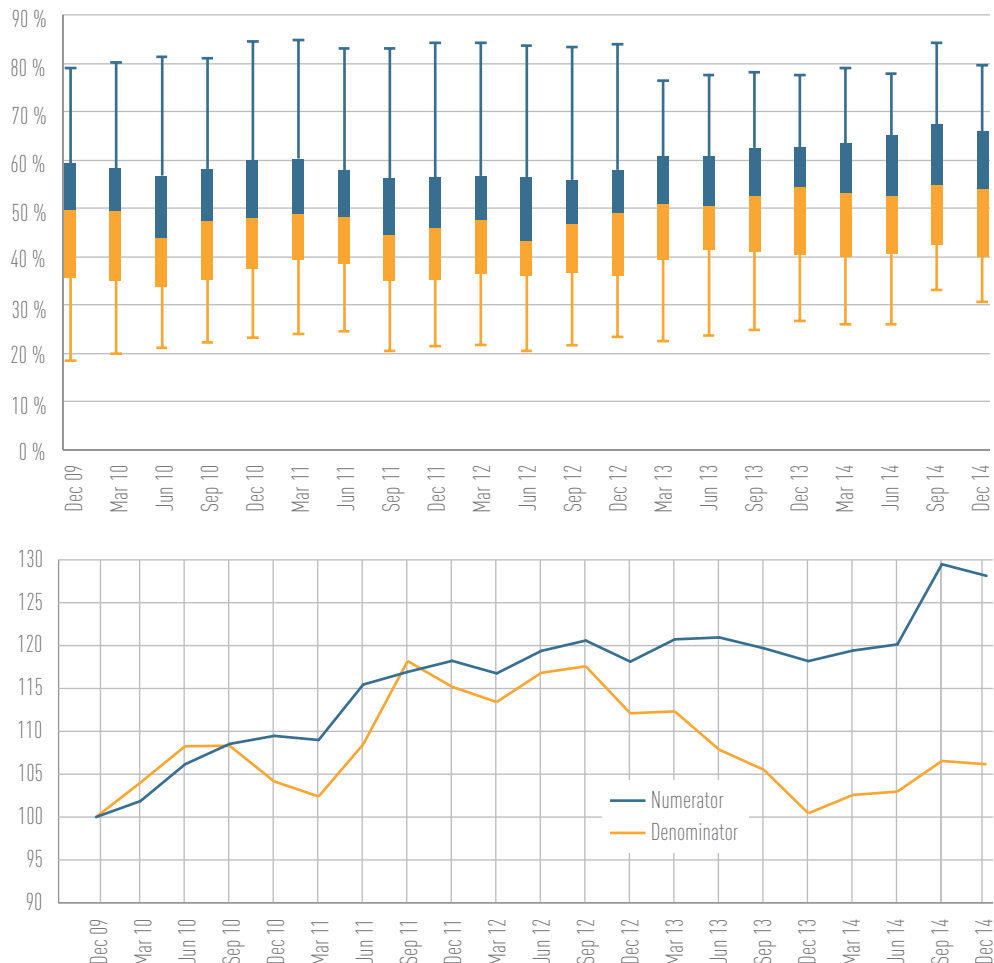
The fact that rating agencies are introducing in their methodologies a reduction of the consideration of sovereign support in bank ratings (driven also by the BRRD requirements) supports the idea that the link might be loosening in future. However, according to the answers to the RAQ, banks expressed their view that the correlation with their home country's debt is still high (Figure 46).

### 3.2 Deposits

During 2014, liabilities and customer deposits showed a similar growth to that of assets. The overall share of customer deposits to total liabilities even further increased from about 48 % per year-end 2013 to nearly 50 % per year-end 2014, continuing its growth since 2011 (Figure 47).

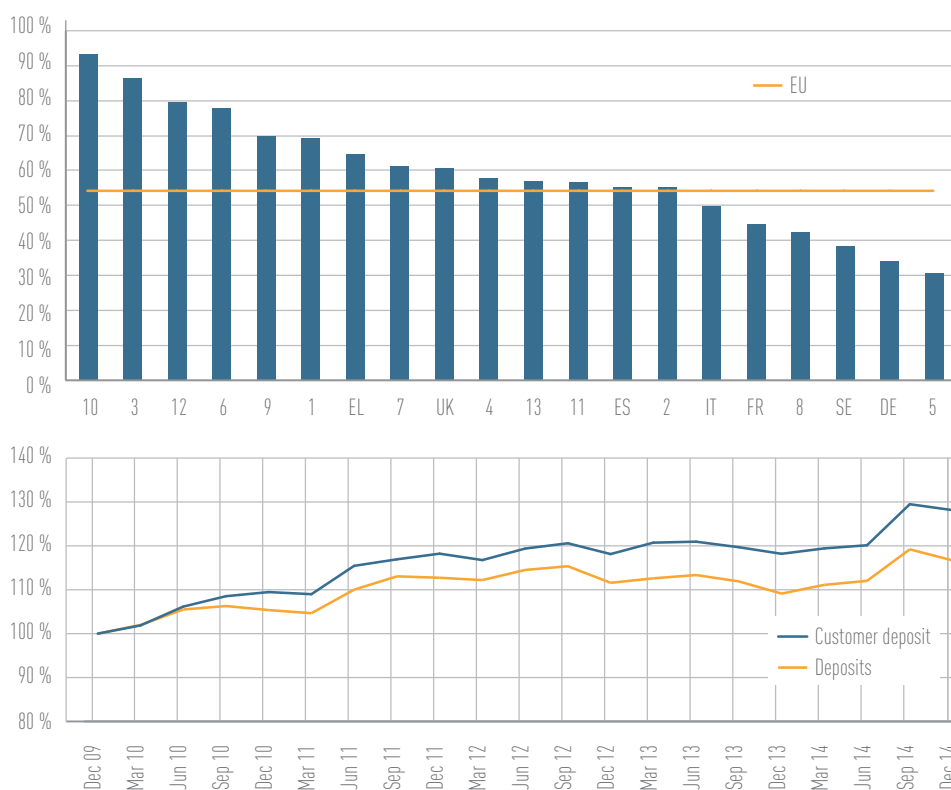
**Figure 47:** Customer deposits to total liabilities — 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)

Source: EBA KRI.



**Figure 48:** Customer deposits to total liabilities — country dispersion (median) and trends of customer deposit volumes and overall deposit volumes (December 2009 = 100)

Source: EBA KRI.



#### Customer deposits grew stronger than overall deposit volumes

The share of customer deposits has grown further not only when compared to total liabilities, but also when compared to total deposits (Figure 48). It would indicate a growth in confidence of customers in banks. It also contributes to a stabilisation in the banks' funding mix. This idea is supported by the reflection of customer deposits in the net stable funding ratio (NSFR) with factors of available stable funding (ASF) between 50 % and 95 %.

However, customer deposits remain vulnerable to potential bank runs in stress scenarios, even though they are, in general, considered as less volatile than interbank deposit funding. They contribute to the maturity mismatch, too. Additional concern results from the uncertain behaviour of wholesale depositors that are not covered by deposit guarantee schemes. The risk that they withdraw parts of their deposits further increases when new resolution and bail-in requirements come fully into force.

A comparison between geographies shows material differences in the share of customer deposits in the banks' funding mix. Banks in several financially stressed countries have a high reliance on customer deposit funding with a median of 70 % and more, whereas

banks from several other countries have a materially lower dependency on customer deposits (Figure 48).

#### Improvements in the loan-to-deposit ratio

In the second half of 2014, the loan-to-deposit ratio further decreased to 108.6 % continuing a decline initiated in the beginning of 2013. Both the numerator and denominator moved in parallel, with the deposits showing lower rates of decline and higher growth rates, compared to respective dynamics of the loans. In times of volume growth this might be influenced by a higher flexibility in deposit movements compared to less flexibility in loan volumes. In times of a decline, customers might be rather reluctant to withdraw deposits.

A decline in the loan-to-deposit ratio can also be understood in a way that less loan volume depends on other funding instruments besides deposits. As such, it is obvious that, in general, countries with low shares of customer deposits in their overall funding mix have high loan-to-deposit ratios and vice versa. The loan-to-deposit ratio of financially stressed countries is on the lower end of the ratio, whereas for several of the other countries it is on the higher end in the country-by-country comparison. Like for the ratio of customer deposits to total liabilities there

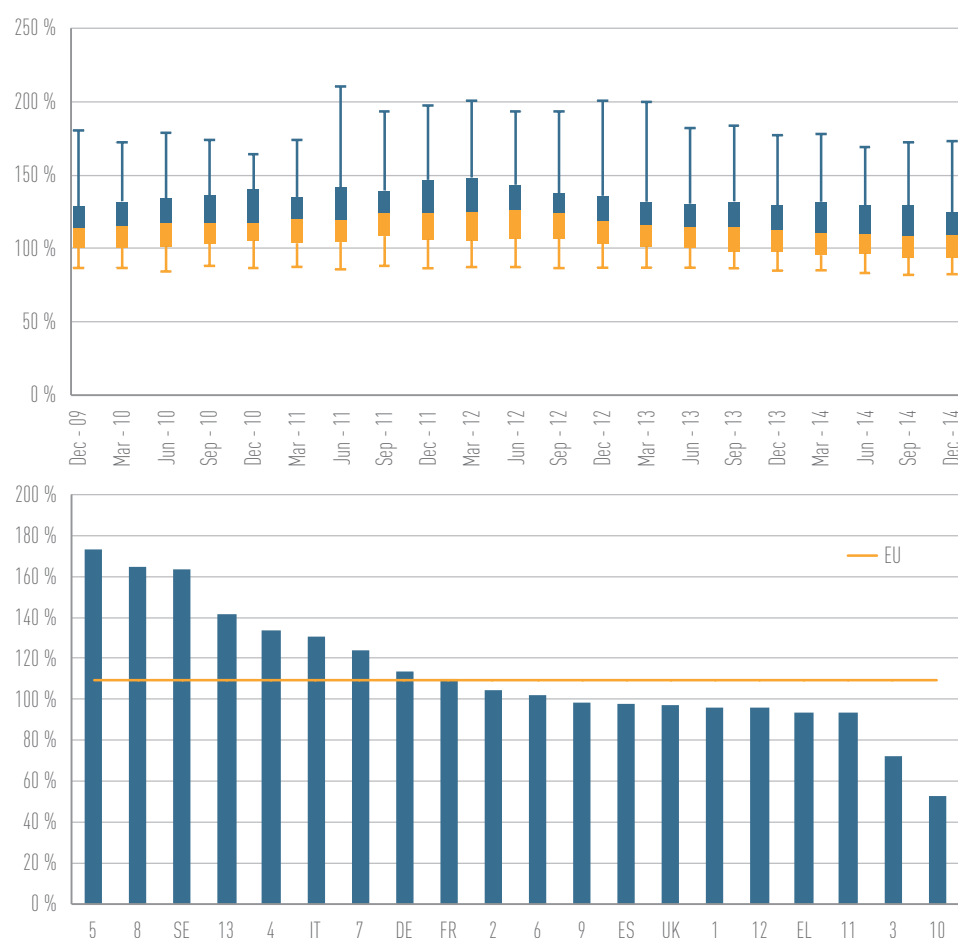
is a big country dispersion of the loan-to-deposit ratio, ranging from about 50 % to more than 170 % (Figure 49).

Banks seem to regard their deposit funding as stable going forward, and they even see potential for further growth of it. Out of the banks that assume changes to their funding mix (a statement with which about 40 % of the banks 'agree' or 'somewhat agree'), about 30 % of the respondents plan to increase their deposit bases according to the RAQ results.

The results also show that deposit funding is the only source of funding in the RAQ for which the rate of agreement in respect of future increase in volumes was higher than the rate of disagreement (ca. 25 % disagreement versus the mentioned ca. 30 % agreement, Figure 53). In parallel, a large majority of the banks do not plan an increase of deposit rates to attract new deposit volumes, as the results of the RAQ show. There also is a small minority of banks which anticipate volatilities in their wholesale deposits (Figure 50).

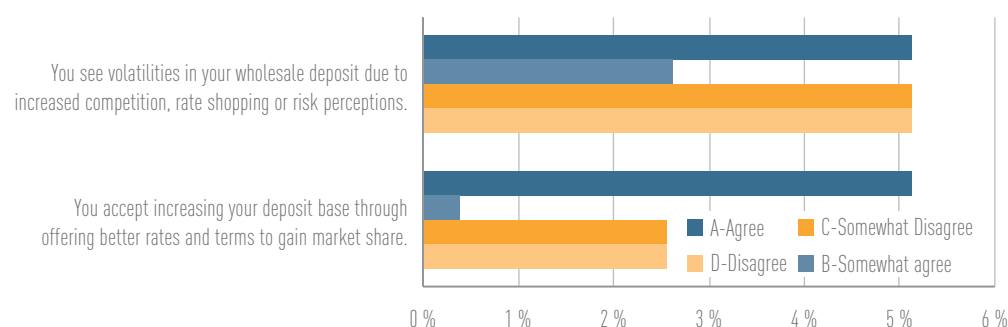
**Figure 49: Loan-to-deposit ratio — 5th and 95th percentiles, interquartile range and median, and country dispersion**

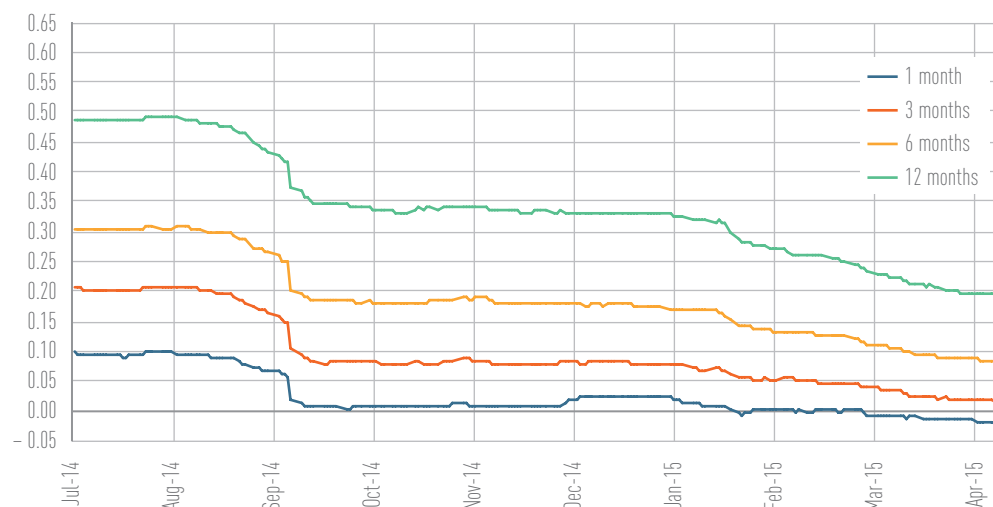
Source: EBA KRI.



**Figure 50: Deposits**

Source: EBA RAQ for banks.



**Figure 51: Euribor rates***Source: Bloomberg, EBA calculations.*

### Low and even negative interest rates for deposits

Euribor further declined for all terms during the second half of 2014 and first quarter of 2015. Depending on their term, rates even became negative (Figure 51). Deposits' rates, in general, had similar movements. Several banks even introduced negative rates for wholesale deposits in some cases. For customer deposits such a development could only be seen in very rare cases.

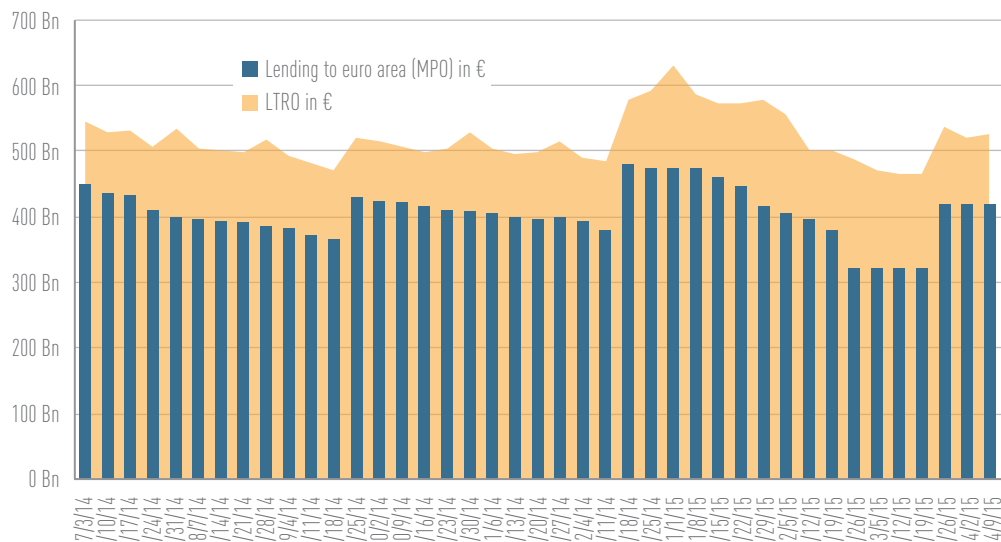
ing markets have not yet returned to pre-crisis conditions and banks are still benefiting from central banks extraordinary measures adopted during the crisis.

### There is still high reliance on central bank funding

LTROs remained an important funding channel for euro area banks. Even though LTROs 1 and 2 matured in January and February 2015, there was no overall decline in outstanding volume. Allocations of TLTRO-3 (during the second half of last year) and TLTRO-4 (first allocation in March 2015) resulted in an immediate increase in volumes again, bringing them back to the levels as of mid-year 2014 (Figure 52). Like for the deposit funding, there were significant differences between the levels of central bank funding of banks from

## 3.3 Asset encumbrance and central bank funding

Levels of central bank funding and asset encumbrance remained high in the second half of 2014. This is an indication that fund-

**Figure 52: Evolution of ECB's monetary policy and operations (MPO) and LTRO volumes***Source: ECB, EBA calculations.*



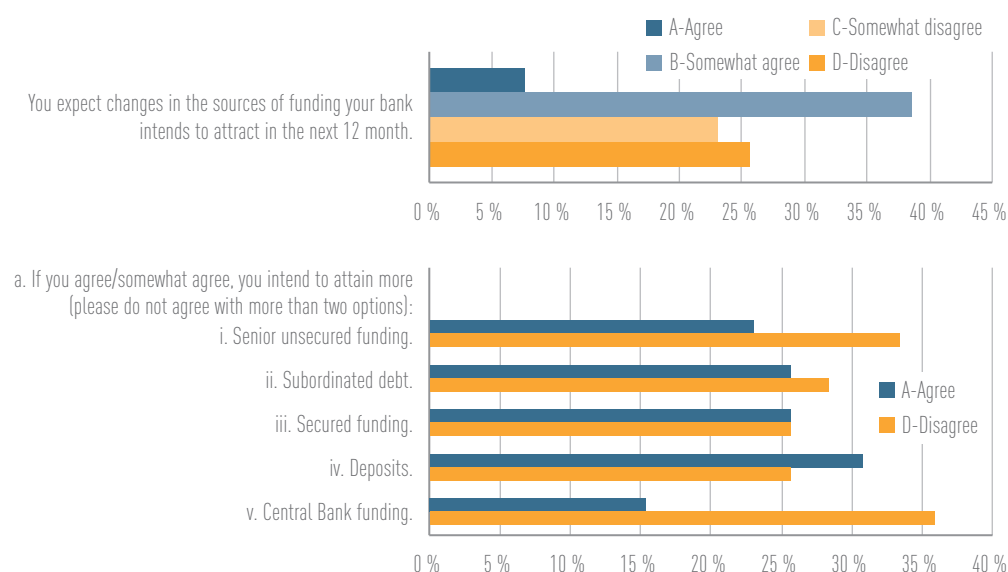
different countries, with more reliance on central bank funding in financially stressed countries.

The RAQ responses to questions about potential changes in the funding mix show that there are still banks that plan to increase their share in central bank funding in the next 12 months (ca. 15 %, all again out of the banks that assume changes to their funding mix). However, more banks might intend to replace central bank funding through other means (Figure 53). In contrast to the banks, none

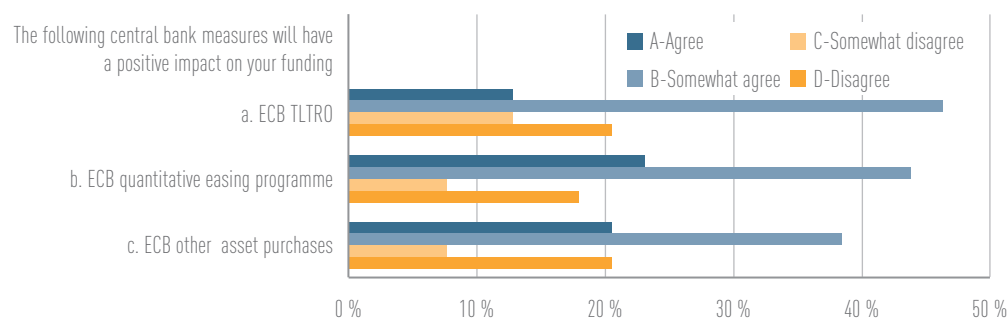
of the market analysts expect an increase in central bank funding, while in the previous RAQ about 30 % of market analysts expected it (out of those market analysts assuming changes in the funding mix, Figure 37).

Banks assume positive implications on their funding from recent ECB measures: It is no surprise that a substantial majority of banks expect a positive impact from the ongoing TLTRO and QE programmes (in both cases, 'agree' plus 'somewhat agree' responses were above 50 %; Figure 54).

**Figure 53: Expected trends of the funding mix**  
Source: EBA RAQ for banks.



**Figure 54: Impact of central bank measures on banks' funding**  
Source: EBA RAQ for banks.



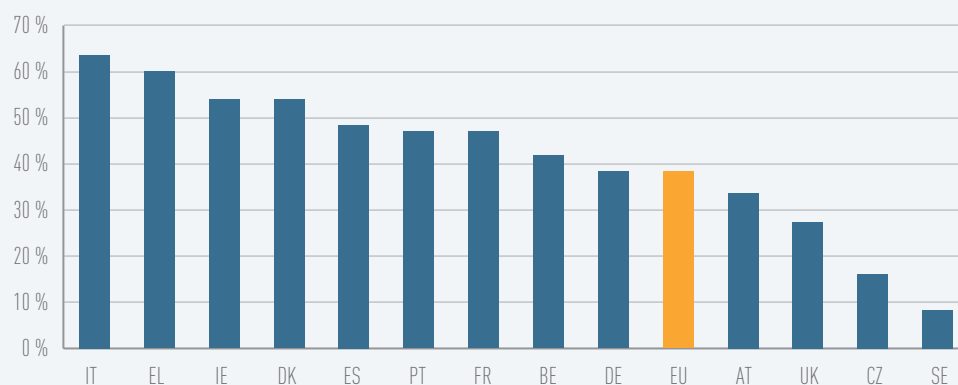
### Levels of asset encumbrance and collateral-based central bank funding

The ratio of encumbered assets to central bank eligible assets (encumbrance ratio) is on average nearly 40 % <sup>[13]</sup>. A country by country analysis indicates that it is particularly high in financially stressed countries. Several countries outside the euro area have the lowest ratio. However, countries with high encumbrance ratio in this analysis do not necessarily have a high ratio of central bank funding as this data does not show if the encumbered assets are used for central bank financing or other collateralised funding (e.g. covered bonds, Figure 55).

Figure 56 shows that the share of encumbered assets in central bank funding is the highest for financially stressed countries. The analysis also shows that this ratio is low for several other countries with a high level of encumbrance: these are mainly countries with a large share of other means of collateralised funding like covered bonds. The lowest share of encumbered assets used in central bank funding can be seen either from other countries of the euro area or countries outside the euro area (Figure 56).

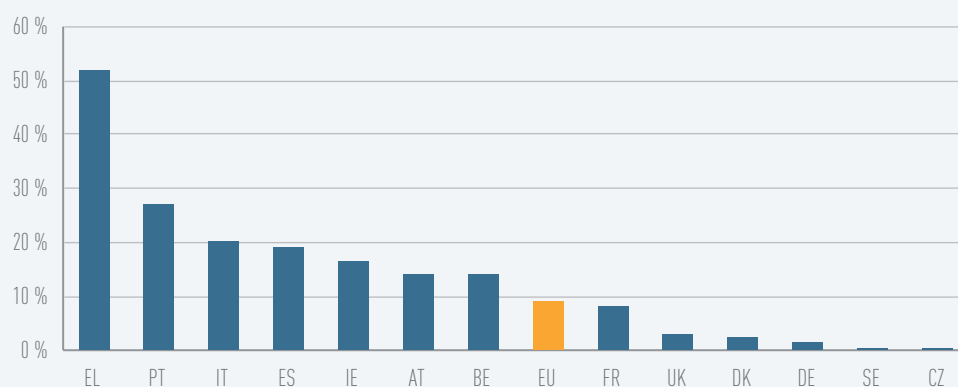
**Figure 55:** Level of encumbrance of central bank eligible assets, average by country (weighted average)

Source: EBA Supervisory Reporting.



**Figure 56:** Share of encumbered assets used in central bank funding operations to total encumbered assets, average by country (weighted average, for the whole sample of banks and country by country)

Source: EBA Supervisory Reporting.



<sup>[13]</sup> The data for figures of this textbox are based on the extended Supervisory Reporting, reported the first time in the second half of 2014. See also respective description in Chapter 1 — Introduction about the new ITS on data reporting.

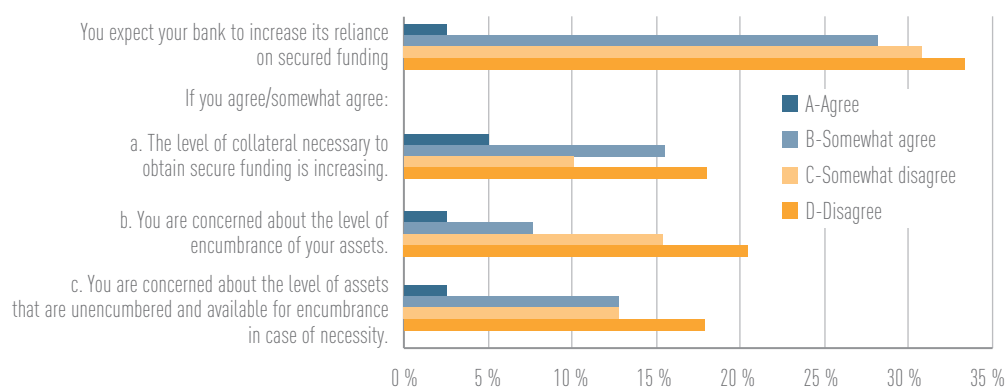
### No material change in the relevance of secured funding expected

The share of banks agreeing and disagreeing with growing importance of secured funding in their overall refinancing mix is about 25 % each (out of the respondents that assume changes in the funding mix, Figure 53).

It is confirmed by the RAQ responses, with more than 60 % of the banks 'disagreeing' or 'somewhat disagreeing' with the expectation that their reliance on secured funding will increase implying that it will at least stay unchanged. However, the banks that are planning to increase their reliance on secured funding are hardly concerned about the level of their encumbrance (Figure 57).

**Figure 57: Secured funding**

Source: EBA RAQ for banks.



## 4. Capital

The repair process of the European banking system initiated in 2011 has led to a major strengthening of the banks' capital position. Overall, EU banks increased their weighted average CET1 ratio by 290 bp between December 2011 and December 2014, from 9.2 % to 12.1 %. (Figure 58). On a Basel III fully loaded basis, EU banks report a 10.9 % CET1 ratio as of December 2014, 80 bps above March 2014 levels.

### Improvement of CET1 capital levels has been achieved more through increases of common equity than decreases of RWA

Between December 2009 and December 2014, EU banks' CET1 ratios increased from 9.0 % to 12.1 %. During the same period, the amount of CET1 capital grew by approximately 37 % (+ EUR 318 billion, net of buybacks) while RWA slightly increased by approximately 1 %. This means that the strengthening of the EU banks' capital position has been driven more through real capital issuances rather than through reducing the denominator. An adjustment to the capital ratios driven by RWAs is often seen as particularly critical, as it could be the result of adjustments of internal models. It could also happen through a reduction in lending to customers attracting higher capital charges, which might in turn reduce the ability of the banking sector to contribute to the recovery (Figure 59).

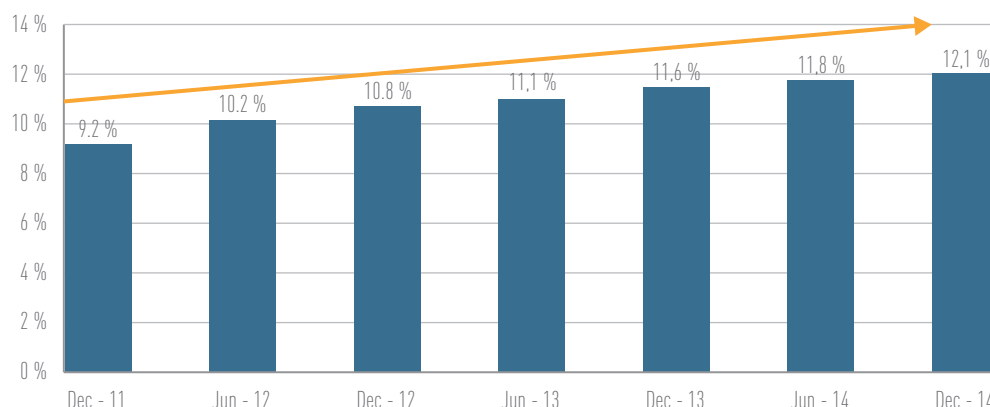
### Tier 1 capital ratio shows a similar evolution to CET1 capital ratio, also improving but with a larger dispersion

The evolution of the EU banks' tier 1 (T1) capital ratio is similar to the evolution of the CET1 ratio, rising by 310 bp since December 2009 (10.2 %) to December 2014 (13.3 %). The numerator and denominator also show a similar behaviour to the case of the CET1 ratio, with total T1 capital increasing by 31 %. The dispersion of the T1 capital ratio remains higher and growing: the interquartile range (4.29 %) is higher than in December 2009 (2.21 %), December 2010 (3.1 %), December 2011 (3.42 %), December 2012 (2.97 %) and December 2013 (3.46 %). The evolution of banks by size class experienced a turning point during the first quarter of 2014, when the top 15 banks, that traditionally showed T1 capital ratios above the rest of the banks, reported lower ratios, a trend that remained until the end of 2014 (Figure 60).

EU banks have achieved a real improvement of their capital position that should place them in a better position to increase their lending activity and to reduce their costs of funding. Nevertheless, important risks remain linked to economic and political uncertainty especially in some euro area countries (e.g. Greece) and in emerging markets. These developments may trigger additional impairments in the

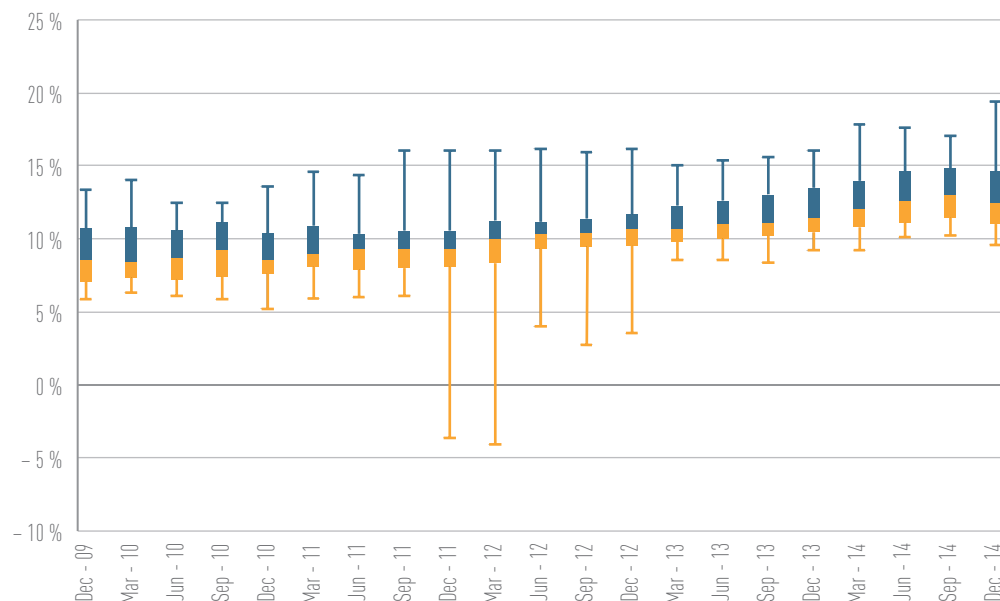
**Figure 58: Common equity tier 1 ratio (until December 2013: tier 1 ratio excluding hybrid instruments) — weighted average**

Source: EBA KRI and EBA calculations.



**Figure 59:** Common equity tier 1 ratio (until December 2013: tier 1 ratio excluding hybrid instruments)

Source: EBA KRI.



future. Moreover, current weak levels of profitability might jeopardise the natural way that banks have to strengthen their equity, preventing them from increasing their capital buffers through retained earnings. Going forward, supervisors should pay attention to the ability of banks to maintain their capital base through retained earnings and to banks' dividend policy in a context of low profitability.

**EU banks in a better position than their US peers in terms of solvency, while the US banks are outperforming in terms of profitability**

The comparison between EU banks (KRI data) and the 20 largest US banks shows the major improvement of the EU banks' capital

positions since 2009 to levels above their US peers as of end-2014 (+ 310 bp compared to + 100 bp). The overall net increase of capital since the Lehman crisis has been more substantial for EU banks. Nevertheless, in terms of profitability, US banks significantly outperform EU banks (Figure 61) and are in a better place than the EU banks to keep moving forward an organic growth of their capital base through retained earnings. The relative better performance of US banks in terms of profitability as measured by the Return on Assets (RoA) should however be interpreted having in mind the usually smaller balance sheet of US banks compared to EU banks, due to more netting (especially for repos and derivatives) being allowed in the US GAAP than in IFRS.

**Figure 60: Tier 1 capital ratio — 5th and 95th percentiles, interquartile range and median, and by size class [medians]**

Source: EBA KRI.



**Figure 61: Tier 1 ratio, RoA, loan-to-deposit ratio — EU banks (55 banks considered in the EBA KRI) compared to US banks (market data for the 20 biggest banks according to their total assets) – (data non-adjusted for the difference in netting rules between US GAAP and IFRS)**

Source: EBA KRI, SNL Financials, EBA calculation.

	2009	2010	2011	2012	2013	2014
<b>EU</b>						
Tier 1 ratio	10.2 %	11.0 %	11.1 %	12.5 %	13.1 %	13.3 %
RoA	0.20 %	0.30 %	0.00 %	0.02 %	0.15 %	0.21 %
Loans to deposits	117.1 %	117.8 %	117.7 %	115.7 %	112.8 %	108.4 %
<b>USA</b>						
Tier 1 ratio	11.4 %	12.4 %	12.6 %	12.9 %	12.7 %	12.4 %
RoA	0.39 %	0.66 %	0.65 %	0.75 %	0.88 %	0.78 %
Loans to deposits (*)	79.5 %	81.2 %	74.9 %	72.2 %	69.9 %	69.1 %

(\*) Not available for two banks in the sample (Morgan Stanley and Goldman Sachs).

### Strengthening of banks' capital position has been accompanied by increased comparability and harmonisation in the definition of capital

The strengthening of banks' capital position has been accompanied by a major step forward in the harmonisation of the applicable regulatory definition of capital across the single market with the entry into force in January 2014 of the CRD/CRR package and the development by the EBA of relevant ITS and RTS in the context of the EU single rule book. Some national discretions persist, in general linked to the pace of phasing-in of the new requirements and will gradually fade away. They can have a sizeable impact on capital levels and their comparability. The EBA is making efforts to minimise the impact of such differences.

- During the 2014 EU-wide stress test exercise, the EBA provided very detailed disclosure of the capital components and published the results of the stress test also with reference to the fully loaded capital ratio, which is much less affected by national discretions.
- The EBA has recently published detailed information on the implementation of national discretions under CRD/CRR in each Member State <sup>[14]</sup>. This transparency exercise provides a better picture of where differences in implementation remain, and will be followed by peer review analyses to monitor their impact.

On the denominator side, it is important to monitor the effect of potential variations of the level of RWA on capital ratios. Such effects should remain an area for closer supervision in future, especially in respect of the

<sup>[14]</sup> EBA overview of options and discretions set out in Directive 2013/36/EU and Regulation (EU) No 575/2013 — <https://www.eba.europa.eu/documents/10180/923772/Supervisory+disclosure+-+Annex+2+-+Options+and+National+discretions+-+Part+1.xlsx>

RWAs' comparability. It is a topic the EBA has been working on since 2011. Its Task Force for Supervisory Benchmarking is considering the comparability of credit and market RWAs (see Chapter 2 — Asset side).

### Further issuances of AT1 and Tier 2 instruments during the first half of 2015

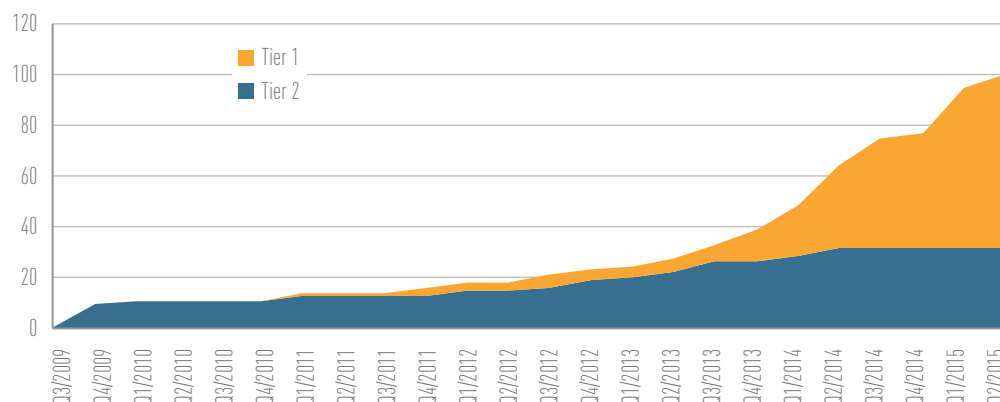
Total issuance of AT1 instruments and Tier 2 instruments keeps increasing. During 2015, banks issued contingent convertible instruments (CoCos) amounting to more than EUR 20 billion (Figure 62). CoCos can be qualified as AT1 or Tier 2 instruments, depending on their features.

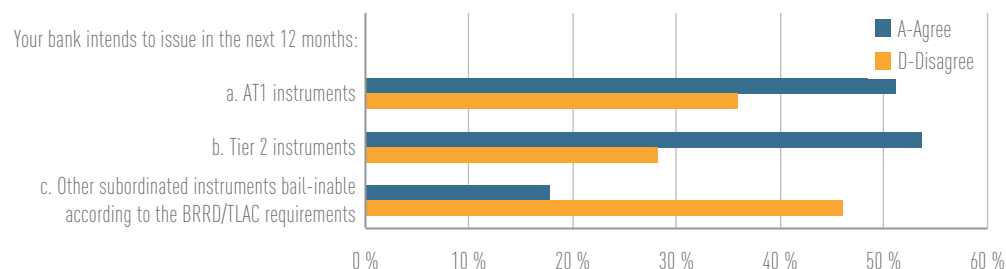
All AT1 and Tier 2 instruments of an institution should be capable of being fully and permanently written down or converted fully into CET1 capital at the point of non-viability of the institution. AT1 instruments feature the following conditions, more restrictive compared to Tier 2 instruments: they rank below Tier 2 instruments in the event of the insolvency of the institution; the instruments are perpetual, while Tier 2 instruments' requisite is that they have an original maturity of at least five years; the institution has full discretion at all times to cancel the distributions on the instruments for an unlimited period and on a non-cumulative basis, a condition that does not exist in the case of Tier 2 instruments. Furthermore, in order to qualify as AT1 capital, the trigger level of the instrument must not be lower than 5.125 % (CET1-Ratio).

Minimum CET1 and total capital requirements under the CRDIV/CRR, together with MREL/TLAC requirements under the BRRD, might be important drivers behind this activity and will likely trigger additional issuance going forward. Indeed, according to the RAQ, more than 50 % of the banks intend to issue AT1 instruments and Tier 2 instruments in the next 2 months (Figure 63).

**Figure 62: Total cumulative issuance of contingent convertibles by EU banks (billion EUR)**

Source: SNL Financial, Bloomberg, EBA calculations.



**Figure 63: Planned issuance of AT1 instruments***Source: EBA RAQ for banks.*

**Certain risks might arise from the banks' need to trigger additional issuances of AT1 and Tier 2 instruments linked to legal requirements**

The increased needs of new issuances of AT1 and Tier 2 instruments may create challenges as banks might not be able to cover their funding needs in these kinds of instruments in case of an excess of supply. This may be exacerbated by any reversal of market risk appetite. Shortage of funding may lead to in-

creases of spreads, pushing up funding costs and putting additional pressure on institutions' profitability and returns.

On the demand side, supervisors have to pay special attention to potential mis-selling of these kinds of instruments triggered by the banks' prevailing need to comply with regulatory requirements <sup>(15)</sup>. Given the intrinsic complexity of this type of instrument, potential investors may not be in the position to fully understand all the risks that they would assume.

<sup>(15)</sup> Recommendations and limitations concerning the issuance of such instruments have already been published by the ESAs and the FCA (cp. Joint Committee of the European Supervisory Authorities: Placement of financial instruments with depositors, retail investors and policy holders – 'Self placement', London 2014; Financial Conduct Authority: Restrictions in relation to the retail distribution of contingent convertible instruments, London 2014).



## 5. Profitability

The EU banks' profitability remains depressed, with a weighted average RoE of 3.6 % as of the end of 2014, still far away from the pre-crisis levels and from the levels of profitability considered as sustainable by market participants. It is, nevertheless, steadily improving on a year-to-year basis, with banks reporting the highest RoE per year-end since December 2011, and in parallel to an increase of the CET1 ratio (Figure 64).

The total profits for EU banks (after tax and discontinued operations) as of the end of 2014 rose by EUR 14 billion (+ 36 % compared to December 2013). The main drivers for this increase are a sharp decline of impairments of financial instruments (EUR 24 billion, – 20 % on a year-to-year basis), and the growth by EUR 15 billion of the net interest income (+ 5 % compared to the end of 2013). The positive trend of the net interest income during 2014 is partially explained by a growth of total loans and debt instruments. It supports the idea that banks are now on their way 'back to basics' with their business models (see also Chapter 2). On the other hand, there is a greater portion of loans funded by deposits (as reflected by a decreasing loan-to-deposit ratio) which together with financing provided by central banks, reduces banks' costs of

funding and interest expenses and also has a positive impact on net interest margins.

### Return on equity remains subdued and insufficient to cover banks' cost of equity

The RoE reported by EU banks as of December 2014 (3.6 %), reaches its year-end highest value since 2011 (0.0 %, 0.5 % and 2.7 % in December 2011, 2012 and 2013). It, nevertheless, remains very low and still far from pre-crisis levels and from viable returns.

The median and the 75th percentile of the RoE have decreased compared to December 2013 (from 4.8 % and 9.1 % to 3.2 % and 8.0 %, respectively, in December 2014), while total profit or loss after tax and discontinued operations is higher than in the previous year (+ 36 % in comparison with December 2013). In addition, the dispersion continues to decrease on a yearly basis (Figure 65). Banks from nine countries present median values of RoE below 5 % (and below the EU median, 3.2 %). During the second half of 2014, the top 15 banks by size report better RoE values (4.7 % weighted average) than the rest of the banks (2.89 % weighted average).

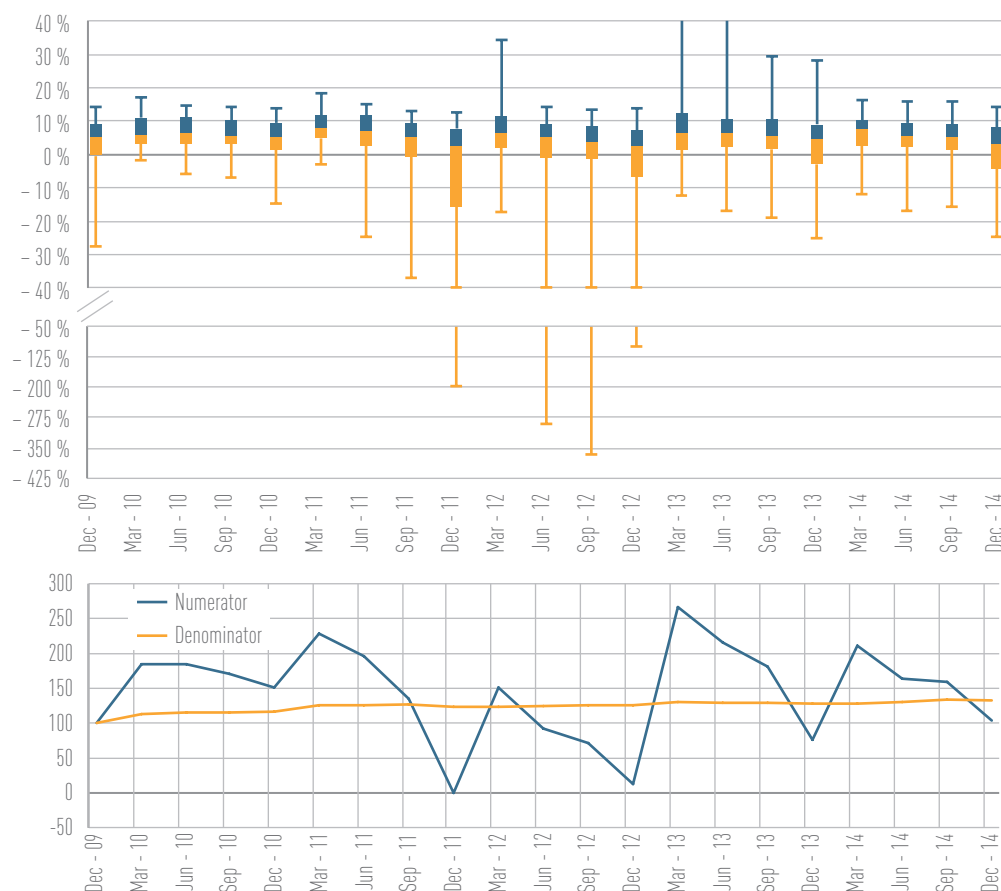
Figure 64: Comparison of RoE and CET1 ratio (weighted average, per year-end)

Source: EBA KRI.

Year end	2011	2012	2013	2014
RoE	0.0 %	0.5 %	2.7 %	3.6 %
CET1	9.2 %	10.8 %	11.6 %	12.1 %

**Figure 65:** Return on equity — 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)

Source: EBA KRI.



In 2014, like in the years before, the RoE in the first three quarters was higher than per year end. This effect results from a decrease of the return in the last quarter each year. It is due to impairments that are mainly considered in the last quarter (the impact of impairments is the highest in the last quarter as the KRIs also show).

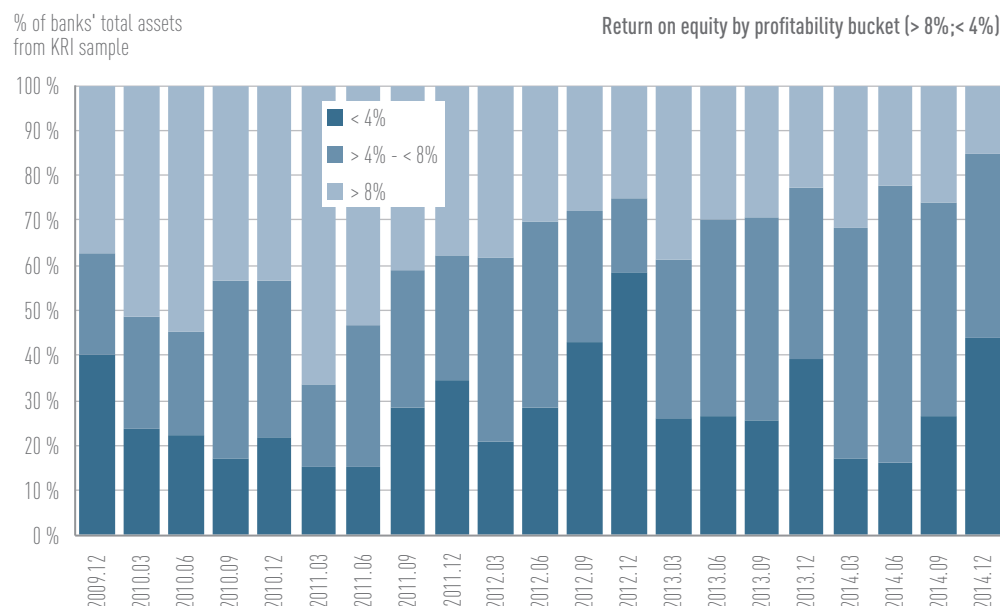
The share of banks with an RoE below 8 % continues to increase and represents 84.7 % of total assets in the sample in December 2014 (up from approximately 77 % and 78 % in December 2013 and June 2014, respectively). Banks with an RoE below 4 % represent 44 % of total assets in December 2014. This is a result of the challenges faced by banks to generate enough profit (Figure 66).

In contrast to the reported actual levels of RoE, a majority above 50 % of respondents to the RAQ for banks continues to consider an RoE value in the range of 10 % to 12 % as the target for the long-term viability of their businesses.

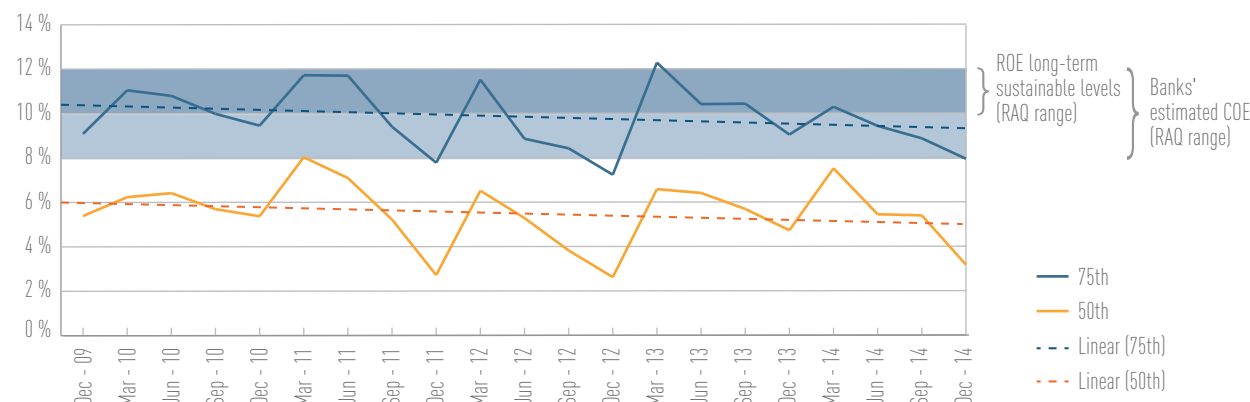
In addition, the number of respondents that agree to consider an RoE below 12 % grew (from 62 % in June 2014 and 66 % in December 2014 to 69 % in June 2015) and those in the range of 12–14 % have significantly been reduced (from 41 % in June 2014 to 25 % in June 2015). This provides evidence of a significant reduction in terms of banks' RoE expectations. Attained and expected levels of RoE contrast with banks estimates of their cost of equity (CoE), above 8 % in most of the cases (Figure 67).

**Figure 66: RoE by profitability bucket and percentage of banks' total assets**

Source: EBA KRI data and EBA calculations.

**Figure 67: RoE — 50th and 75th percentiles and comparison with RAQ for banks**

Source: EBA RAQ and EBA KRI.



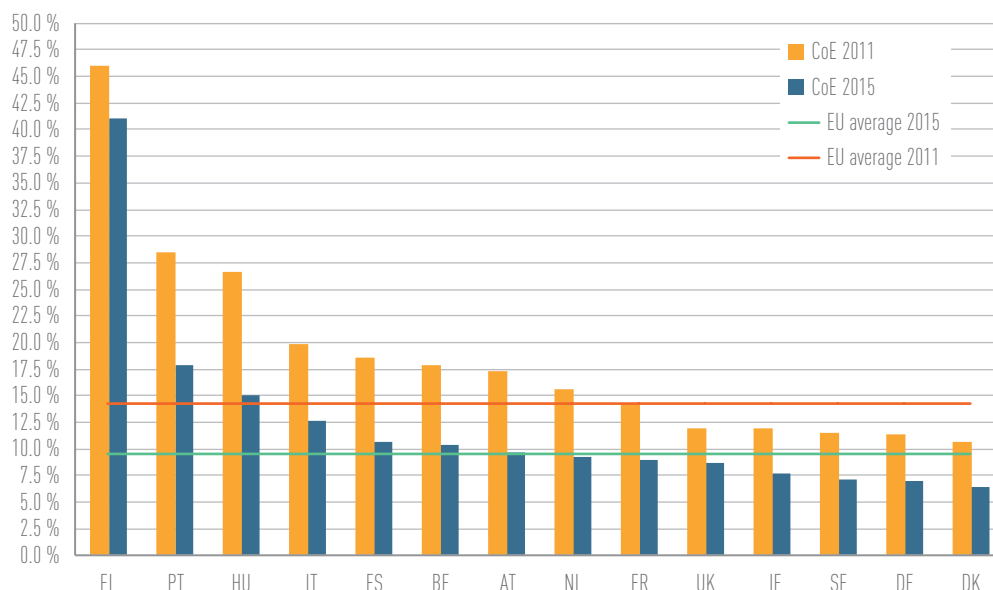
### Banks' average cost of equity decreased by one third between 2011 and 2015

The EBA has carried out an analysis on the CoE, comparing 2015 and mid-2011 in order to assess its evolution and the impact of the LTRO and the QE programmes (as the market in 2014 already discounted the effect of the QE in 2015) <sup>[16]</sup>. According to the results of the analysis, in 2015 the EU average CoE is 9.5 %

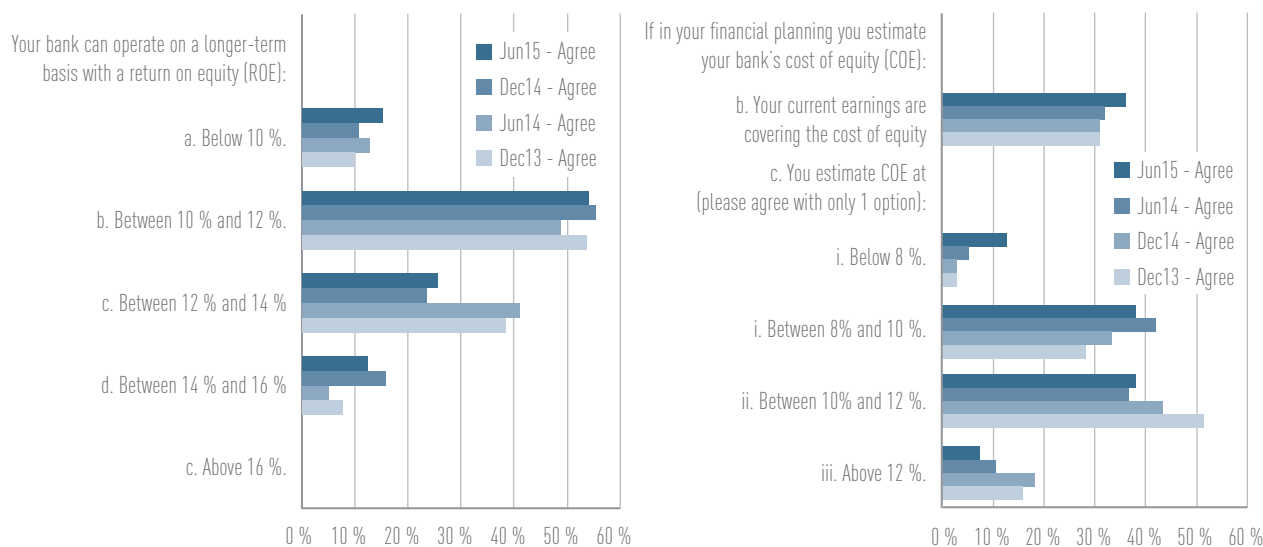
(9.15 % excluding Greece), 5.5 percentage points lower than the one in 2011 (14.6 %). The difference is mainly explained by the interest rates environment, that in 2011 were at their peak (especially in the peripheral countries) and by the higher risk aversion due to the lack of policy measures (Figure 68). It is worth noting that banks, market analysts and longer term investors will tend to focus on sustainable or longer term CoE and RoE, while the figures here relate to point in time CoE.

<sup>[16]</sup> The analysis is based on a sample that includes the top 30 EU listed banks. Country-specific CoEs were calculated aggregating the single bank data figures by market capitalisation of respective banks. The CoE is estimated according to the capital asset pricing model (CAPM) approach with the formula  $CoE_i = R_{rf} + \beta_i * (RiskPremium_{mkt} - R_{rf})$ . The data source for the analysis is Bloomberg for Betas (computed on a time lapse of 500 days considering the national equity index as a benchmark) and interest rates (10y government bonds) and NYU Leonard N. Stern School of Business for the equity risk premiums ([http://pages.stern.nyu.edu/~adamodar/New\\_Home\\_Page/datafile/ctryprem.html](http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/ctryprem.html)).

This is in line with the view of banks expressed in the RAQ, where a vast majority of respondents (80 %) consider their CoE to be in a range between 8 % and 12 % (with approximately the same number of responses placing it in the 8–10 % range and in the 10–12 % range, close to 40 % in both cases). Only around 35 % of the respondents agree that their current earnings cover their CoE (Figure 69).

**Figure 68: CoE for EU countries**Source: Bloomberg, NYU Leonard N. Stern School of Business, EBA calculation<sup>(17)</sup>**Figure 69: RoE and CoE**

Source: EBA RAQ for banks.



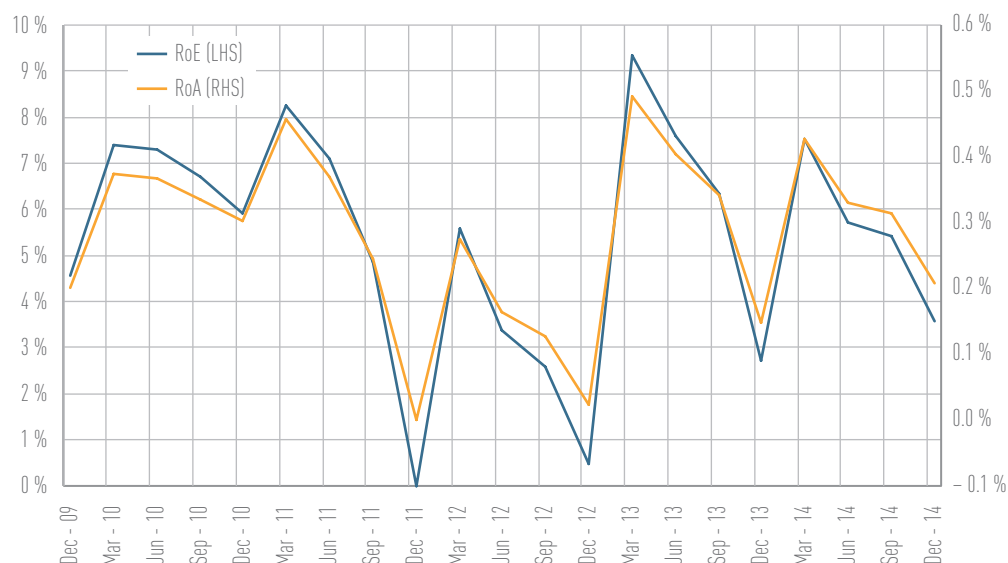
RoE and RoA both present a similar evolution since December 2009, with periods in which RoE is higher than RoA, meaning that total assets are growing at a greater pace than equity. In other periods it is the other way round, and equity grows at a greater pace than total

assets, what leads to a higher RoA. Since December 2013, the trend is overall a better behaviour of RoA, meaning that the turnaround in asset volumes from deleveraging to stabilisation/growth is supported by equivalent or even higher equity increases (Figure 70).

<sup>(17)</sup> Estimates based on July 2011 and April 2015 data. Equity risk premium calculated in accordance with data of January 2015.

**Figure 70: RoE and RoA in comparison**

Source: EBA KRI.



Bank's RoA needs to continue to improve given lower leverage (higher equity to assets) due to CRD IV implementation. Given the long term nature of bank assets, particularly mortgages, it can take time before banks can adjust their revenues to reflect higher capital requirements and the balance sheet structure required by new liquidity rules.

#### Net interest income is gradually improving but still under great pressure

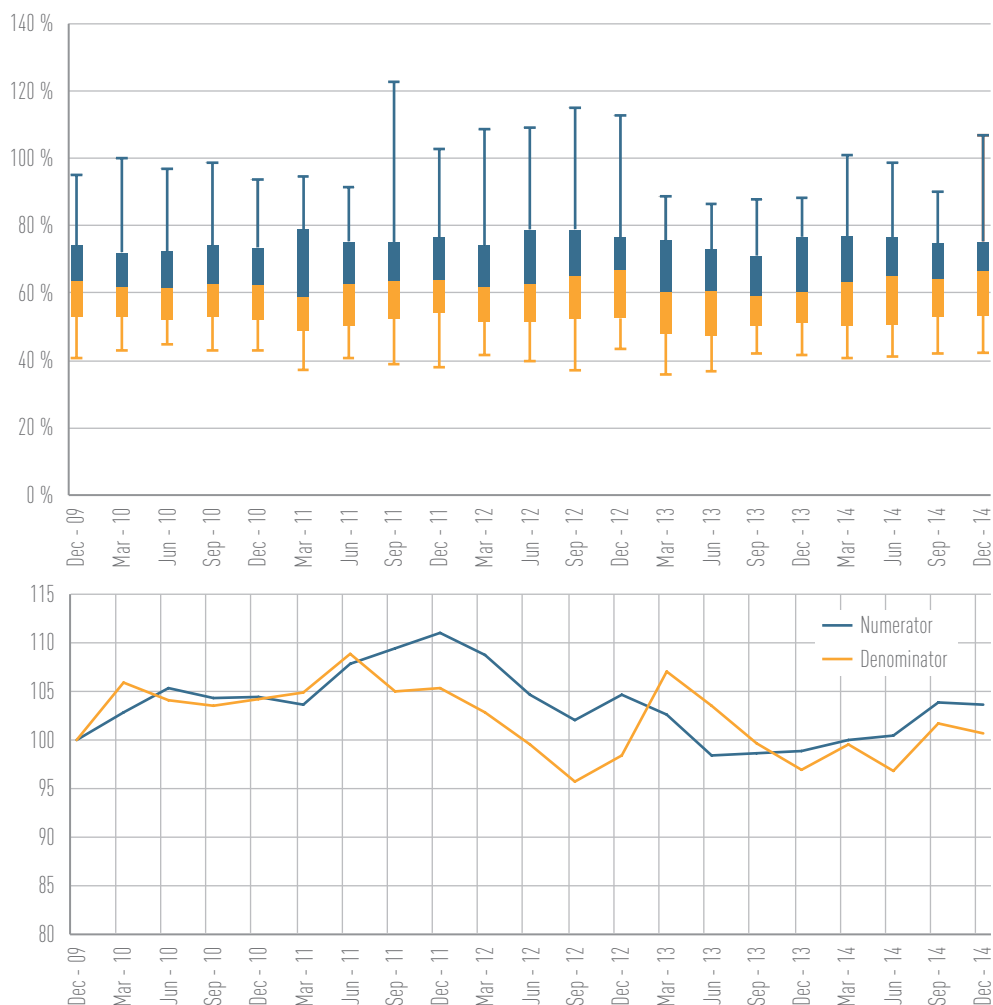
Total volume of net interest income (NII) has slowly and gradually been increasing since June 2013 (+ 4.6 % during 2014, + 5.3 % since June 2013), reaching, as of December 2014, levels above 2009 (almost 4 % above) but still well below December 2011 (– 7 % compared to December 2011). On aggregated levels the dispersion of NII to total operating income is decreasing (lower interquartile range) compared to December 2013. This could be an indication that banks' earnings are stabilising and becoming more predictable, although there are more outliers. In terms of the weighted average NII to total operating

income per country, values vary between 47 % and 82 %. The median is 66.6 % as of December 2014, with eight countries reporting average values below the median (three of them with values of NII that represent 50 % or less of total operating income, Figure 71).

Growth of total NII can be partially explained by the increase of total loans. Another driver behind this evolution is the increase of the portion of loans funded with deposits and the growth of central bank funding. This way, deposits and central bank funding are replacing more expensive sources of funding and partially compensating, through lower costs of funding, the decline in loans' rates that arise from re-pricing of existing loans and granting of new loans at lower rates, due to decreasing interest rate benchmarks. Nevertheless, the positive effect of these factors is not enough to compensate the impact of an environment of low interest rates in banks' net interest margins, which remain very fragile and unable to lead acceptable levels of RoE, especially in those banks with still high levels of bad loans and loan impairments.

**Figure 71: Net interest income to total operating income – 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)**

Source: EBA KRI.



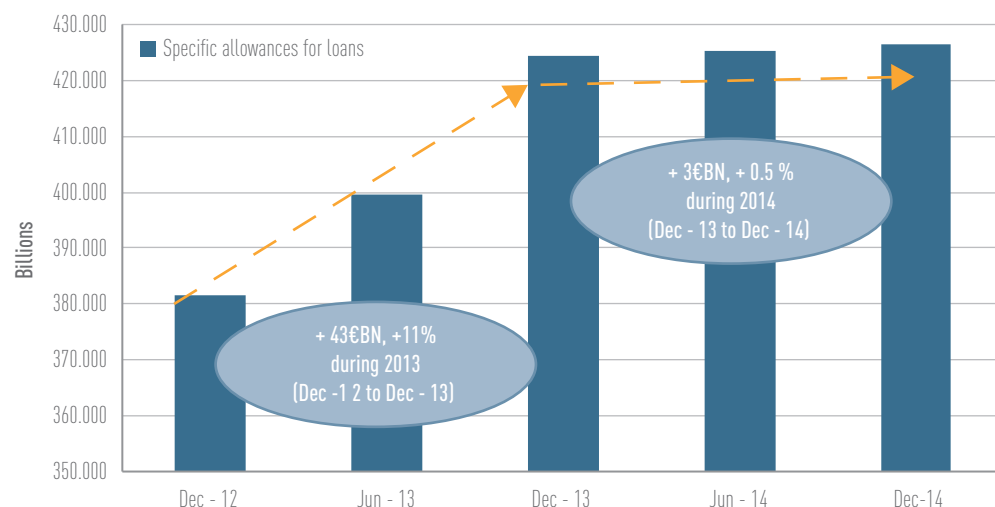
**Decreasing level of impairments is pushing profitability up, and expectations are that they will decrease further in the future**

The balance sheet repair process of the EU banking system and the impairments booked in preparation for the 2014 AQR and EU wide stress test exercise involved a significant front-loading of impairments during 2013 with additional provisioning of EUR 43 billion between December 2012 and December 2013. During 2014, provisioning levels were maintained and kept basically unchanged (Figure 72).

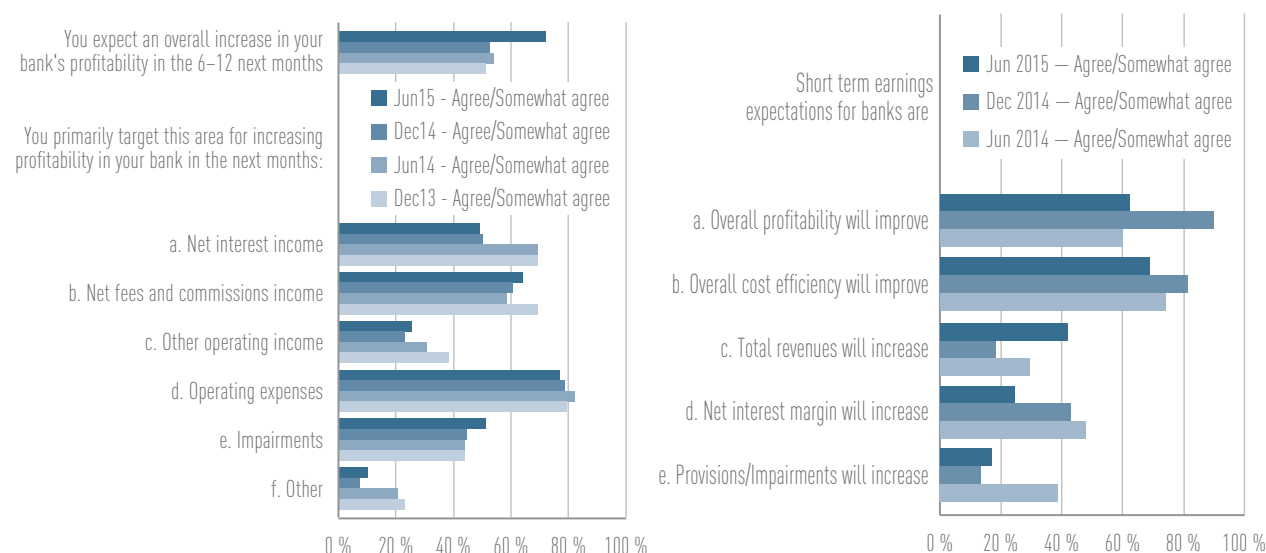
Banks and analysts expect impairments to decrease in the future, pushing up profitability and RoE. In their responses to the RAQ, banks reflect their expectations that the costs side will be an important driver that will positively influence RoE in the coming months, for both impairments (51 % of banks 'agree' or 'somewhat agree') and other operating expenses (77 % of the banks 'agree' or 'somewhat agree', Figure 73).

**Figure 72: Evolution of specific allowances for loans (billion EUR)**

Source: EBA KRI data and EBA calculations.

**Figure 73: Evolution of profitability in the next months and main drivers**

Source: EBA RAQ for banks and EBA RAQ for market analysts.



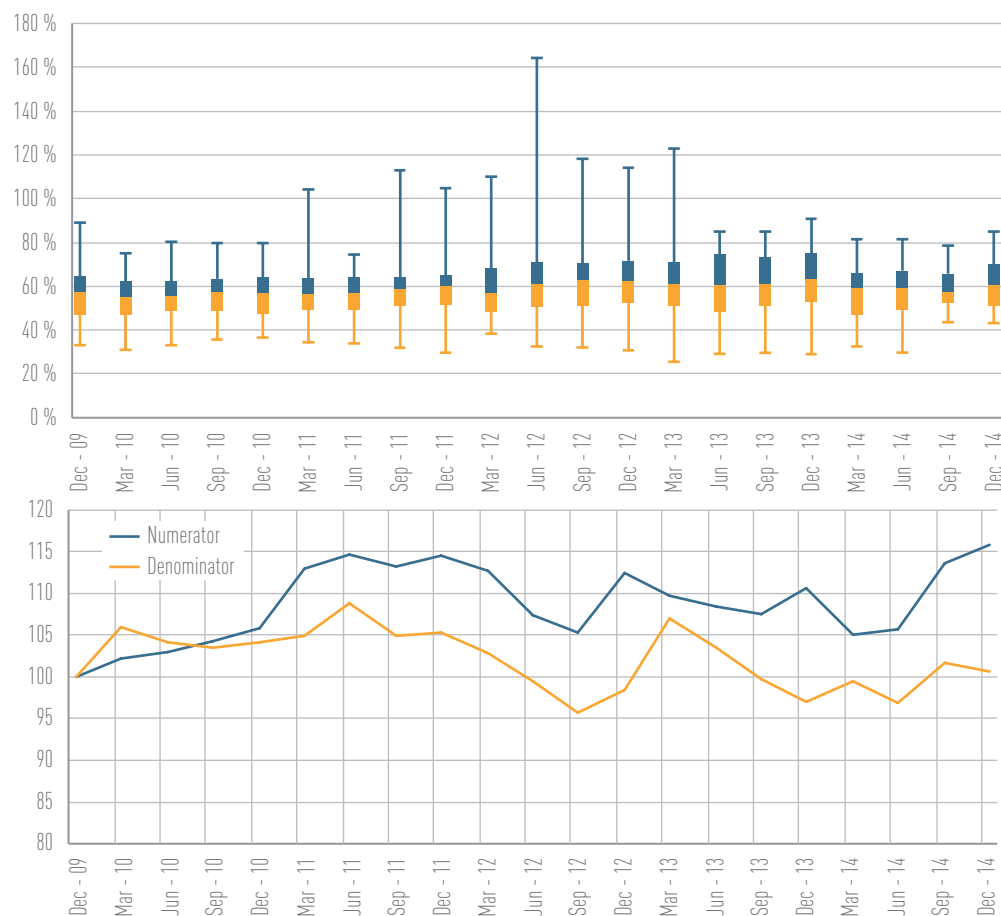
### The cost-to-income ratio for European banks is rising again

The cost-to-income ratio evolved from 55.2 % as of December 2009 to 63.6 % as of December 2014, its worst level since 2009. In terms of median and 75th percentile, values reported are also far from the best levels, although there were worse values reported

in the time-series. Finally, the increasing gap between costs and operating incomes during 2014 (Figure 74), with costs growing at a great pace, raise concerns in an environment of low interest rates and struggling interest margins, where one of the banks' main expectations to increase profitability is through operating expenses reduction (Figure 73).

**Figure 74:** Cost-to-income ratio — 5th and 95th percentiles, interquartile range and median, numerator and denominator trends (December 2009 = 100)

Source: EBA KRI.



The top 15 banks by total assets behave worse in terms of efficiency compared to the rest of the banks, with their weighted average cost-to-income ratio varying from 59 % at the end of 2009 to 66 % at the end of 2014 (54 % to 58 % for the rest of the banks). Additionally, the dispersion of the median by country is high. In December 2014, banks from seven countries presented median values of cost-to-income ratios higher than the EU median of 60.75 % (Figure 75). Seven additional countries report cost-to-income ratios equal to or below 50 %.

Banks show broad consensus in the RAQ on their intention to keep reducing costs through a reductions of overheads and staff costs (75 % of the banks, although below percentages close to 90 % in previous editions of the RAQ). A big majority of banks, around 70 %, intends to achieve saving through increasing automation and digitalisation. Banks still expect to increase their efficiency by cutting non-profitable units, but to a lesser extent (around 40 %, down from levels around 50 % in previous periods, Figure 76).

In this context, supervisors need to be particularly vigilant to banks' plans to cut oper-

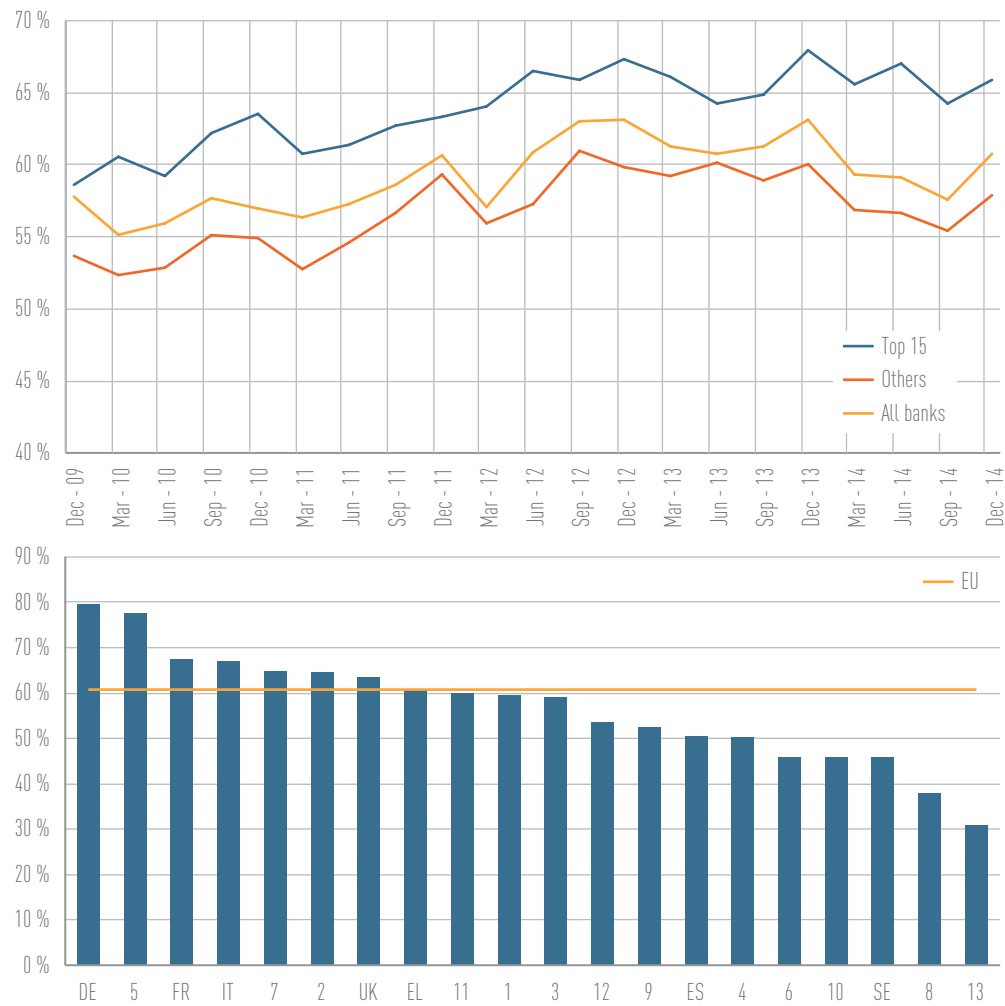
ating expenses going forward, especially to their plans to reduce overhead and staff costs and to the potential operational and strategic risks. Banks should design their plans to reduce costs aiming at increasing their efficiency, and not seeking pure outright reductions. Otherwise plans may result in the loss of specialised staff and specific skills in certain areas such as cyber-security, anti-money laundering, internal audit, and risk management areas. It is also important that banks retain sufficient experienced front line staff in order to generate good quality new business to protect each bank's franchise. Otherwise, this might provoke further increases in other costs (e.g. fines and legal penalties) and lead to an effect opposite to the intended, triggering additional losses of efficiency and further constraints to profitability.

Supervisors should also consider in their assessment of the banks' plans to cut costs, potential problems created by previous cutbacks that may have already led to a lack of appropriately skilled staff in specific areas. Going forward, cost-cutting plans should always be aligned with the banks' stated risk appetite in terms of revenue generation.



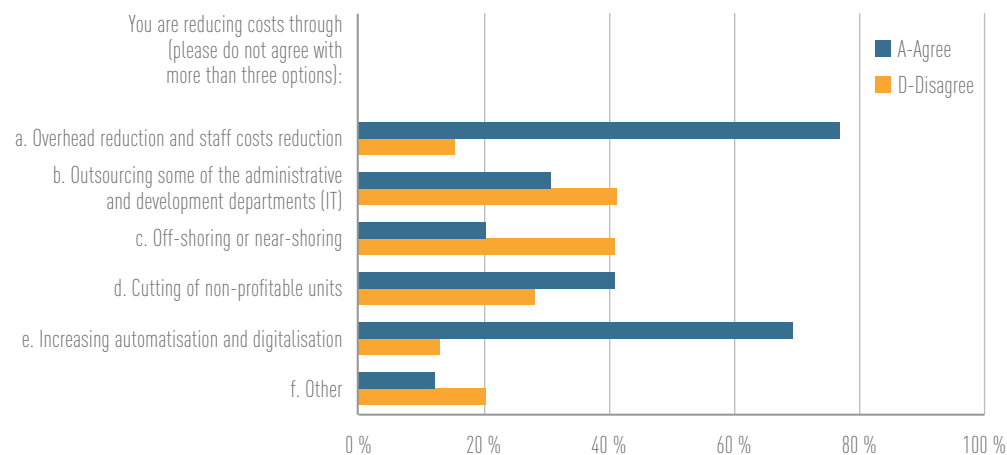
**Figure 75: Cost-to-income ratio — KRI by size class (banks by size class according to their average total assets) and country dispersion (median by country)**

Source: EBA KRI.



**Figure 76: Reduction of costs**

Source: EBA RAQ for banks.



### Profitability drivers — Comparison between geographies

Despite the progressive improvement of RoE and RoA ratios since their lowest levels (December 2011), profitability in euro area Group 2 countries is still very low (RoE is 1.5 % as of December 2014). In the euro area Group 1 countries and non-euro area countries, the banks' profitability, although above that of euro area Group 2 countries, remains also depressed and far away from sustainable levels (RoE is 3.5 % and 5.6 % for euro area Group 1 and non-euro area countries respectively), with non-euro area banks reporting a better behaviour<sup>(18)</sup>.

The evolution of RoE and RoA values since December 2009 is much more volatile over time in euro area Group 2 countries compared to euro area Group 1 and non-euro area countries. Volatility in those countries is higher in terms of RoE than in terms of RoA, where volatility of net income is, to some extent, being offset by decreasing total assets due to deleveraging. The efforts of banks during this period to enhance their capital position also contributes to putting downward pressure on RoE (Figure 77).

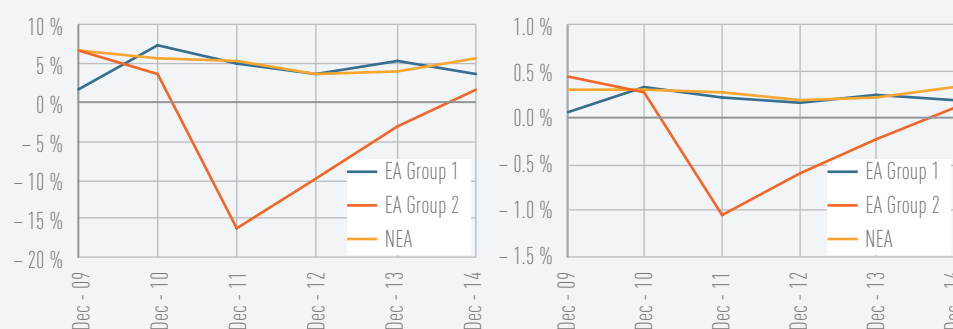
The level of impairments on financial assets is a main driver behind these differences in profitability. Banks in euro area Group 2 countries report impairments that represent almost 37 % of their total operating income in 2014, compared to 14 % in euro area Group 1 countries and 6 % in non-euro area countries (Figure 78).

On the revenues side, the earning mix and its evolution differ in the three geographies (Figure 78).

<sup>(18)</sup> In the calculations AT, BE, DE, FI, FR, LU and the NL are considered as Group 1 countries, CY, ES, GR, IE, IT, MT, PT and SL as Group 2. Eurozone countries with no banks in the sample are EE, LT, LV and SK.

- **Banks in the euro area Group 2 countries** — NII is especially relevant in these banks, representing 64 % of their total operating income (TOI) as of December 2014. Net fees and commissions are growing steadily throughout the observation period and keep gaining weight in their earning mix. This source of revenue, net of expenses, amounts to 27 % of the institutions' TOI as of December 2014, 338 bp above the December 2009 levels. Net gains on financial instruments at fair value are the least significant of the operating income elements for these banks, representing only slightly above 1 % of their TOI as of December 2014, and continue to decrease. The relevance of NII in these banks in a context of low interest rates raises important uncertainty on their ability to boost profitability. Given the still remarkably high level of impairments in these banks, and asset quality permitting, reduction of impairments might be a main driver to improve net incomes in the near future. Net fees and commission might also contribute, at least to some extent, to raise profitability in these banks. In terms of operating costs, although banks in these geographies report better efficiency ratios than in the other two areas, they are gradually losing efficiency, with their cost-to-income ratio increasing from 48.5 % in December 2009 to 56 % in December 2014.
- **Banks in euro area Group 1 countries** — While NII is of great relevance for these banks as well (55.5 % of TOI), their earning mix is more diversified, with a higher weight of net fees and commissions (30 % of TOI). Impairments are also an important toll to these institutions' net income (14 % of TOI), and further improvements in credit

**Figure 77: RoE (1) and RoA (2) — Comparison between euro area (EA) Group 1, euro area Group 2 and non-euro area (NEA) countries**  
Source: EBA KRI and EBA calculations.



quality might contribute to improve their profitability, although to a much lesser extent than in the case of banks in Group 2 countries in the euro area. Net gains on financial instruments at fair value represent slightly more than 5 % of TOI. Efficiency is much lower in these banks, with a cost-to-income ratio close to 70 % and room for cutting operating costs that might increase profitability significantly.

- A major change in the earning mix of **banks outside the euro area** has occurred since the beginning of the financial crisis. Winding down of proprietary trading activity, linked to conduct-related issues and to the structural regulatory reform of the EU banking sector, has triggered a shift from net gains on financial instruments at fair value, a component that used to rep-

resent almost 23 % of TOI as of December 2009 moving to slightly above 10 % as of December 2014, towards NII, a component that has increased its weight compared to TOI by almost 10 percentage points during the same period. This change will probably have a positive impact on the banks' conduct-related costs in the future, once past conduct issues have been overcome. Nevertheless, in the short term, it may raise important challenges for the banks' already subdued profitability, as they are moving away from profitable though volatile sources of income to sources of revenue weakened by the low interest rate environment. Banks in this geography are also losing efficiency, with the cost-to-income ratio moving from 49 % at December 2009 to 62 % at December 2014.

**Figure 78:** NII to TOI [1], Net fees and commissions to TOI [2], Impairments on financial assets to TOI [3], Net gains on financial instruments held for trading and at fair value through profit and loss to TOI [4] — Comparison between euro area Group 1, euro area Group 2 and non-euro area countries

Source: EBA KRI and EBA calculations.



### EU banks still face important challenges to profitability and deep uncertainties remain

Market participants emphasise in their responses to the RAQ the potential impact of the new regulations on capital and MREL on banks' funding costs. More than 80 % of market analysts expect an increase in banks' funding costs due to the issuance of BRRD/MREL/TLAC-compliant funding instruments

(Figure 38). There is also uncertainty linked to the potential consequences of the banking sector structural reforms and the subsequent shrinking of activities (investment banking and proprietary trading) that are at the moment materially contributing to the profits (net gains on financial instruments), however, with high volatility.

Conduct-related charges and litigation costs remain a significant toll on banks' results, and important provisions are still being booked for future charges. Heightened scrutiny from regulators both in Europe and overseas may result in additional large fines and litigation costs that will keep dragging banks' net revenues down.

- More than 55 % of the banks answering to the RAQ have paid more than EUR 100 million in the form of compensation, redress, litigation and similar payments since the end of the financial year 2007/08. Some 25 % of the banks have paid more than EUR 1 billion.
- Banks also expect that aggregated litigation costs will increase further in the near future in Europe (almost 50 % of the banks in the sample of the RAQ).

The low interest rate environment continues to put pressure on banks' net interest margins, with further tensions expected as a consequence of the ECB's QE programme and intensifying monetary easing policy, in a context of reservations on inflation expectations. Downward pressures to already depressed levels of net interest margins, which represent 60 % of the total operating income of European banks, together with a decreasing efficiency of banks, lead to returns on equity below the cost of equity and to doubts on the viability of specific business models.

Increased competition in the sectors, products and type of clients that banks are planning to focus on might contribute to more pressure on net interest margins. Moreover, increasing disintermediation of financial services traditionally provided by banks and a more relevant role of shadow banking institutions may hamper the ability of banks to grow in areas that may compensate the declining net interest margins.

Finally, political issues in some euro area countries, geopolitical risk and macroeconomic uncertainty in emerging markets may challenge banks' profitability, from the asset quality side and also by raising concerns on the sustainability of certain business models.

#### **On the other hand, there are also trends that could go forward to prompt a recovery of banks' results**

Market participants show greater optimism about the banks' capacity to gain momentum and enhance their performance. Banks and analysts perceive a potential for stronger loan growth that may partially offset the decline in net interest margins with volume.

Decreasing funding costs might also partially relieve NII from the expenses side.

Net income from fees and commissions is also perceived by banks as a source of revenues that may partially offset the decrease of interest incomes. A shift of investors looking for yields from low returns investments to mutual funds and insurance products may boost this line of revenues. There is a trend observed, mainly in euro area countries, where this kind of income is gaining momentum and gradually increasing its weight in the banks' earning mix. Threats to this line of income might come from a growing role of shadow banking institutions and the disintermediation of the kind of financial services that generate this type of income.

The long and lasting repair process of the European banks' balance sheets and the asset quality reviews conducted across the continent have led to a rather stable credit quality of banks' loan portfolios (see Chapter 2 — Asset side about impairment ratios). This, together with a positive impact of incipiently improving macroeconomic conditions and monetary easing on debtors' creditworthiness, should push impairment allowances further down. Moreover, the restructuring and consolidation process of the EU banking sector initiated during the crisis is contributing to solving the problem of unprofitable business models.

#### **Market participants expect further changes to business models triggered by regulatory changes and in search of profitability**

In January 2014, the European Commission adopted a proposal for a regulation to stop the biggest banks from engaging in the risky activity of proprietary trading, following the recommendations included in the Liikanen report. The new rules envisage a structural separation of the risks associated with banks' trading activities from their deposit-taking function. This suggested reform comes on top of the regulatory reforms developed and being implemented in the single market to increase the resilience of banks and to reduce the impact of potential bank failures: the new rules on capital requirements for banks (CRR/CRD) and the new BRRD. Moreover, the financial crisis highlighted important constraints of certain types of business models, leading to the restructuring and consolidation process of the European banking sector.

The regulatory reforms already implemented and the essential restructuring process of the EU banking sector initiated after the crisis have already triggered important changes

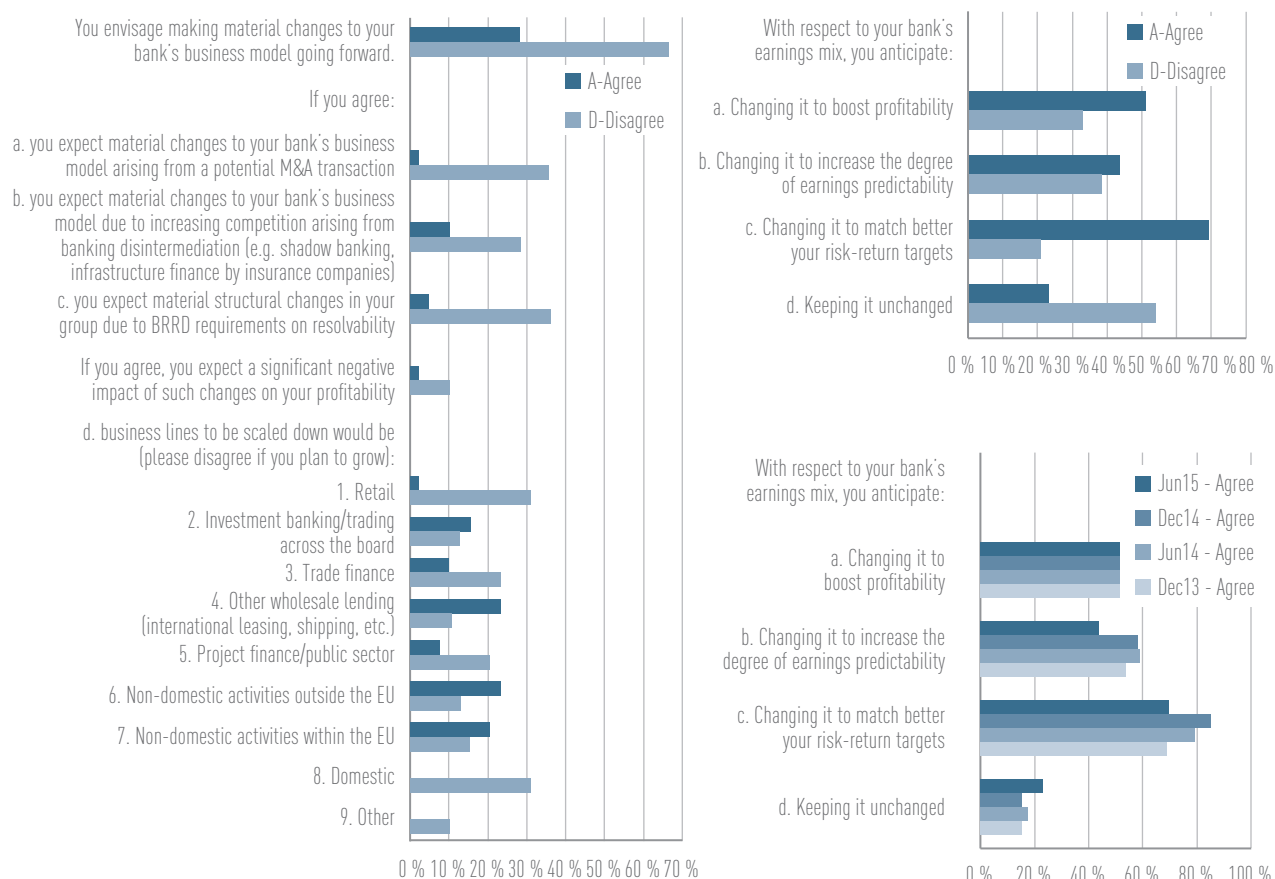
to banks' business models. Still more profound changes are likely to occur, mainly linked to the necessary resolvability of banks envisaged in the BRRD, and to the structural separation of banks' business proposed in the Liikanen report and in the related EU proposal of regulation on structural measures improving the resilience of EU credit institutions.

While market analysts largely agree on future foreseeable changes to banks' business models that will be driven by the regulatory reforms still to implement (100 % of the analysts answering to the RAQ expect further changes to business models coming from new regulation on capital and 91 % expect changes arising from the banking structural reform), banks' perception is that they have already put in place change programmes and have adapted to the new environment (ac-

cording to the RAQ, only 28 % of the banks envisage material future changes to their business models). For the minority of banks that plan to make additional changes to their business models, the business lines to be scaled down continue to reflect, to some extent, the refocusing on core activities and markets. For this reason, non-domestic activities, both within the EU (which has market fragmentation as a side-effect) and especially outside the EU, continue to be a prevalent choice for scaling-down. Despite their reluctance to consider further changes to their business models going forward, banks nevertheless anticipate changes to their earning mix in order to boost profitability. This is in a context of RoE levels that do not seem to be enough to cover banks' CoE and that make, in many cases, business models unviable if kept unchanged (Figure 79).

**Figure 79: Changes to the business model**

Source: EBA RAQ for banks and EBA RAQ for analysts.

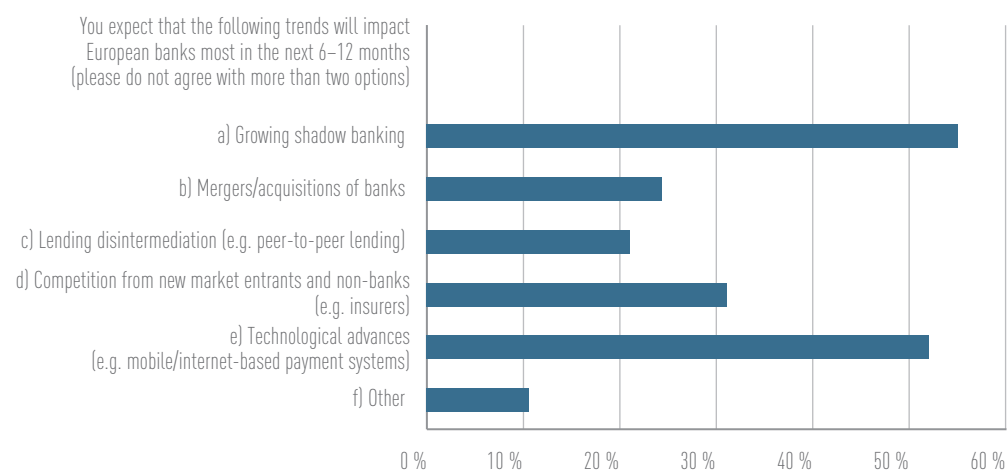


Finally, market analysts consider that shadow banking and technological advances are trends that will likely have an impact on the EU banking sector and on banks' business models, in the short term (Figure 80). The ongoing tightening of banks' regulations combined with ample liquidity and investors' search for yields are factors that may be encouraging a shift of traditional banking activities into shadow banking (such as

mutual funds, hedge funds, finance companies, venture capital corporations and securitisation vehicles). An increasing role of the shadow banking and of the disintermediation of financial activities traditionally developed by banks may result in further impacts to banks' revenues (especially fees and commissions) and to their ability to grow in areas that could compensate the declining net interest returns.

**Figure 80: Trends that will impact European banks**

*Source: EBA RAQ for analysts.*



## 6. Consumer issues, reputational concerns and IT-related operational risks

Risks related to detrimental business practices of EU banks continue to be high on the agenda of both supervisors and banks. The substantive materialisation of these subrisks of operational risk, a wide scope of identified and alleged mis-conduct, the high frequency of incidences, and the magnitude of incurred costs have made related risks a priority on supervisory agendas. In addition to conduct of business concerns, risk related to information technology (IT) has gained further attention from both supervisors and banks, and is one of the main operational risks in the supervisory scope. The results of the SREP also showed heightened concern about operational risk, and in particular IT risks among supervisors, besides asset quality and profitability concerns. While IT-related risks have posed threats to banks for a while, their complexity and sophistication has increased further. In addition, the dimension of IT risk is expanding as banks' reliance on IT-related business increases further, and also covers technological advances such as cloud computing, payment systems and further new 'digital' products.

### 6.1 Legal/litigation issues and reputational concerns

A wide scope of alleged and identified inappropriate business conduct has already been identified in previous reports and remains a substantive supervisory concern. Detrimental practices such as mis-selling of banking and other products to consumers and failures with regard to rate benchmark-setting processes have had, and continue to have, a detrimental impact on those banks concerned. More recently, violations of trade sanctions and misconduct related to foreign exchanges have increasingly come to the fore and were identified to have the most substantive impact on those banks concerned. However, while the scope of identified inappropriate business practices remains wide, it appears not to have widened further compared to the last risk report. Further previously not identified alleged mis-practices supplementing the wide range of already identified mis-practices are currently not coming to the fore.

#### Material impact from legal issues and tax litigation on capital and profitability

Responses to the RAQ confirm that a wide scope of banks are affected by conduct concerns, while the magnitude of financial impact from misconduct has stabilised, after a steady rise in previous RAQs of compensation, litigation and similar such payments banks have to pay. Some 18 % of participating banks paid out litigation and similar payments of over EUR 100 million in the ongoing financial year, while 35 % of banks indicated to have rendered such payments in the previous RAQ. Thereof, 10 % of banks had to render such payments of over EUR 1 billion, compared to 16 % in the previous RAQ. When taking into account a longer time horizon, some 25 % of participating banks meanwhile rendered such payments of more than EUR 1 billion since the end of the financial year 2007/08, and over one third of participating banks paid out over EUR 500 million<sup>19</sup>.

Regarding potential future legal issues and litigation costs, the EBA data indicates that the impact of provisioning for pending legal issues and tax litigation will continue to be a challenge, in particular while profitability remains subdued. For the largest EU countries, including France, Germany, Italy, Spain and the UK, provisions ranged from roughly 5 to 10 % of operating income in Q4-2014.

Figures on provisions reflected in the chart above have to be interpreted cautiously, since different banks (in different countries) have different provisioning practices, therefore the level of provisions is not a perfect proxy of the expected litigation costs. While the magnitude of the financial impact from misconduct has stabilised, the scope of misconduct remains wide among European banks. The RAQ indicates that almost all (97 %) participating banks had to render some compensation, litigation and similar payments in the ongoing financial year. There are also forward-looking expectations of further substantial impact in the form of compensation and litigation

<sup>[19]</sup> The breakdown of the specific figures corresponding to penalties paid or recorded in profit and loss accounts is not available in supervisory reporting and the analysis is based on the responses to the RAQ.

payments, and reputational and financial concerns are not expected to abate soon.

Some 48 % of respondents to the RAQ expect aggregated litigation costs in the EU banking sector to increase further in the next 6–12 months, after 45 % of respondents already had such expectations in the previous RAQ. Also, 72 % of respondents see an increasing reputational and legal risk in the banking sector in general, and a negative trend in the banks' image with public opinion (68 % in the previous RAR). Accordingly, continued uncertainty over the scope of potential further financial and reputational impact stemming from misconduct can not only lead to a financial impact, but also to additional substantial reputational damage. Such concerns may impact wider consumer confidence and financial stability, too.

The magnitude of compensation, litigation and similar payments can also significantly affect profitability and capital-generating capacities of banks concerned. While overall bank profitability remains very low, the additional detriment to bank profitability that misconduct costs pose is an issue of supervisory concern. In an environment of prolonged low interest rates, bank profitability increasingly relies on fee and commission income generation, and becomes more susceptible to potential costs arising from misconduct. Also, low-profitable banks might enter riskier business in search of generating additional fee and commission income. These banks could, in turn, become more susceptible to potentially further inappropriate business practices. These operational risk events can manifest themselves in operational risk losses.

#### Provisioning and disclosure of conduct risk

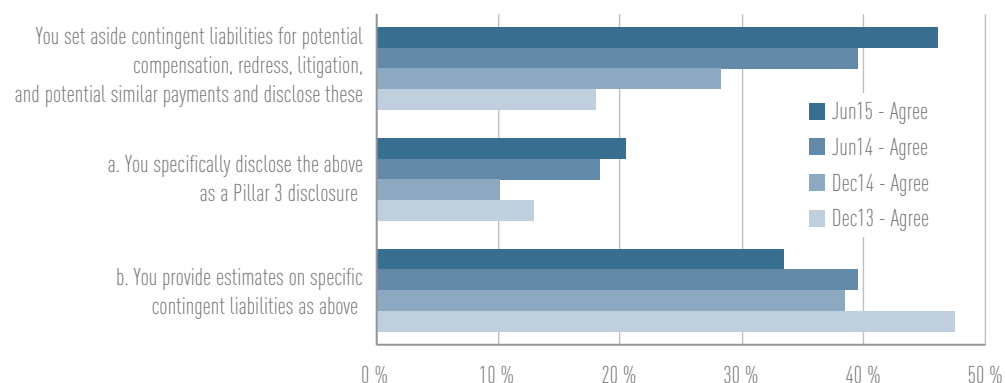
The RAQ results points to a continued trend of growing awareness of conduct risk at banks, including the continuation of a modest

improvement in provisioning on conduct risk indicated in the last risk report. About 50 % of respondents are now setting aside contingent liabilities for potential compensation, redress and similar payments. Yet the number is still rather low in light of elevated risk and of the magnitude of related costs that have in some instances materialised. Since a large majority of respondents identify increasing legal risks in the banking sector and almost all participating banks had to render some compensation, building up further contingency reserves should be a priority for banks, and an issue of supervisory scrutiny (Figure 81).

Also, disclosure on conduct risks continues to be underdeveloped, though cautiously improving. Approximately 20 % of respondents now indicate they are improving specific Pillar 3 disclosures, compared to about 10 % in the June 2014 RAQ. However, a decreasing number of respondents (now 33 %, but 39 % in the previous RAQ) provide estimates on specific contingent liabilities, in spite of international financial reporting standards (IFRS) stipulations to set aside contingent liabilities with no impact on the income statement if reliable estimates of actual and potential redress costs cannot be made and therefore provisions cannot be recognised. While this may be driven by reputational concerns which may arise when indicating actual and potential redress costs affecting the bank, improving disclosure is nevertheless important to remove uncertainties and to foster confidence in banks.

Sanctioning and embargoing certain activities has become one response of global regulators to address identified misconduct, and can include sanctioning of payment systems. Here, supervisory vigilance of implications is warranted in light of the critical function of payment systems for financial infrastructures.

**Figure 81: Contingent liabilities linked to conduct and similar risks**  
Source: EBA RAQ for banks.





## 6.2 Information and communication technology-related operational risk

The scope and magnitude of operational risks related to information and communications technology for banks has continued to increase since the last risk report and is now one of the main operational risks banks face. While IT-related risks have posed threats to banks for a while, their complexity and sophistication has increased further. As proliferation of IT in banking services is growing further, the dimension of risks is expanding as well, and banks' reliance on IT-related business continues to increase. It also covers technological advances such as cloud computing, retail payment systems and further advances as banks increasingly digitalise their business. Payment systems are particularly sensitive for banking and financial infrastructures. Also, new 'digital' products and distribution channels have been introduced or are under development in many banks.

Dependency, complexity and interconnect-edness of IT at banks continues to rise with growing proliferation of IT throughout business lines, while at the same time IT-related risks have become more complex and intense. Threats to IT environments increasingly target the confidentiality and integrity of information systems, by, for example, aiming to access banks' internal information systems.

Risks are crystallising as system outages, caused either by inadequate infrastructures or by high-profile cyber-attacks such as distributed denials of service (DDoS). Other outages have increased in scope and frequency. They not only affect the integrity of information systems, but also adversely impact on profitability of banks. Susceptibility to risks cannot only be ascribed to increasing sophistication of IT threats, but also to weak IT governance and past inefficient IT investments at some banks, to data theft or to fraud generated by cyber-attacks. Additional risks stem from fragmented IT systems, inadequately managed IT development processes and a tendency for underinvestment in IT systems.

Pressures to further reduce costs in an environment of prolonged low profitability risk is compromising efforts to maintain IT infrastructure adequately, and to commission new, large-scale IT programs required and adequate implementation to ensure future competitiveness. Due to limited resources,

IT projects often show high failure rates and long timelines for implementation or to pay off. Here, continued bank restructuring may add to challenges.

The RAQ results indicate that banks are aware of the need to address IT-related risks. Responses to risk appear to have become more targeted as fewer banks than in previous RAQs indicate that they subsume related risks under general operational risk. Increased spending on IT security remains the most important response of banks to address IT risks (72 % of respondents), followed by strengthening of governance, risk cultures (64 % respondents) and strengthening continuity plans (38 % respondents). However, the trends in agreement indicating an increase in IT spending and a strengthening of business continuity plans have decreased compared to the last RAQ. Reduced agreement may be a consequence of possible earlier spending increases in IT securities and strengthening of business continuity plans, but they should nevertheless be an issue of supervisory concern. As the complexity of IT systems continues to evolve while scope and magnitude of threats to IT security is increasing, further investments in IT security and business continuity plans are vital, and should be subject to supervisory scrutiny (Figure 82).

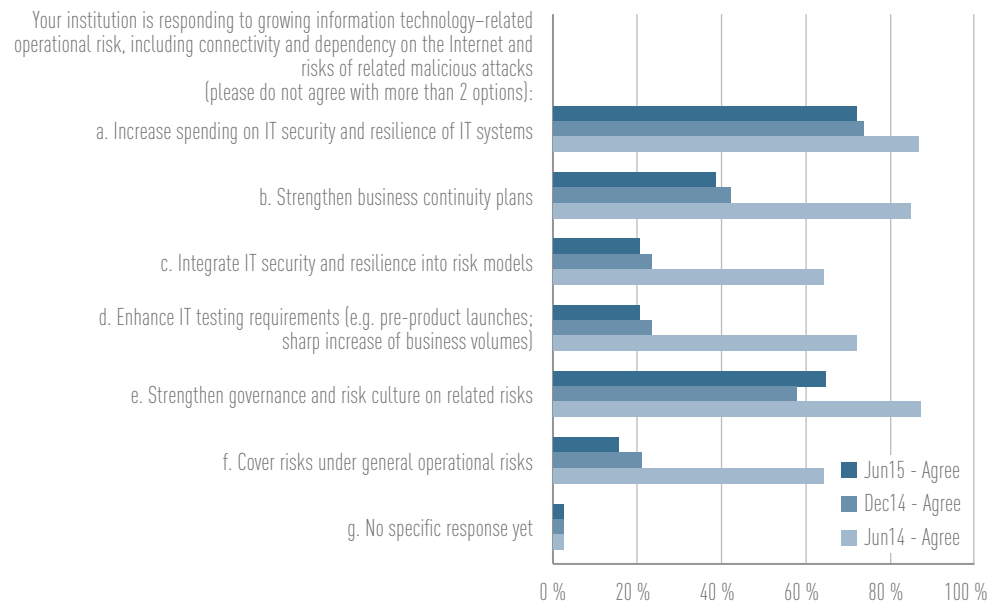
### Responses to increasing risks

Policies and banks' approaches to address IT risks should be broad-based and not only focus on prevention of risk, but also on identification and recovery procedures, as well as on risk response procedures. Policies and procedures should also reconsider the relevance of IT risks for all operational processes in banks. Regarding governance structures, it is also important that banks have functions in place that can identify, quantify and escalate IT-related risks independently from those functions responsible for the direct management of these risks.

IT audits and controls should be reinforced and should cover all parties along the value-added chain of IT at banks, such as third-party IT providers, banking software vendors and outsourcing providers. Efforts should also include rapid use of new technologies such as transaction-filtering systems, which can detect and deter potentially fraudulent transactions at an early stage.

Further steps are also needed to integrate IT security and resilience into internal risk models banks use. It would also be important for banks to set adequate tolerance limits for this key operational risk.

**Figure 82: Information technology-related operational risk**  
Source: EBA RAQ for banks.



## 7. Policy implications and possible measures

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Despite many positive developments observed, banks' enhanced capital position and an improved market sentiment, there are still significant risks and vulnerabilities that demand further policy and supervisory action.

**Predominant challenges to profitability in a context of low interest rates, still high NPL levels and increased competition underline the necessity of in-depth supervisory assessment of banks' business models.** These risks also underline the need for coordination among supervisors when conducting such assessments in the case of cross-border banking groups. Sustainability and viability of business models remain a cause for concern, where NPL levels although decreasing remain high especially in certain countries, potential drivers to boost profitability in a sustainable manner are unclear and it is imperative that supervisors have a clear picture of institutions' earnings and funding mixes and strategies. In this context of low revenues, supervisors also need to be particularly vigilant to banks' plans to cut operating expenses going forward. Moreover, closer cross-sector cooperation will also be needed with insurance and security markets supervisors. This might especially be relevant in light of the risks and vulnerabilities arising from a potential decrease of trading market liquidity, in order to develop measures to counter respective risks. Finally, the 2014 AQR process was a major step forward in enhancing the quality of banks' assets. Nevertheless it is not the end of the story and further supervisory work is necessary to keep improving the quality of banks' balance sheets and decreasing NPL levels. This may have possible implications on the restructuring and consolidation process of the European banks.

**The need for continued regulatory and supervisory convergence across the EU will remain a key focus for the EBA.** With the aim of promoting regulatory convergence, the

EBA continues to make progress in the development of a single EU-wide rule book. For this purpose, the EBA has so far issued more than 90 technical standards, and another 50 are in the pipeline. For the purpose of boosting supervisory convergence, the EBA's efforts focus on facilitating consistency and coherence of supervisory practices through further work on the European supervisory handbook and supervisory training; improving processes and cooperation for key supervisory tasks of cross-border banking groups in supervisory colleges; promoting consistent treatment and enhanced cooperation with third countries by assessing the equivalence of their confidentiality provisions; continuing work on matters related to recovery; and engagement with resolution authorities. The prevailing risks linked to emerging markets underline the need for enhanced cooperation of EU authorities with authorities from third countries, giving special relevance to the work that the EBA is currently developing in this area. Reaching convergence in supervisory practices is important to underpin a consistent implementation of the single rulebook and the well-functioning of the single market, and to restore the benefits of appropriate levels of cross-border banking activity, for instance in terms of cross-border funding and lending.

**The growing role and competition from shadow banking institutions, the increasing exposures of banks to this kind of institution and the impact that such institutions might have on banks' business due to additional competitors demands supervisory attention.** In March 2015, the EBA launched a public consultation on its guidelines proposing criteria to set limits on EU institutions' exposures to shadow banking entities. The EBA's guidelines propose criteria which shall help banks implement effective processes to set limits on exposures to shadow banking entities, at both aggregate and individual levels.

The increasing scope and scale of operational risks related to information and communications technology for institutions requires special supervisory oversight. Cyber-risks should further rise in the supervisors' attention. In order to support respective tasks, the EBA has created a task force on IT risk supervision. This task force's objectives are: to analyse and prioritise the relevant prudential IT risks; to promote the exchange of relevant IT supervisory information and experiences; to enhance cooperation among supervisors; to ensure the provision of adequate IT supervisory trainings; to identify and promote good practices on IT supervision; and to liaise and cooperate with other relevant authorities. Finally, and as mentioned in the December 2014 RAR, supervisors should pay additional attention to monitoring if adequate provisioning for reputational and legal risks has been made, and if contingency reserves are being built.

Supervisory and regulatory convergence across the single market should also extend to macro-prudential measures that authorities might take to mitigate risks. Despite the EBA's mainly micro-prudential regulatory role, it has been mandated to also provide an opinion on macro-prudential matters. The EBA's work on this topic focuses on these areas: to ensure consistency in the development and implementation of the specific tasks mandated to the EBA and that involve macro-prudential considerations; to streamline the coordination of macro-prudential tasks with the European Systemic Risk Board; to ensure that macro-prudential tools are not used to undermine the single rulebook and do not lead to fragmentation within the single market; and to establish a more clear understanding, to the extent possible, between the boundary of macro- and micro-prudential supervision.



# Annex I – Samples

Below are the lists of banks that made up the sample population for the RAQ and the KRI.

## Risk assessment questionnaire

	Bank name	Home country
1	Erste Group Bank AG	AT
2	Raiffeisen Zentralbank Österreich AG	AT
3	KBC Group NV	BE
4	Bank of Cyprus Public Company Ltd	CY
5	Bayerische Landesbank	DE
6	Commerzbank AG	DE
7	Deutsche Bank AG	DE
8	DZ Bank AG Deutsche Zentral-Genossenschaftsbank	DE
9	Hypo Real Estate Holding AG	DE
10	NORD/LB Norddeutsche Landesbank Girozentrale	DE
11	Danske Bank A/S	DK
12	Alpha Bank S.A.	EL
13	Eurobank Ergasias S.A.	EL
14	National Bank of Greece S.A.	EL
15	Piraeus Bank S.A.	EL
16	Banco Bilbao Vizcaya Argentaria SA	ES
17	Banco Santander SA	ES
18	BNP Paribas SA	FR
19	Groupe Crédit Agricole	FR
20	Société Générale SA	FR
21	OTP Bank Nyrt.	HU
22	Allied Irish Banks plc	IE
23	Bank of Ireland	IE
24	Intesa Sanpaolo SpA	IT
25	UniCredit SpA	IT
26	ABN AMRO Groep N.V.	NL
27	ING Bank N.V.	NL
28	Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.	NL
29	DNB Bank ASA	NO
30	Banco Comercial Português SA	PT
31	Nordea Bank Group	SE
32	Skandinaviska Enskilda Banken AB (publ)	SE
33	Svenska Handelsbanken AB (publ)	SE
34	Swedbank AB (publ)	SE
35	Barclays plc	UK
36	HSBC Holdings plc	UK
37	Lloyds Banking Group plc	UK
38	Standard Chartered plc	UK
39	Royal Bank of Scotland Group plc	UK

EBA key risk indicators (KRI) <sup>(20)</sup>

Bank name	Home country
Erste Group Bank AG	AT
Raiffeisen-Landesbanken-Holding GmbH	AT
Volksbanken-Verbund	AT
Belfius Banque SA	BE
KBC Group NV	BE
Bank of Cyprus Public Company Ltd.	CY
Bayerische Landesbank	DE
Commerzbank AG	DE
Deutsche Bank AG	DE
DZ Bank AG Deutsche Zentral-Genossenschaftsbank	DE
Hypo Real Estate Holding AG	DE
Landesbank Baden-Württemberg	DE
NORD/LB Norddeutsche Landesbank Girozentrale	DE
Danske Bank A/S	DK
Banco Bilbao Vizcaya Argentaria SA	ES
Banco Financiero y de Ahorros SA	ES
Banco Santander SA	ES
Criteria Caixa Holding SA	ES
OP-Pohjola Group	FI
BNP Paribas SA	FR
Groupe Crédit Agricole	FR
GCM Group	FR
Groupe BPCE	FR
Société Générale SA	FR
Alpha Bank S.A.	GR
Eurobank Ergasias S.A.	GR
National Bank of Greece S.A.	GR
Piraeus Bank S.A.	GR
OTP Bank Nyrt.	HU
Allied Irish Banks plc	IE
Bank of Ireland	IE
Banca Monte dei Paschi di Siena SpA	IT
Banco Popolare Società Cooperativa	IT
Intesa Sanpaolo SpA	IT
UniCredit SpA	IT
Bank of Valletta plc	MT
ABN AMRO Groep N.V.	NL
Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.	NL
ING Groep N.V.	NL
DNB ASA	NO
Powszechna Kasa Oszczedności Bank Polski SA	PL

Bank name	Home country
Banco Comercial Português SA	PT
Caixa Geral de Depósitos SA	PT
Novo Banco	PT
Nordea Bank - group	SE
Skandinaviska Enskilda Banken AB (publ)	SE
Svenska Handelsbanken AB (publ)	SE
Swedbank - group	SE
Nova Ljubljanska Banka d.d.	SI
Barclays plc	UK
HSBC Holdings plc	UK
Lloyds Banking Group plc	UK
Nationwide Building Society	UK
Standard Chartered Plc	UK
Royal Bank of Scotland Group plc	UK

<sup>(20)</sup> During recent years, the sample of banks has been marginally adjusted to take into account bank-specific developments, e.g. banks that ceased activity or underwent a significant restructuring process are not further considered.

## Annex II — Descriptive statistics from the EBA key risk indicators

Descriptive statistics from the EBA key risk indicators with data up to Q4/2014

The charts of KRI show the dispersion of data points for the relevant KRI over time, with 5th, 25th, 50th (median), 75th and 95th percentiles

KRI	Descriptive statistics	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14
1 — Tier 1 capital ratio	Weighted average	10.2 %	10.2 %	10.4 %	10.6 %	11.0 %	11.3 %	11.4 %	11.4 %	11.4 %	11.6 %	12.0 %	12.3 %	12.5 %	12.4 %	12.6 %	12.9 %	13.1 %	12.4 %	12.9 %	13.2 %	13.3 %
	First quartile	9.1 %	9.0 %	8.8 %	8.9 %	9.3 %	9.7 %	9.4 %	9.6 %	9.4 %	9.8 %	10.4 %	10.3 %	10.5 %	10.8 %	11.0 %	11.1 %	11.4 %	11.2 %	11.7 %	11.8 %	11.7 %
	Median	9.9 %	10.2 %	10.1 %	10.3 %	10.6 %	11.1 %	11.1 %	11.0 %	10.9 %	11.4 %	11.7 %	11.7 %	11.7 %	11.6 %	12.0 %	12.3 %	12.8 %	12.3 %	13.3 %	13.5 %	13.5 %
	Third quartile	11.3 %	11.1 %	11.4 %	11.6 %	12.4 %	12.7 %	12.5 %	12.8 %	12.8 %	13.0 %	13.3 %	13.4 %	13.5 %	13.4 %	13.8 %	13.9 %	14.8 %	15.1 %	15.3 %	15.7 %	16.0 %
	Weighted average	13.0 %	12.9 %	12.9 %	13.1 %	13.5 %	13.7 %	13.6 %	13.5 %	13.1 %	13.6 %	13.9 %	14.1 %	14.4 %	14.8 %	15.1 %	15.4 %	15.7 %	15.2 %	15.7 %	16.1 %	16.1 %
2 — Total capital ratio	First quartile	11.5 %	11.2 %	11.4 %	11.5 %	11.7 %	11.8 %	11.6 %	11.4 %	11.3 %	11.5 %	12.0 %	12.0 %	12.1 %	12.6 %	13.1 %	13.0 %	13.4 %	13.8 %	14.7 %	14.8 %	14.5 %
	Median	12.5 %	12.6 %	12.2 %	12.4 %	12.8 %	13.3 %	13.0 %	12.8 %	12.8 %	13.9 %	14.1 %	14.0 %	13.9 %	14.4 %	14.4 %	14.6 %	14.8 %	15.3 %	16.0 %	16.3 %	16.1 %
	Third quartile	14.0 %	13.9 %	14.0 %	14.6 %	14.9 %	15.0 %	15.1 %	15.1 %	15.0 %	15.4 %	15.8 %	15.8 %	16.2 %	16.3 %	16.8 %	17.1 %	17.4 %	18.2 %	17.6 %	17.8 %	17.8 %
	Weighted average	9.0 %	9.0 %	9.2 %	9.3 %	9.0 %	9.3 %	9.3 %	9.4 %	9.2 %	9.8 %	10.2 %	10.5 %	10.8 %	10.8 %	11.1 %	11.4 %	11.6 %	11.4 %	11.8 %	12.1 %	12.1 %
	First quartile	7.1 %	7.3 %	7.2 %	7.4 %	7.7 %	8.2 %	7.9 %	8.0 %	8.1 %	8.3 %	9.3 %	9.4 %	9.5 %	9.8 %	10.0 %	10.2 %	10.4 %	10.7 %	11.1 %	11.5 %	11.0 %
3 — Tier 1 ratio (excluding hybrid instruments)	Median	8.6 %	8.5 %	8.6 %	9.3 %	8.5 %	9.0 %	9.3 %	9.4 %	9.4 %	10.0 %	10.3 %	10.5 %	10.7 %	10.7 %	11.0 %	11.1 %	11.4 %	12.0 %	12.6 %	13.1 %	12.5 %
	Third quartile	10.7 %	10.8 %	10.6 %	11.1 %	10.4 %	10.9 %	10.3 %	10.6 %	10.5 %	11.3 %	11.2 %	11.4 %	11.6 %	12.3 %	12.6 %	13.1 %	13.5 %	14.0 %	14.6 %	14.8 %	14.6 %

KRI	Descriptive Statistics																					Credit risk and asset quality
	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14	
13 — Impaired loans and past due (> 90 days) loans to total loans and advances	Weighted average	5.1 %	4.9 %	5.1 %	5.3 %	5.3 %	5.2 %	5.4 %	5.4 %	5.8 %	5.9 %	6.0 %	6.3 %	6.5 %	6.5 %	6.7 %	6.6 %	6.8 %	6.8 %	6.6 %	6.7 %	6.6 %
	First quartile	3.1 %	3.1 %	3.3 %	2.8 %	3.0 %	2.9 %	2.5 %	2.6 %	2.5 %	2.8 %	2.8 %	3.1 %	3.0 %	3.0 %	3.2 %	2.9 %	3.0 %	3.0 %	2.9 %	2.8 %	2.7 %
	Median	4.9 %	5.1 %	5.4 %	5.0 %	5.4 %	5.4 %	5.6 %	5.6 %	6.4 %	6.7 %	6.3 %	7.3 %	7.3 %	6.7 %	6.7 %	6.5 %	6.5 %	6.1 %	6.2 %	6.3 %	5.8 %
	Third quartile	9.8 %	9.9 %	10.7 %	10.9 %	10.5 %	11.3 %	12.4 %	13.1 %	14.1 %	15.2 %	15.8 %	16.3 %	17.3 %	17.6 %	17.6 %	15.7 %	16.2 %	16.4 %	17.1 %	17.2 %	17.1 %
14 — Coverage ratio (specific allowances for loans to total gross impaired loans)	Weighted average	41.6 %	41.7 %	41.6 %	42.5 %	41.4 %	42.3 %	41.2 %	40.7 %	41.0 %	41.3 %	41.3 %	41.8 %	42.4 %	42.4 %	42.4 %	44.4 %	46.0 %	46.9 %	46.9 %	45.5 %	46.4 %
	First quartile	34.5 %	34.8 %	35.2 %	34.6 %	34.5 %	34.6 %	33.8 %	33.8 %	34.3 %	34.8 %	35.8 %	35.1 %	34.7 %	35.6 %	34.9 %	35.6 %	35.6 %	39.2 %	36.8 %	37.3 %	39.4 %
	Median	41.0 %	41.5 %	41.5 %	42.4 %	42.5 %	43.5 %	42.8 %	41.9 %	41.5 %	41.4 %	41.8 %	42.0 %	41.7 %	43.5 %	43.8 %	44.4 %	46.1 %	45.5 %	46.4 %	46.1 %	46.8 %
	Third quartile	50.7 %	50.1 %	49.4 %	51.5 %	51.9 %	50.9 %	49.3 %	47.2 %	51.1 %	51.4 %	50.6 %	50.9 %	50.1 %	52.0 %	51.7 %	52.8 %	55.0 %	55.6 %	53.9 %	53.3 %	53.6 %
18 — Impaired financial assets to total assets	Weighted average	1.6 %	1.6 %	1.6 %	1.6 %	1.7 %	1.7 %	1.8 %	1.7 %	1.9 %	1.9 %	1.9 %	1.9 %	2.0 %	2.0 %	2.1 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %	2.0 %
	First quartile	1.0 %	1.1 %	1.1 %	1.2 %	1.2 %	1.2 %	1.1 %	1.0 %	1.0 %	1.1 %	1.0 %	1.0 %	1.1 %	1.2 %	1.2 %	1.0 %	1.0 %	0.9 %	1.0 %	1.0 %	0.9 %
	Median	1.9 %	1.9 %	1.8 %	1.9 %	2.0 %	1.9 %	2.0 %	2.0 %	2.2 %	2.0 %	2.1 %	2.2 %	2.4 %	2.4 %	2.4 %	2.5 %	2.4 %	2.3 %	2.3 %	1.7 %	1.5 %
	Third quartile	3.5 %	3.5 %	3.6 %	3.9 %	3.9 %	4.1 %	5.3 %	5.3 %	5.6 %	5.8 %	6.3 %	6.7 %	7.0 %	8.2 %	8.4 %	6.8 %	6.7 %	6.7 %	6.7 %	6.9 %	6.9 %
20 — Accumulated impairments on financial assets to total (gross) assets	Weighted average	1.3 %	1.3 %	1.3 %	1.4 %	1.4 %	1.4 %	1.4 %	1.3 %	1.6 %	1.5 %	1.5 %	1.5 %	1.6 %	1.6 %	1.7 %	1.8 %	1.9 %	1.8 %	1.8 %	1.8 %	1.8 %
	First quartile	0.9 %	0.9 %	0.9 %	0.8 %	0.9 %	0.8 %	0.8 %	0.7 %	0.8 %	0.8 %	0.7 %	0.7 %	0.7 %	0.7 %	0.8 %	0.8 %	0.8 %	0.8 %	0.7 %	0.7 %	0.7 %
	Median	1.5 %	1.5 %	1.5 %	1.6 %	1.7 %	1.6 %	1.5 %	1.5 %	1.6 %	1.6 %	1.7 %	1.7 %	1.8 %	1.7 %	1.8 %	1.8 %	1.8 %	1.7 %	1.7 %	1.8 %	1.7 %
	Third quartile	2.2 %	2.3 %	2.3 %	2.8 %	2.7 %	2.9 %	2.9 %	3.1 %	3.7 %	3.7 %	3.7 %	3.8 %	3.9 %	4.0 %	4.1 %	4.2 %	4.3 %	4.4 %	4.7 %	4.9 %	5.1 %
21 — Impairments on financial assets to total operating income	Weighted average	26.6 %	17.2 %	20.1 %	18.2 %	19.4 %	13.8 %	17.9 %	20.3 %	26.7 %	17.9 %	24.6 %	24.9 %	27.0 %	16.9 %	18.6 %	18.6 %	22.7 %	13.7 %	16.2 %	15.8 %	17.5 %
	First quartile	21.0 %	15.5 %	17.5 %	14.5 %	15.5 %	7.4 %	10.0 %	14.7 %	14.8 %	8.4 %	9.9 %	10.4 %	10.8 %	9.0 %	9.8 %	10.4 %	11.0 %	6.7 %	7.4 %	7.0 %	7.4 %
	Median	27.4 %	20.4 %	23.3 %	21.1 %	23.9 %	15.7 %	20.2 %	21.6 %	26.2 %	19.7 %	18.7 %	20.9 %	22.4 %	19.4 %	19.2 %	20.0 %	21.4 %	11.6 %	15.9 %	12.6 %	14.6 %
	Third quartile	41.0 %	28.1 %	33.5 %	31.6 %	31.3 %	25.9 %	32.0 %	36.9 %	56.8 %	32.1 %	39.8 %	44.4 %	56.0 %	34.2 %	30.8 %	31.9 %	43.3 %	30.6 %	29.7 %	31.4 %	37.8 %



KRI	Descriptive statistics	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14
22 — Return on equity	Weighted average	4.5 %	7.4 %	7.3 %	6.7 %	5.9 %	8.3 %	7.1 %	4.9 %	-0.0 %	5.6 %	3.4 %	2.6 %	0.5 %	9.3 %	7.6 %	0.0 %	2.7 %	7.5 %	5.7 %	5.4 %	3.6 %
	First quartile	-0.5 %	3.1 %	3.1 %	3.0 %	1.7 %	5.0 %	2.8 %	-0.7 %	-15.7 %	1.8 %	-0.9 %	-1.5 %	-6.5 %	1.4 %	2.2 %	0.0 %	-2.9 %	2.9 %	2.5 %	1.3 %	-4.0 %
	Median	5.4 %	6.2 %	6.4 %	5.7 %	5.4 %	8.0 %	7.1 %	5.2 %	2.7 %	6.5 %	5.3 %	3.8 %	2.6 %	6.6 %	6.4 %	0.0 %	4.8 %	7.5 %	5.5 %	5.4 %	3.2 %
	Third quartile	9.1 %	11.1 %	10.8 %	10.0 %	9.5 %	11.7 %	11.7 %	9.4 %	7.8 %	11.5 %	8.9 %	8.4 %	7.2 %	12.3 %	10.4 %	0.0 %	9.1 %	10.3 %	9.5 %	8.9 %	8.0 %
24 — Cost-to-income ratio	Weighted average	55.2 %	53.3 %	54.6 %	55.6 %	56.1 %	59.5 %	58.2 %	59.6 %	60.1 %	60.6 %	59.7 %	60.8 %	63.2 %	56.6 %	57.9 %	59.6 %	63.1 %	58.3 %	60.3 %	61.7 %	63.6 %
	First quartile	47.2 %	46.9 %	49.1 %	48.7 %	47.9 %	49.6 %	49.7 %	51.0 %	52.0 %	48.1 %	50.4 %	51.4 %	52.5 %	51.2 %	48.2 %	51.2 %	52.8 %	47.3 %	49.6 %	52.6 %	51.4 %
	Median	57.8 %	55.1 %	56.0 %	57.7 %	57.0 %	56.3 %	57.3 %	58.6 %	60.7 %	57.1 %	60.9 %	63.0 %	63.1 %	61.2 %	60.8 %	61.3 %	63.2 %	59.3 %	59.2 %	57.6 %	60.7 %
	Third quartile	64.3 %	62.1 %	62.2 %	63.3 %	63.8 %	63.2 %	63.8 %	63.9 %	65.2 %	68.3 %	71.0 %	70.3 %	71.6 %	70.9 %	74.6 %	73.1 %	75.0 %	65.6 %	67.2 %	65.7 %	69.8 %
26 — Net interest income to total operating income	Weighted average	57.9 %	56.2 %	58.6 %	58.3 %	58.0 %	57.2 %	57.4 %	60.3 %	61.1 %	61.2 %	60.9 %	61.7 %	61.6 %	55.5 %	55.1 %	57.3 %	59.1 %	58.2 %	60.1 %	59.2 %	59.6 %
	First quartile	52.8 %	53.2 %	52.3 %	53.2 %	51.9 %	49.0 %	50.4 %	52.5 %	54.2 %	51.7 %	51.8 %	52.5 %	52.6 %	47.8 %	47.4 %	50.1 %	51.1 %	50.3 %	50.6 %	53.2 %	53.2 %
	Median	63.7 %	61.9 %	61.6 %	62.8 %	62.5 %	58.8 %	62.8 %	63.6 %	64.0 %	62.2 %	62.9 %	65.1 %	66.9 %	60.0 %	60.5 %	59.1 %	60.2 %	63.2 %	65.4 %	64.3 %	66.6 %
	Third quartile	74.1 %	72.2 %	72.2 %	74.2 %	73.6 %	78.6 %	75.4 %	75.2 %	76.6 %	74.2 %	78.9 %	79.0 %	76.7 %	75.6 %	72.7 %	71.1 %	76.7 %	76.8 %	76.7 %	74.6 %	75.4 %
27 — Net fee and commission income to total operating income	Weighted average	26.0 %	25.8 %	26.7 %	26.7 %	26.8 %	26.9 %	27.0 %	27.6 %	27.6 %	27.3 %	27.1 %	27.7 %	27.9 %	25.8 %	26.7 %	27.7 %	28.4 %	27.6 %	28.5 %	27.6 %	28.0 %
	First quartile	16.7 %	14.9 %	15.6 %	15.1 %	15.8 %	13.3 %	16.1 %	16.7 %	16.5 %	17.9 %	17.9 %	17.6 %	17.9 %	16.0 %	15.3 %	15.3 %	15.6 %	15.1 %	15.6 %	16.0 %	15.7 %
	Median	22.6 %	23.4 %	24.0 %	24.0 %	24.1 %	24.1 %	24.4 %	25.8 %	24.1 %	22.8 %	24.4 %	23.9 %	25.3 %	23.7 %	23.6 %	23.5 %	24.8 %	24.2 %	24.4 %	24.7 %	24.6 %
	Third quartile	29.0 %	30.6 %	31.5 %	30.8 %	30.6 %	30.4 %	29.2 %	30.5 %	30.9 %	28.2 %	29.1 %	29.9 %	30.6 %	31.2 %	31.4 %	32.6 %	31.3 %	32.7 %	30.8 %	31.4 %	30.7 %
33 — Net income to total operating income	Weighted average	9.3 %	16.3 %	16.6 %	15.2 %	13.4 %	18.9 %	16.7 %	11.9 %	-0.0 %	13.6 %	8.6 %	6.9 %	1.2 %	23.1 %	19.3 %	16.8 %	7.3 %	19.7 %	15.7 %	14.5 %	9.6 %
	First quartile	-3.1 %	7.3 %	7.0 %	7.5 %	5.6 %	14.0 %	8.7 %	-3.6 %	-36.3 %	4.6 %	-2.5 %	-6.3 %	-17.7 %	4.9 %	7.2 %	6.1 %	-10.5 %	8.8 %	8.5 %	3.0 %	-9.9 %
	Median	10.9 %	17.4 %	16.6 %	15.4 %	14.6 %	19.3 %	17.8 %	13.2 %	7.7 %	16.3 %	12.0 %	10.7 %	9.0 %	15.9 %	16.6 %	16.5 %	13.8 %	17.9 %	16.4 %	16.0 %	11.8 %
	Third quartile	19.3 %	23.0 %	24.0 %	23.4 %	22.3 %	29.7 %	26.4 %	22.6 %	18.8 %	28.6 %	20.5 %	21.1 %	18.5 %	33.4 %	30.9 %	29.5 %	30.9 %	35.9 %	32.2 %	29.4 %	22.3 %

KRI	Descriptive statistics	Dec-09	Mar-10	Jun-10	Sep-10	Dec-10	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	Mar-14	Jun-14	Sep-14	Dec-14
34 — Loan-to-deposit ratio	Weighted average	117.1 %	117.0 %	116.6 %	117.6 %	117.8 %	118.3 %	119.8 %	119.6 %	117.7 %	118.0 %	117.7 %	116.2 %	115.7 %	117.4 %	114.1 %	114.7 %	112.8 %	111.4 %	112.9 %	109.3 %	108.6 %
	First quartile	100.3 %	100.6 %	100.9 %	103.7 %	105.3 %	103.7 %	104.2 %	108.7 %	106.0 %	105.1 %	106.6 %	106.4 %	103.6 %	101.3 %	99.9 %	97.8 %	98.0 %	95.0 %	96.3 %	94.0 %	93.4 %
	Median	114.1 %	115.7 %	117.4 %	116.8 %	117.5 %	120.2 %	119.5 %	124.5 %	124.1 %	125.3 %	125.9 %	124.6 %	119.1 %	116.8 %	115.0 %	114.6 %	112.1 %	110.9 %	110.0 %	108.0 %	109.3 %
	Third quartile	128.4 %	132.2 %	133.9 %	135.6 %	140.0 %	135.0 %	141.7 %	139.4 %	146.7 %	148.3 %	143.4 %	137.1 %	135.7 %	131.5 %	130.5 %	132.1 %	129.4 %	131.5 %	129.2 %	129.4 %	124.3 %
35 — Customer deposits to total liabilities	Weighted average	40.6 %	39.7 %	39.8 %	40.6 %	42.6 %	43.2 %	43.2 %	40.1 %	41.6 %	41.8 %	41.5 %	41.6 %	42.7 %	43.6 %	45.5 %	46.0 %	47.7 %	47.2 %	47.3 %	49.3 %	49.0 %
	First quartile	35.6 %	35.0 %	33.7 %	35.3 %	37.5 %	39.4 %	38.5 %	35.0 %	35.2 %	36.3 %	36.0 %	36.6 %	36.1 %	39.4 %	41.4 %	41.2 %	40.5 %	40.0 %	40.6 %	42.5 %	39.8 %
	Median	49.7 %	49.5 %	43.8 %	47.4 %	47.9 %	48.8 %	48.3 %	44.6 %	46.0 %	47.8 %	43.3 %	46.9 %	49.2 %	50.9 %	50.6 %	52.6 %	54.3 %	53.4 %	52.6 %	54.9 %	54.2 %
	Third quartile	59.2 %	58.1 %	56.8 %	58.1 %	59.9 %	60.3 %	57.7 %	56.1 %	56.4 %	56.6 %	56.3 %	55.9 %	57.9 %	60.8 %	60.8 %	62.4 %	62.4 %	63.3 %	65.1 %	67.4 %	65.8 %
36 — Tier 1 capital to [total assets - intangible assets]	Weighted average	4.2 %	4.3 %	4.3 %	4.2 %	4.5 %	4.6 %	4.6 %	4.4 %	4.4 %	4.5 %	4.5 %	4.5 %	4.7 %	4.7 %	4.9 %	5.0 %	5.1 %	4.8 %	4.9 %	4.9 %	4.9 %
	First quartile	3.9 %	4.0 %	4.0 %	3.9 %	4.1 %	4.1 %	4.1 %	3.9 %	3.8 %	3.9 %	4.1 %	4.1 %	4.2 %	4.3 %	4.5 %	4.5 %	4.6 %	4.4 %	4.3 %	4.4 %	4.2 %
	Median	5.5 %	5.2 %	5.1 %	5.0 %	5.3 %	5.2 %	5.2 %	5.0 %	4.6 %	4.8 %	5.1 %	4.9 %	5.1 %	5.4 %	5.4 %	5.5 %	5.5 %	5.2 %	5.3 %	5.4 %	5.3 %
	Third quartile	5.9 %	6.1 %	5.9 %	5.9 %	6.2 %	6.3 %	6.1 %	6.2 %	5.9 %	6.0 %	6.2 %	6.3 %	6.3 %	6.7 %	6.8 %	6.6 %	6.7 %	6.7 %	6.7 %	7.1 %	6.7 %
45 — Debt-to-equity ratio	Weighted average	18.7	19.2	19.4	19.2	18.2	17.8	17.9	19.4	19.6	19.1	19.4	19.1	18.1	17.9	17.5	17.0	16.5	16.6	16.1	15.9	15.9
	First quartile	12.0	12.6	13.1	12.8	12.3	12.0	12.7	13.1	13.6	13.2	13.6	13.5	13.3	12.7	12.5	12.6	12.1	12.5	11.7	11.8	12.2
	Median	14.9	15.3	16.0	16.1	16.6	16.0	17.2	17.2	18.4	18.1	18.1	17.7	16.2	15.9	16.0	15.6	15.9	16.0	15.6	14.4	15.2
	Third quartile	22.6	23.0	24.4	22.8	22.9	22.5	21.7	25.1	27.5	25.0	24.1	24.1	22.7	22.1	22.3	21.4	19.6	20.1	19.2	19.4	19.3
46 — Off-balance sheet items to total assets	Weighted average	18.1 %	17.7 %	17.6 %	17.3 %	17.7 %	17.4 %	17.3 %	16.3 %	18.6 %	17.8 %	17.7 %	16.8 %	17.4 %	17.6 %	18.1 %	18.6 %	19.0 %	18.7 %	18.8 %	18.7 %	18.8 %
	First quartile	8.9 %	8.5 %	8.2 %	8.2 %	8.3 %	7.8 %	8.0 %	7.7 %	8.8 %	8.3 %	8.3 %	7.7 %	7.4 %	8.0 %	7.6 %	7.8 %	7.7 %	8.3 %	8.2 %	13.0 %	13.0 %
	Median	14.7 %	14.4 %	14.2 %	14.2 %	14.0 %	14.1 %	13.8 %	13.4 %	15.1 %	14.6 %	14.7 %	14.6 %	14.7 %	14.5 %	14.7 %	14.9 %	15.2 %	14.8 %	14.4 %	16.7 %	16.3 %
	Third quartile	20.8 %	20.0 %	19.8 %	20.3 %	19.1 %	19.0 %	18.5 %	17.4 %	19.1 %	19.9 %	19.7 %	19.1 %	18.5 %	19.5 %	20.4 %	21.7 %	22.2 %	22.3 %	22.6 %	19.9 %	21.0 %

Balance sheet structure



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