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RISK ASSESSMENT OF THE EUROPEAN BANKING SYSTEM

DECEMBER 2015

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Contents

List of Figures

Abbreviations

AQR	asset quality review
AT1	additional tier 1
BIS	Bank for International Settlements
BRRD	Bank Recovery and Resolution Directive
CAPM	Capital Asset Pricing Model
CCP	counterparty clearing party / parties
CDS	credit default swap
CERT	Computer Emergency Response Team
CET1	common equity tier 1
CoCo	contingent convertible
CoE	cost of equity
COREP	common reporting
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CRE	Commercial Real Estate
DDoS	Distributed denial of service
DM	developed markets
EA	Euro area
EBA	European Banking Authority
ECB	European Central Bank
EDIS	European Deposit Insurance Scheme
EDF	expected default frequencies
EEA	European economic area
EM	emerging market(s)
EMIR	European Market Infrastructure Regulation
ESA	European Supervisory Authority
EURIBOR	Euro interbank offered rate
EWS	early warning system
FBE	forborne exposure
FBL	forborne loan(s)
FED	federal reserve (system) (of the US)
FINREP	financial reporting
GDP	gross domestic product
GL	guideline
ICT	information and communication technologies
ICAAP	internal capital adequacy assessment process
IFRS	International Financial Reporting Standard
IMF	International Monetary Fund
IRB	Internal ratings based
ITS	implementing technical standard
KRI	key risk indicator
LCU	local currency
LIBOR	London interbank offered rate
LTRO	long-term refinancing operation
MPO	monetary policy and operations
MREL	minimum requirement for own funds and eligible liabilities
NEA	non-Euro area
NII	net interest income
NPE	non-performing exposure
NPL(s)	non-performing loan(s)
NSFR	net stable funding ratio
OTC	over the counter
pp	percentage point(s)
P&L	Profit and Losses
QE	quantitative easing
RAQ	risk assessment questionnaire
RAR	report on the risks and vulnerabilities of the European Banking System
RoA	return on assets

RoE	return on equity
RTS	regulatory technical standards
RWA	risk-weighted assets
RW	risk weights
SME	small and medium-sized enterprises
TLAC	total loss absorbing capacity
TLTRO	targeted long-term refinancing operations
TOI	Total operating income
UCITS	undertakings for collective investments in transferable securities

Executive summary

EU banks on average have continued to strengthen their capital position. The weighted average common equity tier 1 (CET1) ratio was 12.5 % in June, 40 basis points (bps) higher than in December 2014. The strengthening of EU banks' capital position continues to be driven more by an increase in capital rather than decline of the denominator. During the first half of 2015 the amount of CET1 capital grew by approximately 6.1 %. In the same period, risk-weighted assets (RWAs) increased by approximately 2.5 % [1].

The first half of 2015 confirmed modest loan growth in the EU banking sector. Asset volumes, including loans, have continued a trend that had already started last year. Loans are growing at a faster pace than assets (3.6 % versus 1.4 %, both YtD).

EU banks show significant direct exposures to non-bank financial intermediaries. According to data collected from 184 institutions (169 banks and 15 investment firms) the exposure is about EUR 1 trillion. The data shows that banks' average individual exposure to non-money market funds is around 29 % and to UCITS money market funds around 6 % of their eligible capital after credit risk mitigation and large exposures exemptions.

EU banks' exposure towards emerging market (EM) countries was about EUR 2.3 trillion in June 2015. Further depreciation of their currencies could have a direct negative impact on EU banks' exposures, by triggering defaults and through negative effects on revenue from business with clients in EM countries, as well as indirect effects through, for example, commodity exposures.

Banks saw further improvements in asset quality, though impairment ratios remain high. The ratio of impaired and past due (> 90 days) loans to total loans decreased to 6.4 % in the first half of 2015 compared to 7 % at the end of 2014. Trends in asset quality differ significantly among countries and banks. Banks' expectation of further gradual improvements in asset quality strongly depends on the further economic recovery, including potentially negative impacts from developments in China and other EM economies.

Coverage ratios have increased in the first half of the year. The effect was driven by a reduction in the total impaired gross loans. Levels of loan provisions are likely to undergo changes in the future due to the implementation of IFRS 9.

Volatility in banks' funding spreads demonstrates an overall fragile state of financial markets. Except for periods of heightened general market stress — mainly during the peaks of the Greek crisis — no major constraints could be observed in the issuance activity for secured and unsecured instruments. In contrast to these instruments, issuance volumes of subordinated funding were below the levels of the same period in the previous 3 years.

Even at the peak of the Greek crisis no major volatility of customer deposit volumes could be observed outside Greece. Though interest rates for deposits have been at long-time lows, banks have even been able to increase volumes of customer deposits.

[1] The sample of banks in this report is smaller compared to the one used in the EBA's 2015 Transparency Exercise.

EU banks reported an aggregate weighted average return on equity (RoE) of 7.8 % as of June 2015. This data represents a significant improvement compared to December and June 2014 (3.5 % and 5.7 % respectively). However, profitability remains weak. Banks' interest margins in a low interest rate environment, growing competition from shadow banking institutions and Fintechs, as well as the still low quality of assets in many jurisdictions and conduct cost keep their negative drag on banks' profitability.

Risks related to information and communication technologies (ICT) remain a key operational challenge. This includes cyber-attacks, which are increasing in scope and sophistication, since skills and resources needed to commit them have spread. Also, the further spread of ICT and outsourcing add to challenges as the scope of respective risks is accordingly widening further.

Conduct risks remain elevated. Recently, detrimental practices have related to foreign exchanges, violations of trade sanctions and customer-related business such as redress from payment protection insurance, and to floors for mortgage loans at variable interest rates. Responses to the risk assessment questionnaire (RAQ) from banks indicate expectations of some cautious improvements regarding potential future misconduct issues and litigation costs, though incurring redress costs should not be neglected in the medium term.

Introduction

This is the eighth semi-annual report on risks and vulnerabilities of the EU banking sector published by the European Banking Authority (EBA). It describes the main developments and trends that have affected the EU banking sector since the end of 2014 and provides the EBA's outlook on the main microprudential risks and vulnerabilities looking ahead [2].

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 assets side, explaining the trends in asset volumes and dynamics of asset quality. Chapter 3 considers in more detail the liability side, presenting the evolution of funding mix and its conditions. It also discusses deposit trends and highlights remaining structural fragilities and challenges in funding markets. Chapter 4 provides an overview of the banks' capital positions and related trends. Chapter 5 describes banks' income and profitability, and the significant headwinds and future evolution. Chapter 6 touches on aspects of banks' operational and ICT risks, as well as business conduct and litigation issues. Finally, Chapter 7 presents policy implications and possible measures to address the prudential issues mentioned in the previous chapters.

This report is based on qualitative and quantitative information collected by the EBA. The report's five main exclusive data sources are:

- EBA key risk indicators (KRIs);
- EBA supervisory reporting;
- the EBA RAQ for banks;
- the EBA RAQ for market analysts; and
- microprudential expertise and college information-gathering.

The EBA KRIs 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 [3]. Information about the sample and descriptive statistics of the latest KRIs can be found in the annexes. The weighted average ratios are described unless stated otherwise. In the country-by-country comparison and related statistics the name of a country is only given if there are four or more reporting banks from this country.

In 2014 the EBA started collecting data based on the EBA's implementing technical standards (ITS) on supervisory reporting for an extended number of 195 banks from 29 EEA countries [4].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 as indicated there.

[2] 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.

[3] The sample of banks on which the data of the KRIs is based on is smaller compared to the one considered in the EBA's Transparency Exercise conducted in 2015.

[4] http://www.eba.europa.eu/risk-analysis-and-data;jsessionid=32D6610C3D1FB0CC13ECA43D0B13A20F, 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. Also this sample of banks is different from the one considered in the EBA's Transparency Exercise conducted in 2015.

The reference date for the data is 30 June 2015. The cut-off date for KRIs and supervisory reporting based on the enlarged sample of banks is 20 September. The data is presented on the highest level of consolidation in a Member State. Since KRIs and supervisory reporting 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 RAQ is a semi-annual survey conducted by the EBA, addressed to banks and/or their financial supervisors. Information from the questionnaire completed in October 2015 by 37 European banks (Annex I) and comparisons with previous responses are used in this report. In addition, the EBA conducted a survey (RAQ for market analysts) addressed to market analysts (20 respondents).

The report also analyses information gathered by the EBA from the 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.

1. External environment

1.1. Market sentiment and macroeconomic environment

EU on a path of moderate recovery, driven by improvements in domestic demand

During the first half 2015, the EU continued to show a faster than expected but still moderate recovery. The real growth rate of the gross domestic product (GDP) for 2015 is projected at 1.9 % for the EU [5]. Growth in the next 2 years is also expected to remain modest, with a real GDP growth of 2.0 % in 2016 and 2.1 % in 2017.

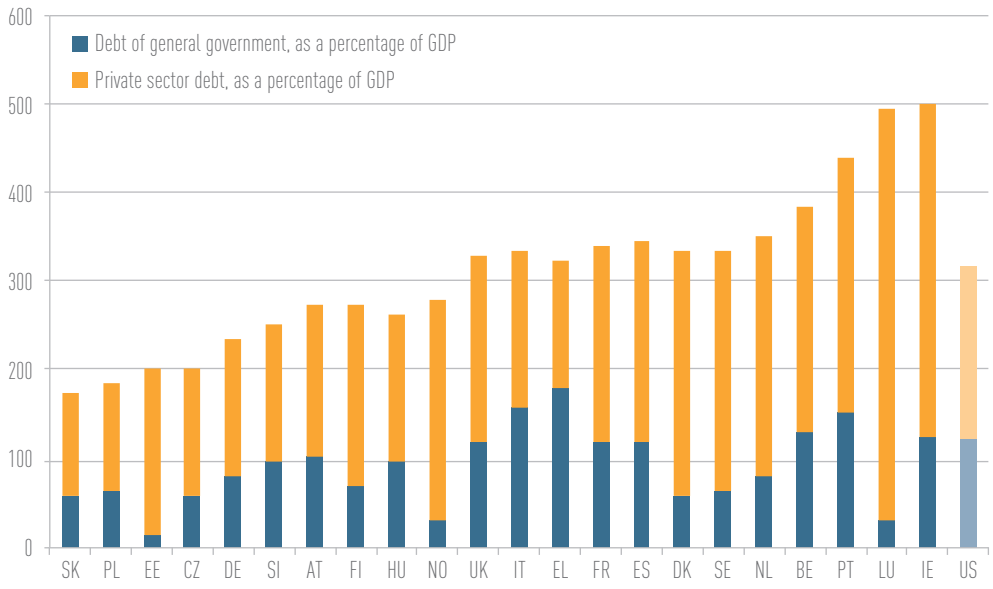
The recent growth in the EU was mostly driven by lower commodity prices, the depreciation of the euro and quantitative and credit easing triggered by the European Central Bank (ECB). These factors increased private consumption and are expected to continue to do so in the near future. In the euro area, improvement in labour markets and an increase of disposable income should underpin growth going forward.

On the other hand, private and public debt overhang remains a concern for several countries, showing high levels which might still be weighing on the recovery of growth. The aggregates of general government and private sector debt (non-financial corporations and households) compared to GDP in EU Member States were in a range between about 175 % and 500 % as of the end of 2014 (Figure 1).

Inflation remains low, supported by lower commodity prices. It is expected to increase slightly from 0 % in 2015 to 1.1 % in 2016 in the EU and from 0.1 % in 2015 to 1.0 % for the euro area in 2016. The unemployment rate continues to improve gradually, from 9.5 % in 2015 to 9.2 % in 2016 and 8.9 % in 2017 in the EU. Neutral fiscal policy, the further implementation of structural reforms and accommodative monetary policy should support gradual EU recovery. Nevertheless, downside risks include EM economies' contagion effects, especially on global trade and financial markets' volatility, geopolitical tensions and low inflation expectations.

[5] Economic data is based on the European Commission's 'October 2015 economic forecast', http://ec.europa.eu/economy_finance/eu/forecasts/2015_autumn_forecast_en.htm, if not otherwise indicated.

Figure 1: Debt of general government and private sector debt as a percentage of GDP (end of 2014)
Source: OECD statistics, EBA calculations.



Banks' market parameters show some volatility throughout the year

During the first half of 2015, credit default swap (CDS) spreads of EU banks remained stable at rather low levels compared to last year. On the other hand, banks' equity prices showed some volatility: after a positive evolution during the first quarter of 2015 the summer brought some market corrections, due to concerns over Greece, China's outlook and the impact on the EM economic environment (Figure 2).

Notwithstanding these economic conditions the general market sentiment for EU banks remains volatile. Market analysts consider the institutions' improved capital and funding positions, as well as asset quality and the impact of new regulatory and policy measures, as positive drivers for the general banks' market sentiment. Risks linked to EM economies, litigation risks and concerns over the development of asset price bubbles are, however, negatively influencing banks' market sentiment, according to market analysts (Figure 3).

Figure 2: Stock index — STOXX® Europe 600 Banks share price index and weighted average of EU bank CDS spreads by market capitalisation (average December 2011 = 100)
Source: Bloomberg, EBA calculations.

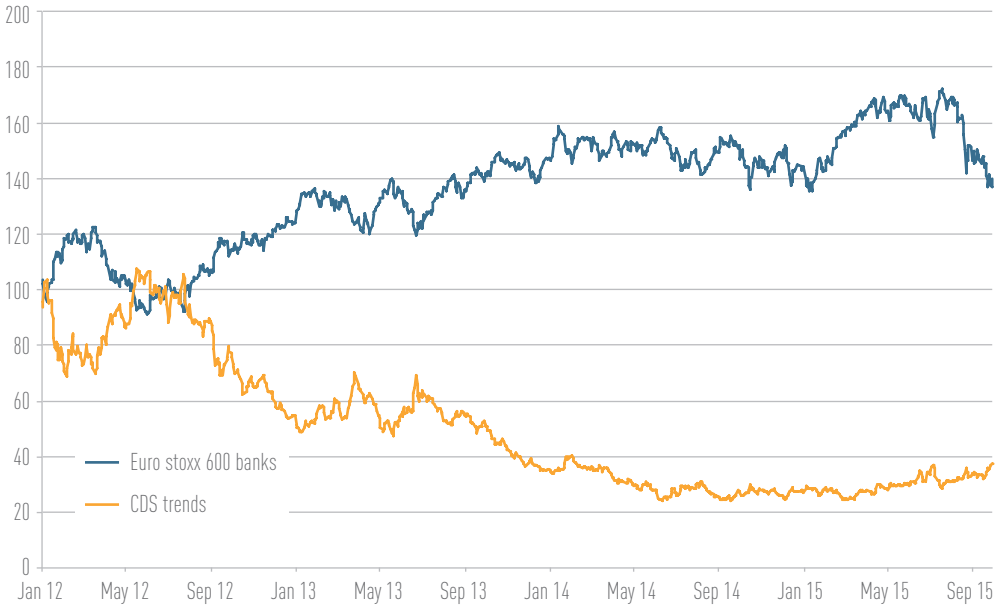
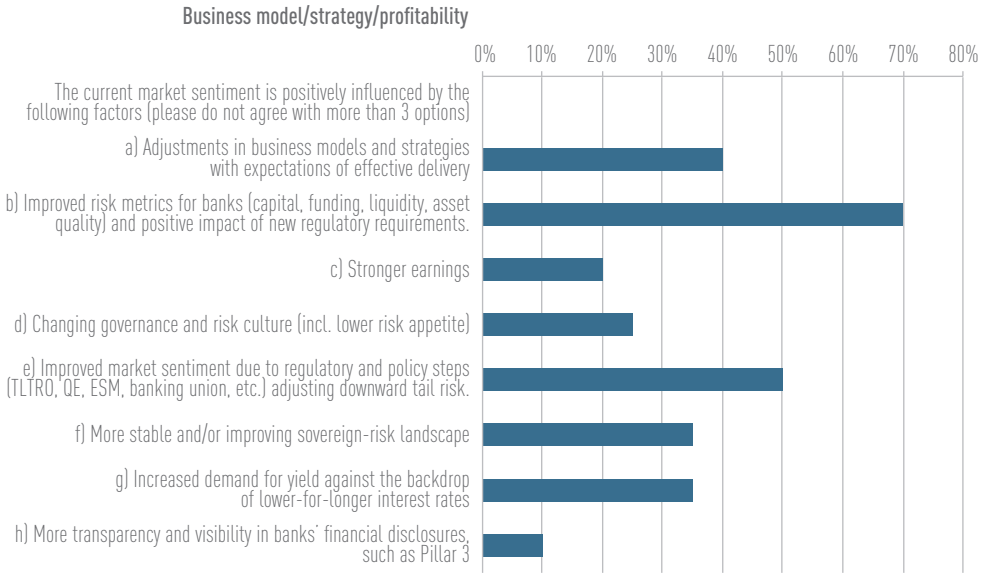


Figure 3: Market sentiment: positive and negative influence
Source: EBA RAQ for market analysts.



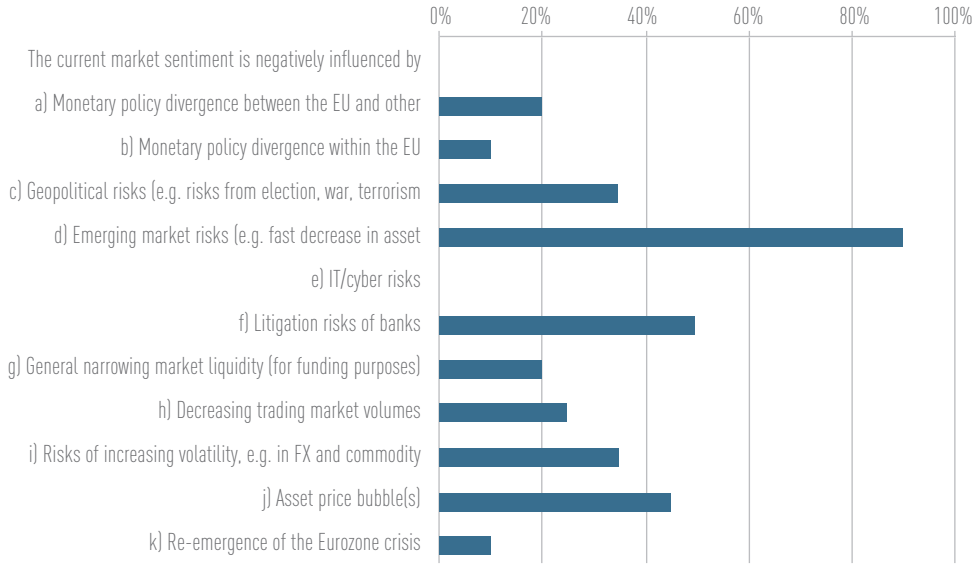
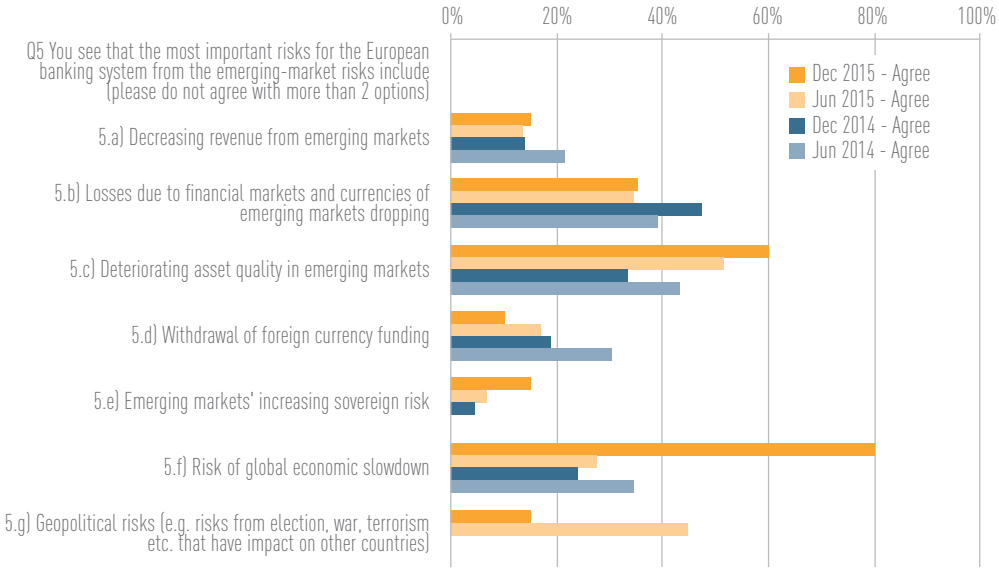


Figure 4: Emerging-market risk
Source: EBA RAQ for banks. EBA RAQ for market analysts.



GDP forecasts signal subdued growth in many EM economies in the near term, including in China, which might negatively impact global economic growth, given their significant share in world output and growth. Asset quality deteriorated during the year in these geographies, given the continued decline and volatility in commodity prices which have a negative impact for EM exporters' economies.

Accordingly, market analysts indicate that the main risks for the banking sector in the near term are a possible global economic slowdown (agreement of 80 %), followed by a deterioration in asset quality in EM economies (60 % agreement) and losses due to financial markets and depreciation of EMs' currencies (Figure 4).

1.2. Regulatory developments

With the objective of promoting regulatory and supervisory convergence across the EU, the EBA continues to make progress in the development of a single EU-wide rule book. During the first half of 2015 the EBA has issued a total of 22 additional regulatory technical standards (RTS) and 10 additional ITS.

Follow-up of the discussion paper on the future of the IRB approach

Linked to the discussion paper on the future of the internal ratings based (IRB) approach published by the EBA in March 2015, the EBA has developed various initiatives. In particular, the EBA issued guidelines on the application of the

definition of default, published for consultation on 22 September 2015, and the RTS on the materiality threshold of credit obligations past due, published for consultation in October 2014. As the changes resulting from these two regulatory products might have a significant impact on some institutions, the EBA has decided to carry out a qualitative and quantitative analysis (QIS) in order to estimate the possible impacts on the regulatory capital requirements; assess the ability of institutions to recover historical data based on an adjusted definition of default; estimate expected impacts on the calibration of risk parameters and assessing the expected materiality of the model changes; and gather information necessary to take final decisions on the regulatory requirements to be included in the RTS and guidelines (GL).

In addition, the discussion paper sought stakeholders' feedback on how to implement the regulatory measures needed to ensure a robust and clear framework for IRB models in a consistent way and how to bring forward future changes to the current approach. Following the finalisation in May 2015 of the consultation period, the EBA is currently working on a report that will provide a comprehensive response to the industry.

Together with the report on the future of the IRB approach, it is the EBA's intention also to publish an opinion on the implementation of the regulatory review of the IRB approach, addressed to competent authorities, that clarifies how to deal with the operational challenges of the implementation processes and the chosen sequencing — in particular the supervisory approval processes that will result from the introduction of the regulatory changes. This will require institutions and supervisors to develop implementation plans together.

By the end of 2015 the EBA will publish the final draft RTS on the assessment methodology for the IRB approach, a key component of the EBA's work to ensure consistency in model outputs and the comparability of risk-weighted exposures.

Progress regarding the liquidity requirements envisaged in the capital requirements regulation and capital requirements directive (CRR/CRD) framework

The specification of the liquidity coverage requirement, envisaged in the CRR, via the liquidity coverage ratio (LCR), as defined by the European Commission's delegated act on LCR published in the Official Journal on 17 January 2015, is applicable from 1 October 2015. The liquidity coverage requirement is intended to cover the net liquidity outflows under gravely stressed conditions over a period of 30 days by the holding of adequate liquidity buffers. An adequate supervisory review of the LCR requires proper LCR reporting according to the specifications in the LCR delegated act. The EBA's final draft ITS on reporting, amended in accordance with the provisions of the delegated act, was published in June 2015, and it provides institutions with a complete set of templates and instructions so as to capture all the necessary LCR items and to adequately ensure the proper supervisory reporting of the LCR according to the Commission's delegated act. The ITS proposes a first reference date corresponding to the later of December 2015 or 6 months after the publication date of the ITS in the Official Journal.

Progress regarding the bank recovery and resolution directive (BRRD) framework and the European Deposit Insurance Scheme (EDIS)

In July 2015 the EBA published a set of standards and guidelines that are part of the EBA's major programme of work to implement the BRRD and address the problem of too-big-to-fail banks.

- Final draft RTS on the minimum requirement for own funds and eligible liabilities (MREL), and on the contractual recognition of bail-in. The set of standards on MREL aims at ensuring that institutions have adequate loss-absorbing capacity. The second set aims at ensuring the cross-border effectiveness of the bail-in power.
- Final draft RTS on resolution colleges under Article 88(7) of Directive 2014/59/EU (BRRD), specifying the operational functioning of resolution colleges in order to ensure the cooperation of all parties involved in the resolution planning and process of banking groups that operate on a cross-border basis.
- Final draft RTS on independent valuers, setting out the general criteria against which valuers should be assessed to determine whether they comply with the legal requirement of independence for the purposes of performing valuation tasks under the BRRD.
- Final guidelines and final draft ITS on simplified obligations, relating to the eligibility of institutions for simplified obligations in the context of the BRRD.
- Final draft RTS and guidelines on the provision of group financial support, and final draft ITS detailing the disclosure requirements of these activities.
- In November 2015, the European Commission issued a proposal for a regulation establishing the EDIS.

Progress during the second half of 2015 on other areas of the single rulebook

In the fourth quarter of 2015 the EBA published the final draft RTS on prudential requirements for central securities depositories (CSDs). These RTS were first published for consultation in February 2015. They define the capital requirements for CSDs with a view to harmonising the diverse practices across the EU, as well as specifying a prudential framework for those CSDs that provide banking-type ancillary services.

In December 2015 the EBA also published the final draft RTS on risk-mitigation techniques for OTC derivative contracts not cleared by a central counterparty (CCP), developed on the basis of Article 11(15) of Regulation (EU) No 648/2012 (EMIR), which establishes provisions aimed at increasing the safety and transparency of the over-the-counter (OTC) derivatives markets in the EU. The publication follows a two-step consultation process jointly conducted by the European Supervisory Authorities (ESAs).

EBA proposal on securitisation

Following requests from the Commission, the EBA published on 7 July 2015 its opinion on a EU framework for qualifying securitisation, together with its report on qualifying securitisation. In this the authority develops the analysis that was conducted and that resulted in a set of recommendations.

The EBA proposes a two-stage approach to the regulatory definition of 'qualifying' securitisation, whereby in order to qualify for differential treatment a securitisation transaction should first meet a list of criteria ensuring simplicity, standardisation and transparency and, as a second step, the underlying exposures should meet criteria relating to the minimum credit quality of the underlying exposures. The report also proposes a more risk-sensitive approach to capital regulation for long-term securitisation instruments, as well as for asset-backed-commercial paper. The Commission securitisation initiative adopted on 30 September 2015 takes into account the conclusions of the EBA report.

The EU's capital market union project

The development of a common regulatory framework underpinning the integration of the financial services within the EU and of the EU financial markets keeps progressing. On 30 September 2015 the European Commission adopted an action plan setting out key measures to achieve a true single market for capital in the EU. The capital markets union (CMU) is another cornerstone of the integrity, efficiency and orderly functioning of the single market. It will complement other initiatives, namely regarding the banking sector, the solvency and liquidity regime set out in the CRD/CRR framework and the common rules on resolution regimes included in the BRRD framework.

The main objectives of the CMU project are to:

- develop a more diversified financial system complementing bank financing with deep and developed capital markets;
- unlock around the EU the capital which is currently frozen and put it to work for the economy, giving savers more investment choices and offering businesses a greater choice of funding at lower costs;
- establish a genuine single capital market in the EU, where investors are able to invest their funds without impediments across borders and businesses can raise the required funds from a diverse range of sources, irrespective of their location.

The project articulates key measures and initiatives, some of them aimed at enhancing the capacity of banks to lend. It is the Commission's intention to:

- revitalise simple, transparent and standardised EU securitisation;
- explore the possibility for all Member States to benefit from local credit unions to operate outside the scope of the EU's capital requirements rules for banks;
- assess whether and how to build a pan-EU covered bond framework.

2. Asset side

The first half of 2015 confirmed that deleveraging in the EU banking sector is reversing. Asset volumes, including loans, have been increasing since the beginning of the year, continuing a trend that had already started last year. With loans growing at a faster pace than assets, banks seem to be further moving towards a traditional role in banking. Nonetheless, banks and analysts expect slower expansion of balance sheets going forward.

Though asset quality is still subdued compared to long-term history, banks saw further improvements in it. The ratio of impaired and past due (> 90 days) loans to total loans decreased to 6.4 % in the second half of 2015 compared to 7 % at the end of 2014. There are still material differences in asset quality depending on the size and the country of the banks. Banks expect further gradual improvements in asset quality, but some institutions might be affected by the negative developments in EM economies.

2.1. Volume trends

Further growth in total asset and loan volumes materialises

Total asset and loan volumes grew further in the first half of the year, a trend which started in the beginning of 2014 and was already noted in the last Risk Assessment Report (RAR). Gross loan volumes increased at a faster pace than total assets (3.6 % increase for the former compared to 1.4 % increase for the latter, year to date, Figure 5). In addition, total loans are increasing faster than last year, which is in general a result of improving macroeconomic circumstances and, in some areas, a result of accommodating monetary policy. Even though total asset volumes remain below June 2012 levels by 6.7 %, these figures indicate a reversal of the deleveraging strategy followed by EU banks in recent years.

Reversal in de-risking and deleveraging process

Banks' deleveraging between 2012 and 2013 was accompanied by the de-risking of balance sheets. Total assets increased by 1.4% and RWA increased by 2.5% in 2015. Off-balance-sheet volumes have grown even faster than on-balance-sheet business in the same period (Figure 6).

Figure 5: Total asset and loan volumes (trillion EUR)
Source: EBA KRIs and EBA calculations.

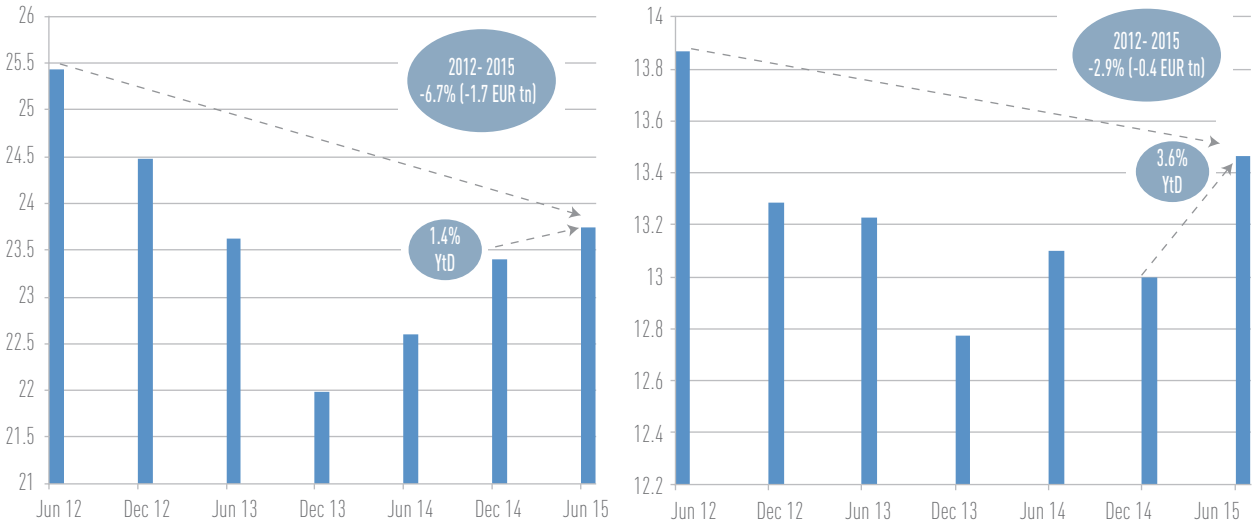
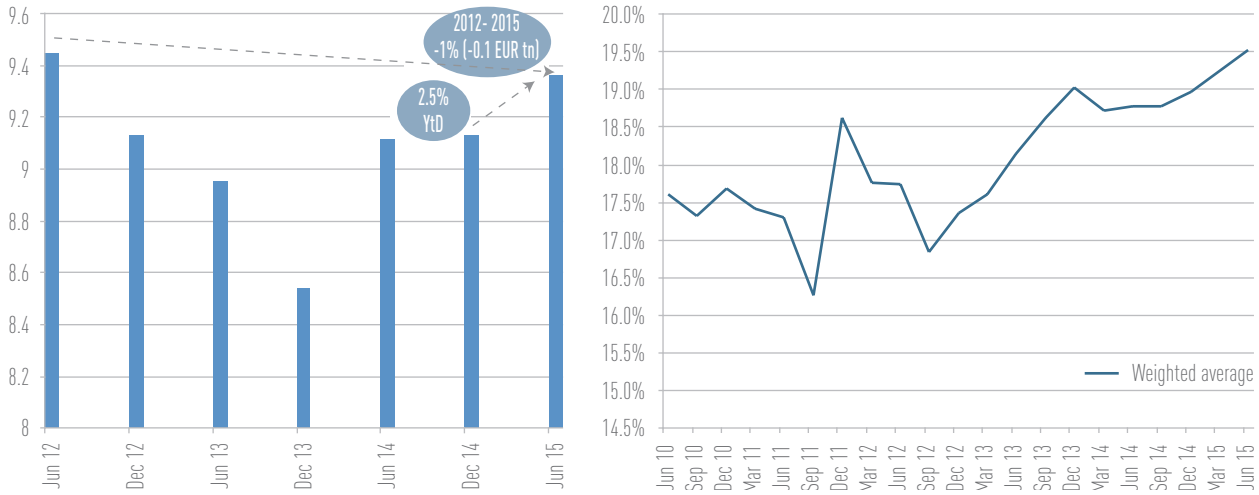


Figure 6: Risk-weighted assets (trillion EUR) and ratio of off-balance-sheet items to total assets
Source: EBA KRIs and EBA calculations.

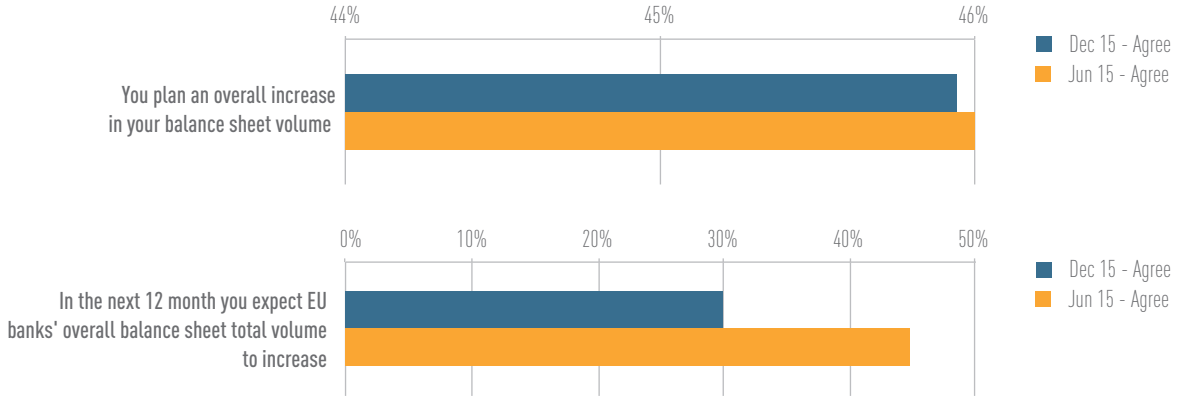


Banks expect to strengthen the traditional lending role, but there is less confidence on further balance sheet expansion

The RAQ results show that almost 45 % of the banks plan an overall increase in their balance sheet volume in the next 12 months. Confidence in the banks' balance sheet expansion decreased slightly from just above 46 % in June 2015. Market analysts are somewhat more conservative: only 30 % of them expect the EU's overall balance sheet volume to increase in the next 12 months (decreasing from over 40 % that agreed it would happen in June 2015; Figure 7).

RAQ results from analysts suggest that banks will continue to move towards plain vanilla lending. In particular, they expect an increase in lending volumes to the corporate sector, including small and medium-sized enterprises (SMEs), and to households (residential mortgage and consumer credit loans). These results are similar to the previous RAQ, showing that between c. 50 % and 80 % of market analysts agree. With many EU economies being dependent on banks' lending to SMEs, trends to increase such lending would materially contribute to a recovery of the economy.

Figure 7: Expected further growth in banks' overall balance sheet
Source: EBA RAQ for market analysts and banks.



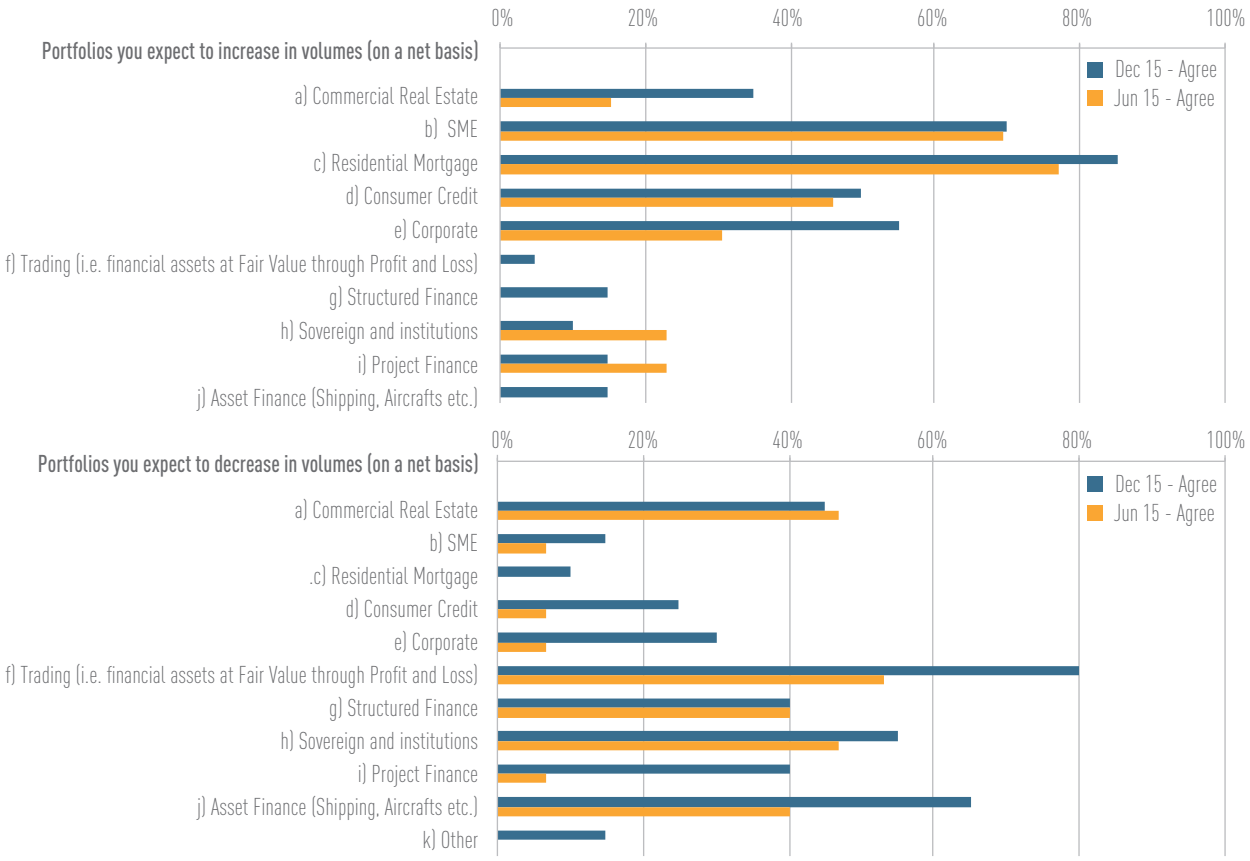
On the other hand, SME loans show the highest ratios of non-performing loans (NPLs) compared to other segments (large corporates and households) at EU level and in many Member States. As such, expanding SME loans aggressively — probably with increasing competition between banks — might build up additional credit risk, which should be monitored by supervisors.

Market analysts expect a contraction in lending volumes in trading activities, asset finance and sovereign and institutions exposures (rates of agreement between 50 % and 80 %). Nevertheless, there is a split in analysts' views regarding commercial real estate (CRE) portfolios: almost 40 % expect the volume of CRE portfolios to increase, whereas slightly over 40 % expect it to decrease (Figure 8). The latter results indicate a divergence in developments in the Member States' real estate markets. Banks in some Member States report significant increase in their real estate-connected portfolios.

Market analysts' views are in line with banks' answers: a continued move towards classical bank lending instead of complex business or sovereign financing is expected in the future. Further decreases in sovereign exposures, at least in the euro area, might also be driven by the ECB's purchases through its quantitative easing (QE) programme, which is on one hand crowding out banks as investors and on the other making sovereign investments less attractive, through further decreasing yields on such investments.

According to the RAQ results, banks are planning to extend lending not only to corporates and SMEs but also to residential mortgage and consumer credit (agreement between 50 % and 70 % each). In contrast, banks intend to decrease their CRE exposures (c. 35 % agreement), as well as asset finance and sovereign and institutions exposures (agreement between 20 % and 30 % each; Figure 9).

Figure 8: Portfolios considered for growth and for deleverage
Source: EBA RAQ for market analysts.



Accordingly, market analysts expect an increase in asset sales in the next 12 months, especially in CRE portfolios (c. 65 % agreement, showing a slight increase from the previous RAQ; Figure 10). Also, reducing exposures to specific geographies is still an important strategy for the banks in the near future (agreement of 40 %).

Figure 9: Portfolios considered for growth and for deleverage
Source: EBA RAQ for banks.

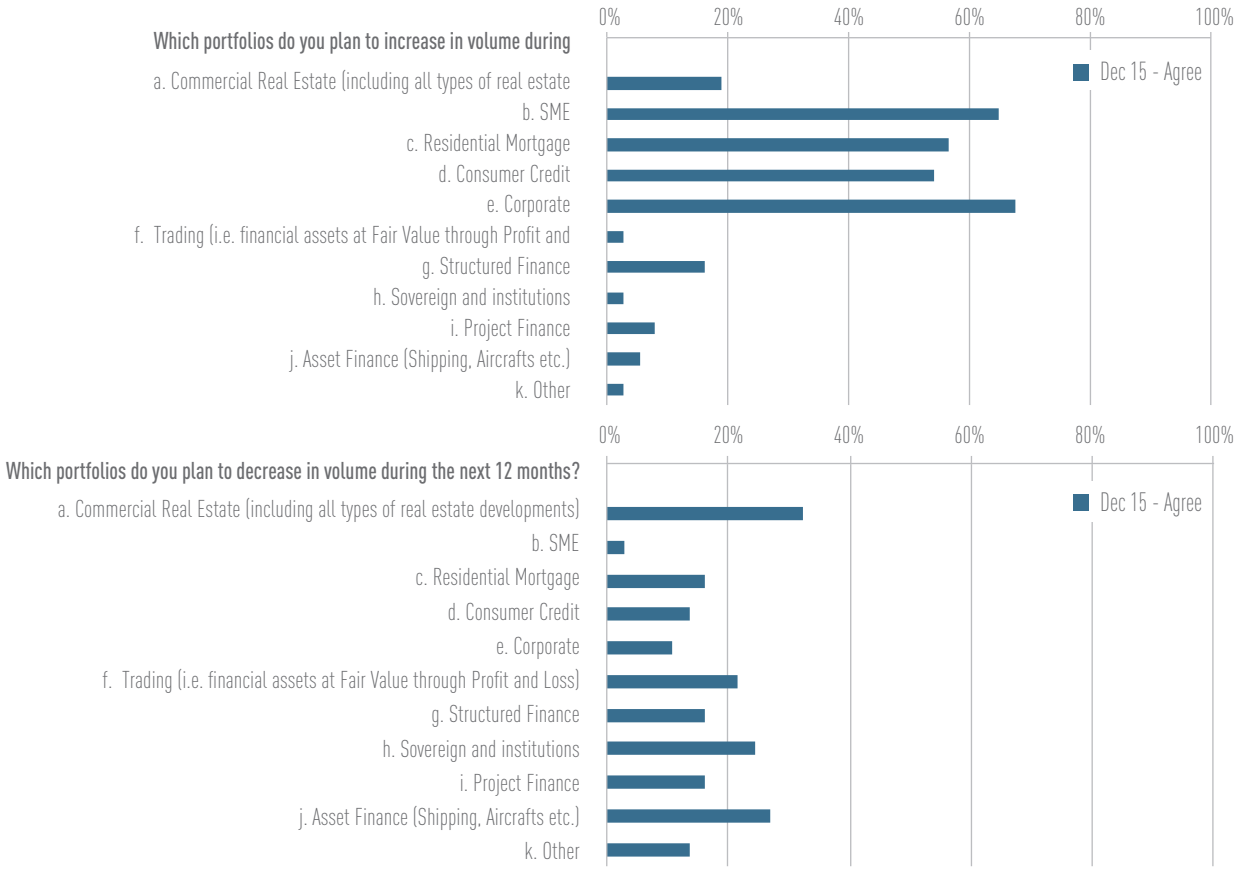
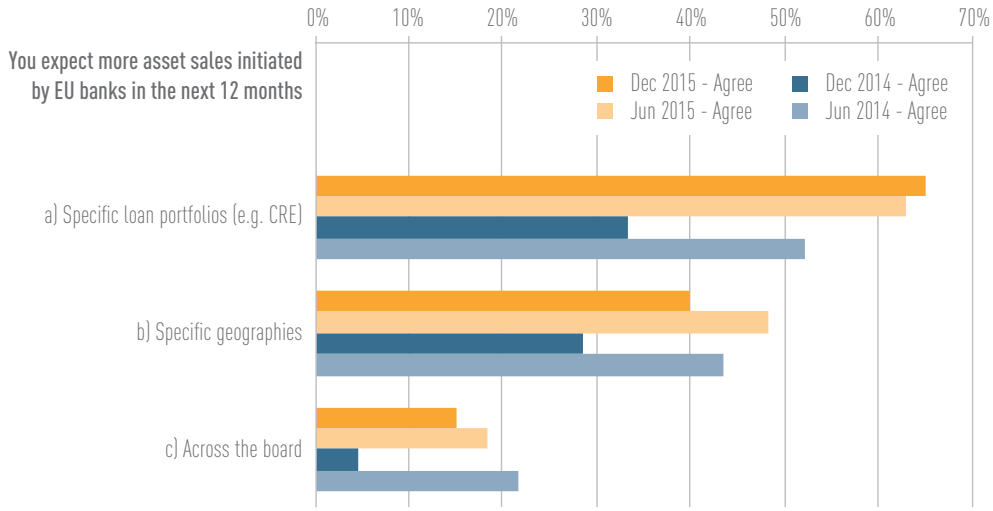


Figure 10: Expectations in respect of asset sales initiated by EU banks
Source: EBA RAQ for market analysts.



Exposures to non-bank financial intermediaries

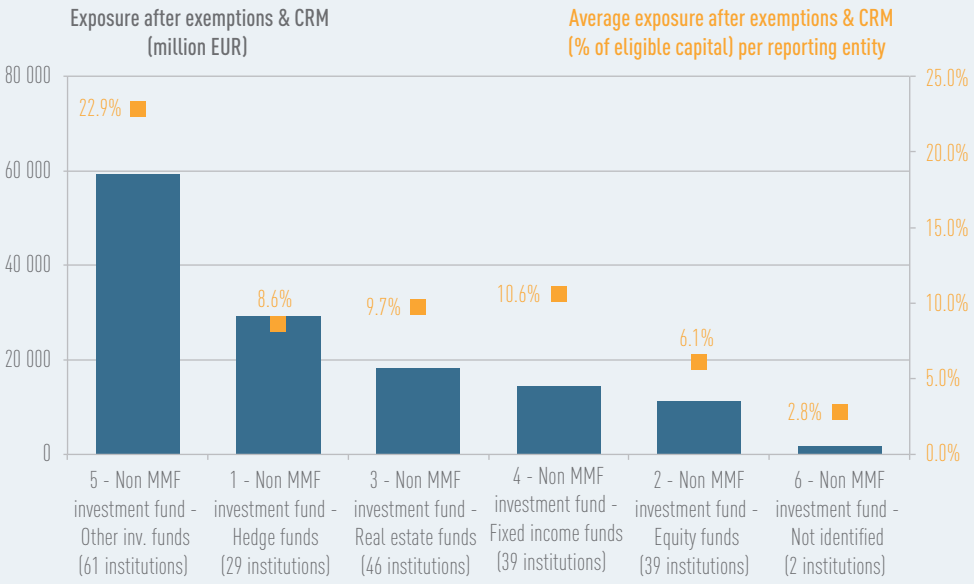
The EBA has a mandate to develop guidelines to set limits on exposures to shadow banking entities which carry out banking activities outside a regulated framework. In this context the EBA has collected data on institutions' exposures to non-bank financial intermediaries and carried out an analysis of the results. This analysis is based on data collected from 184 institutions (169 banks and 15 investment firms) from 22 Member States, covering around half of the aggregate total assets of the EU financial sector. The data includes both entities not subject to prudential regulatory requirements and certain regulated entities, such as undertakings for collective investments in transferable securities (UCITS). The EBA published a separate report on this analysis.

Institutions were asked to classify their counterparties according to their economic function, including money market funds, other investment funds (hedge funds, equity funds, real estate funds, fixed income funds and other investment funds), finance companies, broker-dealers, etc.

The overall exposure to those entities, after credit risk mitigation and large exposures exemptions, of the institutions in the sample was EUR 1 082 billion (first quarter 2015). The related exposure volumes were submitted by institutions and in the further analysis set into relation with eligible capital [6].

The results show that the average individual exposure to UCITS money market funds is around 6 % of an institution's eligible capital, and to non-money market funds is around 29 % (all numbers and ratios after credit risk mitigation and large exposures exemptions). Within non-money market funds, the biggest average individual exposure is to fixed income funds (about 11 % of eligible capital), followed by real estate funds (10 % of eligible capital; Figure 11).

Figure 11: Exposures (in million EUR) and average of aggregate exposures (as a percentage of eligible capital) by type of non-MMF investment funds (considering only individual exposures equal to or above 0.25 % of eligible capital)
Source: EBA report on institutions' exposures to 'shadow banking entities'.



[6] Article 4(71) of Regulation (EU) No 575/2013 defines 'eligible capital' as the sum of tier 1 capital as referred to in Article 25 (of the same regulation) and tier 2 capital as referred to in Article 71 (of the same regulation) that is equal to or less than one third of tier 1 capital.

Drivers of business model changes

Banks' answers might indicate more business model modifications and related changes in portfolio compositions going forward: more than 30 % of the banks agree this will happen, up from c. 25 % in June 2015. The main drivers are increased competition from non-bank intermediation activities (such as shadow banking activities) and regulatory requirements on resolvability. In particular, banks expect the main changes to be due to regulations on resolution/bail-in (c. 85 % agreement), and banking structures and capital regulations (about 70 % agreement). Banks do not expect many mergers and acquisition initiatives in the near future, even though rationalisation initiatives should still be the key to improving their performance (Figure 12).

Market analysts consider that an increase in balance sheets is driven by cheaply available funding (even though this loses relevance when compared to June 2015) and increased demand for credit and transactions (agreement of 60 % and 50 %, respectively). On the other hand, for banks which are deleveraging in general, or at least certain portfolios, these measures continue to be a consequence of regulatory pressures and constraints on capital levels, according to the analysts' responses (Figure 13).

Banks' responses show that the main drivers for deleveraging are the disposal of business units and asset sales, followed by a further de-risking of banks' business lines (approximately 80 % and 70 % agreement, respectively). Similarly to market analysts' views, deleveraging is also taking part in banks due to constraints on current and future capital levels, confirming that regulation is driving banks' business model shifts from more complex to plain vanilla businesses.

Figure 12: Drivers of business model changes
Source: EBA RAQ for banks.

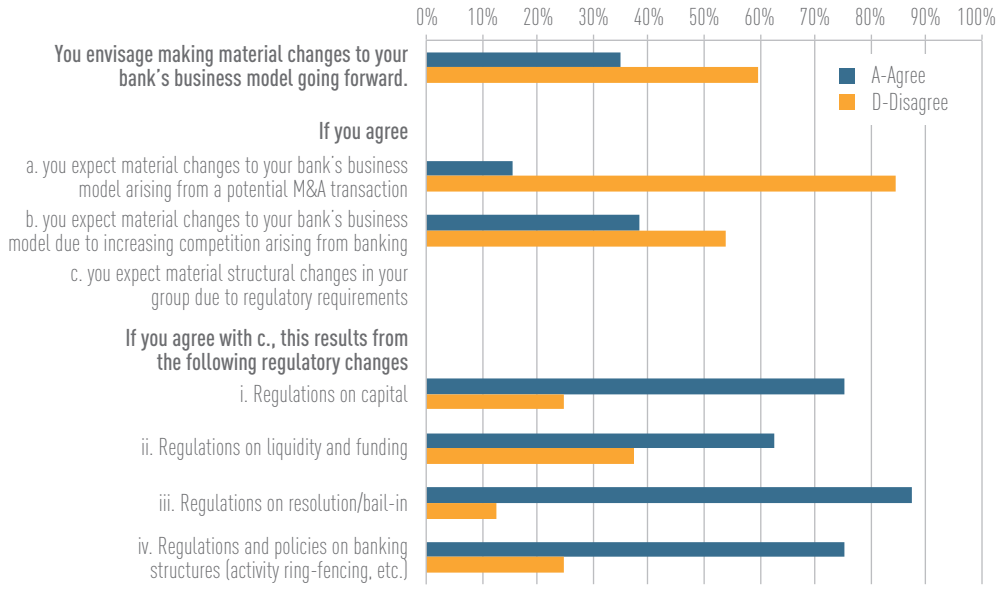
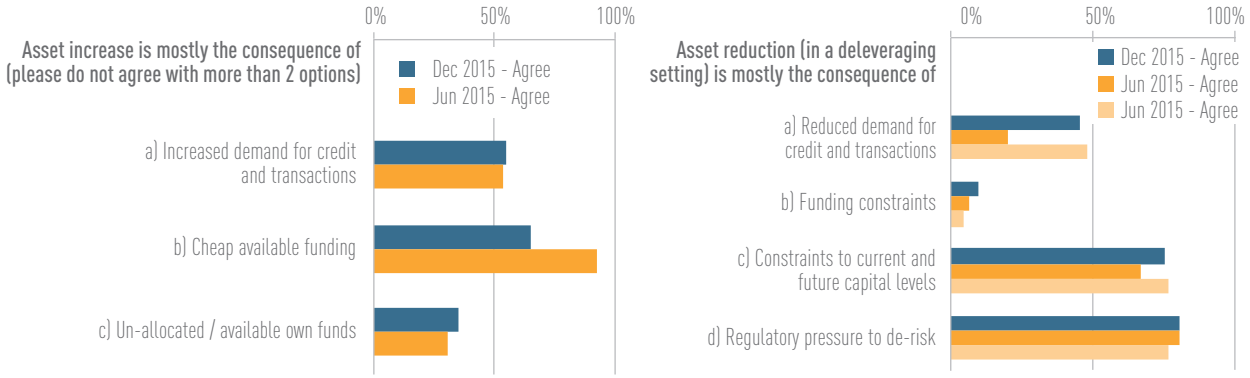


Figure 13: Reasons for asset growth and deleverage
Source: EBA RAQ for market analysts.



Emerging markets' impact on EU banks

Falling commodity prices and economic deterioration in EM countries increased worries about the possible impact on EU banks. This can happen by triggering defaults and through negative effects on revenue from business with clients in EM countries.

Starting from October 2014, when the US Federal Reserve (Fed) terminated its quantitative easing programme, the dollar surged against all main currencies. This was more or less in parallel with a slump in commodity prices, which reached their minimum since 2008. The combination of these two effects has been the main driver of the slowdown of EM economies seen in the last six quarters (Figure 14).

The mismatch between developed market (DM) and EM countries' growth cycles has become a key issue: as economic conditions are improving in the United States, with a reduction in unemployment and inflation picking up, the Fed is expected to finally move from a long period of monetary accommodation to raising interest rates in December, which would be the first time since 2006. That would imply even further depreciation of EM currencies, creating more downward pressures on oil, industrial metals and other commodities prices.

At least 50 % of the outstanding corporate debt in EM countries is denominated in foreign currency, with the exception of Asia, where the percentage is around 30 %, though this is still high (Figure 15). Currency depreciation in EM economies could result in potentially negative effects on EM debt: the rising costs of foreign currency-denominated debt might impose further debt sustainability questions. A deterioration of economic conditions in EM countries might have an important effect on balance sheets and asset quality of EU banks.

Figure 14: Quarterly real GDP, seasonally adjusted year over year percentage of main EM and evolution of EM, USD and commodities indexes
Source: OECD and Bloomberg, EBA calculations.

	Q1 14	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15
Brazil	2,1	0,6	0,5	0,3	1,7	2,4
China	7,4	7,5	7,3	7,3	7	7
Russia	1,2	1,3	0,5	0,5	2,2	4,5
India	7,3	6,9	7,7	7	7,5	7,2
South Africa	2,1	1,3	1,5	1,3	2	1,6
Colombia	6,5	4,2	4,2	3,4	2,8	3
United States	1,7	2,6	2,9	2,5	2,9	2,7
Euro area	1,1	0,7	0,8	0,9	1,2	1,5
Japan	2,1	0,5	1,4	0,8	0,8	0,9

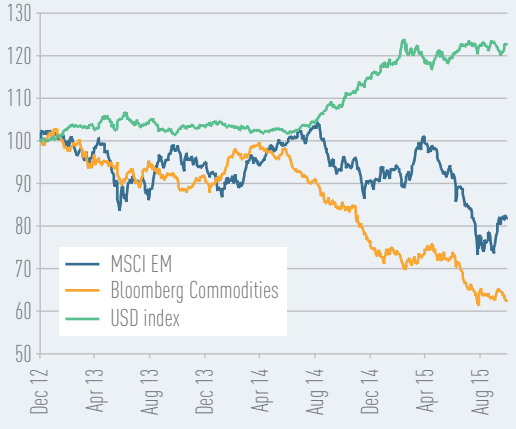


Figure 15: Currency breakdown of corporate debt in EM countries — by geographical area as at year-end 2014
Source: IMF, EBA calculations.

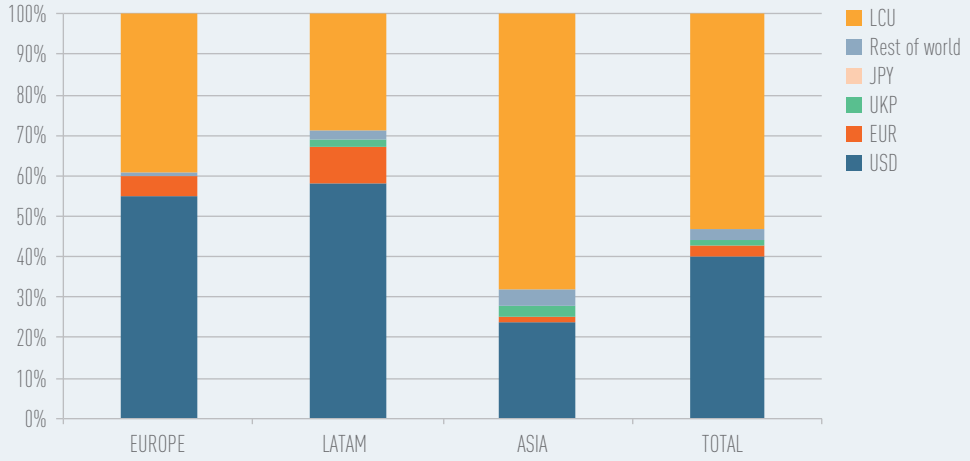
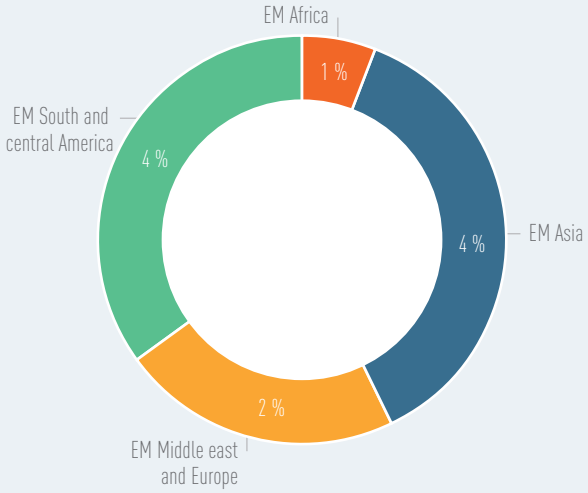


Figure 16: EU banks' RWAs of EM exposures over total RWAs — by geographical area, Q2 2015
Source: EBA supervisory reporting.



	RWA as % of total RWA to EMs
China	25%
Brazil	14%
Turkey	14%
Mexico	9%
India	7%
Russia	7%

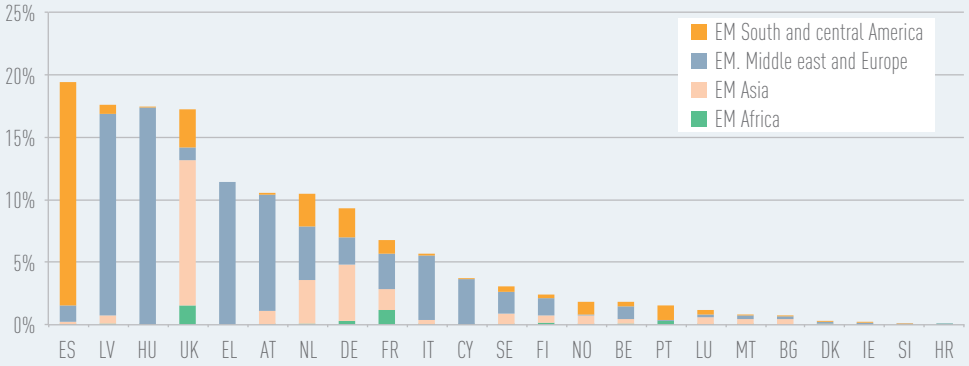
Based on supervisory reporting data ([7]), EU banks' direct exposure towards EM countries was about EUR 2.3 trillion (as of June 2015). EU banks' RWAs in Asia and Latin America represent more than 8 % of their total RWAs. The exposure towards all EM countries is more than 11% of the banks RWA (chart in Figure 16). More than 50 % of EU banks' RWAs towards EM countries are exposed towards China, Brazil and Turkey (table in Figure 16).

In the EU, the most exposed banks towards EM markets are domiciled in AT, ES, EL, HU, LV, the NL and the UK (measured as their % share of RWA exposure). ES banks hold mainly exposures from South American while UK banks are more exposed to Asia's EMs. AT, HU and LV have a very high percentage of eastern European EMs in their portfolios (Figure 17).

In the short term, spillover effects from the Chinese economy slowdown remain a significant risk. After the equity market crash in August, weaker than expected macroeconomic data in the last quarter and a downward revision of global growth signalled that the risk is becoming more material.

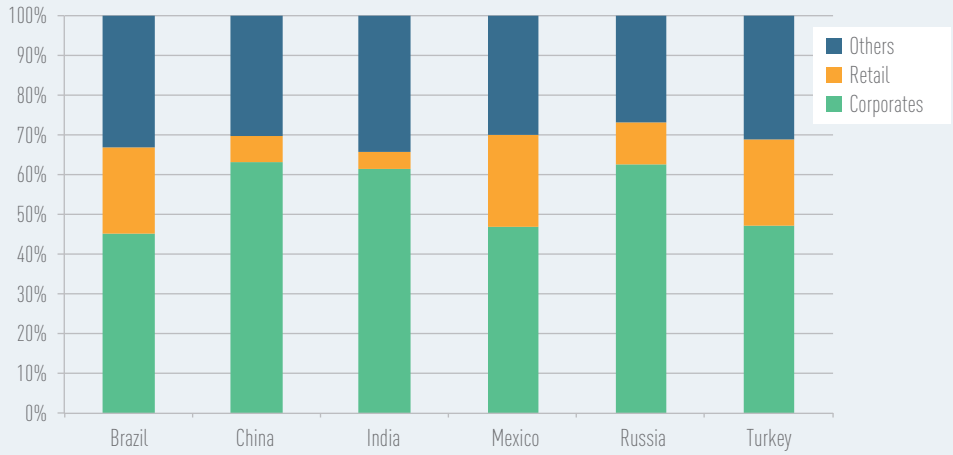
([7]) The data for figures in this text box are based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

Figure 17: EU banks' RWAs of EM exposures over total RWAs — by geographical area, Q2 2015
Source: EBA supervisory reporting.



EM Africa: Morocco,SouthAfrica, Zambia
EM Asia: China, India,Indonesia, Philippines, Sri Lanka,Thailand
EM Middle East and Europe: Russia, Turkey, Ukraine
EM South and central America: Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guatemala, Mexico, Peru, Uruguay, Venezuela

Figure 18: Total EU banks' RWA breakdown in selected countries, Q2 2015
Source: EBA supervisory reporting.



A tightening of the Fed's monetary policy may also trigger capital outflows from EM economies, worsening their liquidity conditions and additionally pushing up the cost of refinancing. Given the actual excess leverage, especially in the corporate sector of EM countries, such a scenario can stem even more economic growth and have a direct effect on EU banks' exposures by triggering defaults, or at least negatively impacting revenue from business with clients of EM countries. In fact, looking at the composition of the exposures in the top six EM countries, 50 % of the exposures in terms of RWAs is towards the corporate sector (Figure 18).

2.2. Asset quality

During the first half of 2015 the ratio of impaired loans and past due (> 90 days) loans to total loans improved (from 7 % in December 2014 to 6.4 % in June 2015), but is still at high levels to historical and geographical comparisons. The decrease in the ratio was driven both by an increase in total loans (despite some volatility during the year) and a decrease in impaired loans (Figure 19).

Dispersion in asset quality between Member States and sizes of banks remains high

Member States with an already rather low ratio (in the figure towards the right side of the chart) show stable or even improving asset quality. Country dispersions show that Member States with rather high impairment ratios have unclear trends over the years. Some of these Member States show an even further deterioration of asset quality during recent periods. For others of this group of Member States a declining impairment ratio could be observed. Latest data also shows that dispersion remains significant between the largest banks and all the others: the ratio of impaired loans for the largest banks is still significantly below that for the other banks (Figure 20).

A further gradual improvement in the banks' asset quality is expected in the future. According to the RAQ, 50 % of the banks expect its credit portfolio's quality to marginally improve (Figure 21).

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 KRIs.

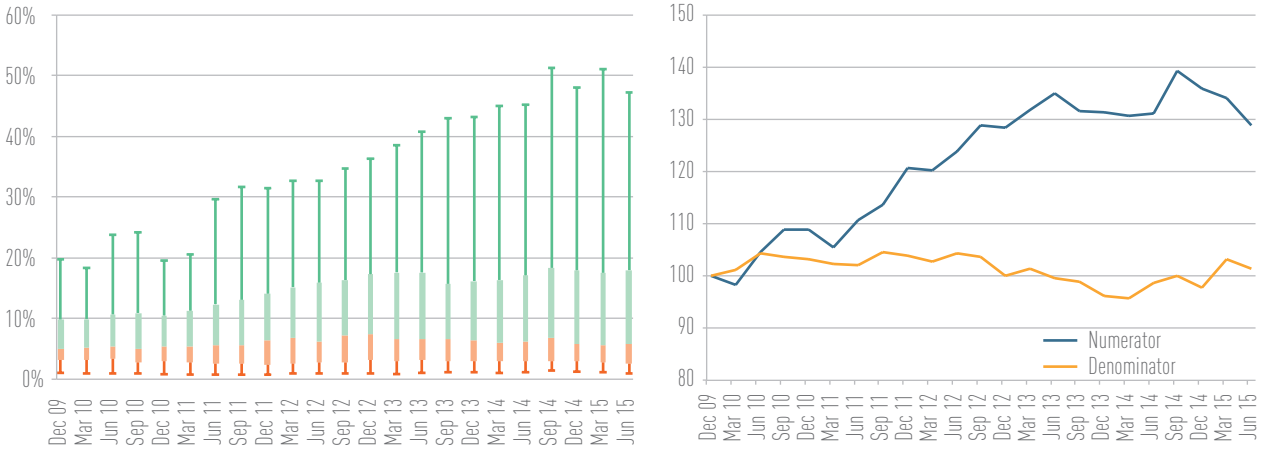


Figure 20: Impaired loans and past due (> 90 days) loans to total loans— medians by banks' size class and by country of the bank
Source: EBA KRIs.

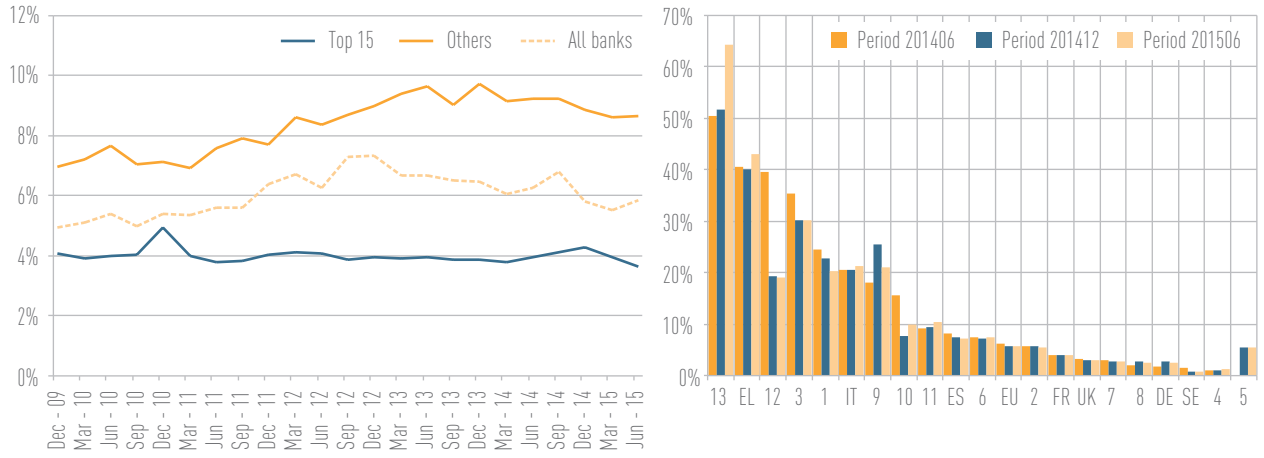
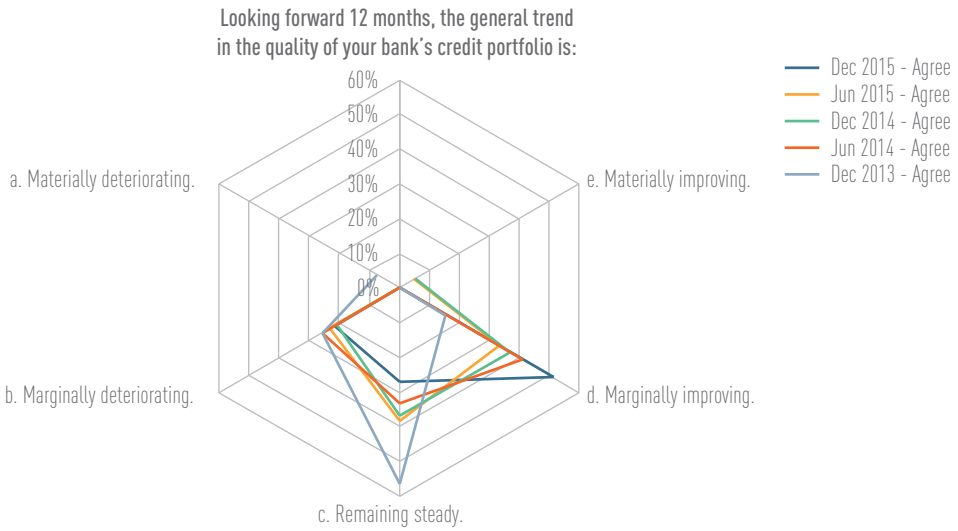


Figure 21: Expected evolution of asset quality
Source: EBA RAQ for banks.



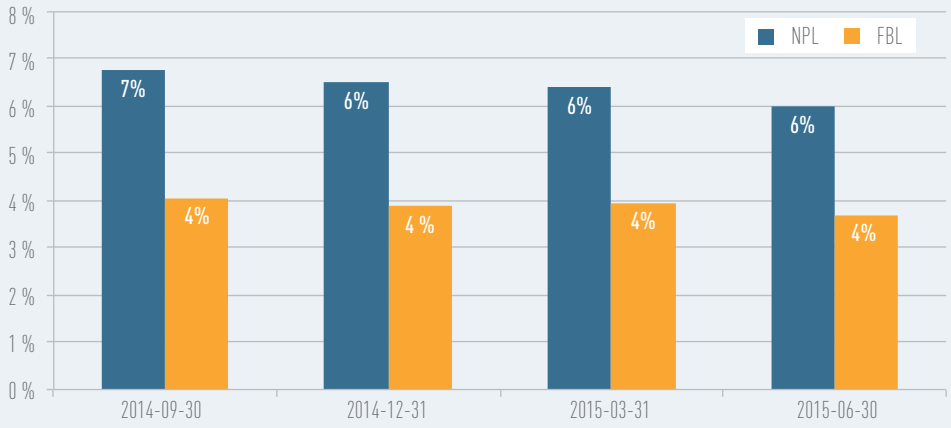
Non-performing and forborne loans based on the EBA harmonised definition

The EBA introduced harmonised definitions of non-performing exposures (NPEs) and forborne exposures (FBEs) in 2014, covering loans and debt securities except those held for trading, and off-balance-sheet commitments, and has collected data since September 2014. This analysis focuses on loans and advances (NPLs) and forborne loans (FBLs)) both at amortised cost and fair value, aggregating data from 160 banks ([8]).

The EU weighted average NPL ratio was 6.0 % in June 2015, a decrease of 0.5 percentage points (pp) from December 2014 (6.5 %; Figure 22). NPL ratios were the highest in financially stressed Member States which were hit more severely by the economic crisis from 2008 onward. In general, NPL ratios mostly followed the development of economic conditions in the respective Member States.

The EU weighted average FBL ratio has been relatively stable over the last four quarters and decreased only modestly by

Figure 22: Ratios of non-performing loans and FBLs
Source: EBA supervisory reporting.



([8]) The data for figures in this text box are based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

0.2 pp to 3.7 % in June 2015 from December 2014 (Figure 22). The stable trend is seen also across Member States with mostly only very small changes in forbearance ratios.

Loans to SMEs still show the highest level of NPLs in most Member States. The EU weighted average for SME loans was 18.5 % in June 2015, remaining stable since December 2014 (18.6 %; Figure 23). A few Member States experienced significant improvements in the NPL ratios for SMEs while those ratios deteriorated in other Member States. While NPL ratios in general followed the development of the economic situation of the respective Member State, the asset quality of SME loans did not always follow this pattern. For instance, in some Member States divestments and other active measures to reduce NPLs resulted a in significant decrease in the NPL ratio for SMEs.

The persistence of SMEs as the most impacted portfolio can be explained by both the relatively lower resilience of SMEs to adverse economic conditions compared to other corporates — SMEs can have a tighter cash situation and be more dependent on bank financing — and by legal and other difficulties surrounding the disposal/write-off of SMEs' NPLs. This depends on many parameters, including the legal environment, which might support restructuring or not.

NPL ratios for other non-financial corporations (NFCs, here large corporates) have recovered in many Member States, and the EU weighted average has improved from 9.2 % in December 2014 to 8.0 % in June 2015 (Figure 23). Only in a couple of Member States did the asset quality of loans to large corporates worsen during the first half of 2015. This mainly followed negative economic trends in these Member States, measured as decreasing or nearly stagnating GDP growth in 2014. This could result from the faster adjustment of large corporates to the general economic conditions, but also from the implementation of more effective resolution strategies for loans to large corporates. Furthermore, one can assume that large corporates are geographically more broadly diversified, and might for this reason benefit from positive economic developments not only in their home countries but also from abroad.

The level of NPLs to households remained stable for the EU on average, and most Member States even experienced modest improvements in the ratios. The EU weighted average NPL ratio for loans to households was 5.1 % in June 2015, improving from 5.3 % in December 2014 (Figure 23). This was influenced by the low interest rate environment, which has in general positively influenced the available funds for households to pay back loans and cover interest payments. However, the relative stability of the ratios over time might also evidence the length of the recovery process for households and the longer time to deal with those exposures due to the lack or clogging of the personal insolvency mechanisms.

In nearly all Member States — mainly with exceptions among financially distressed

Figure 23: Non-performing loan ratios by sector, Q2 2015
Source: EBA supervisory reporting.

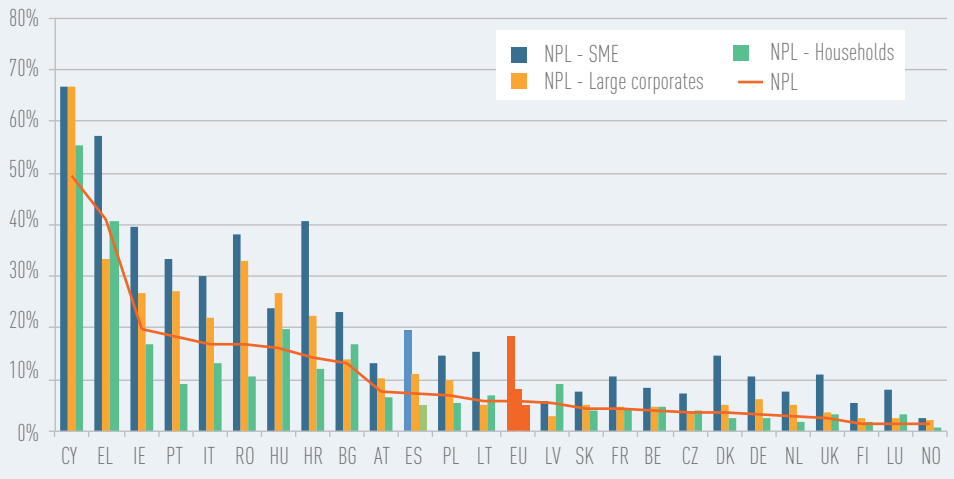


Figure 24: FBL ratios by sector, Q2 2015
Source: EBA supervisory reporting.

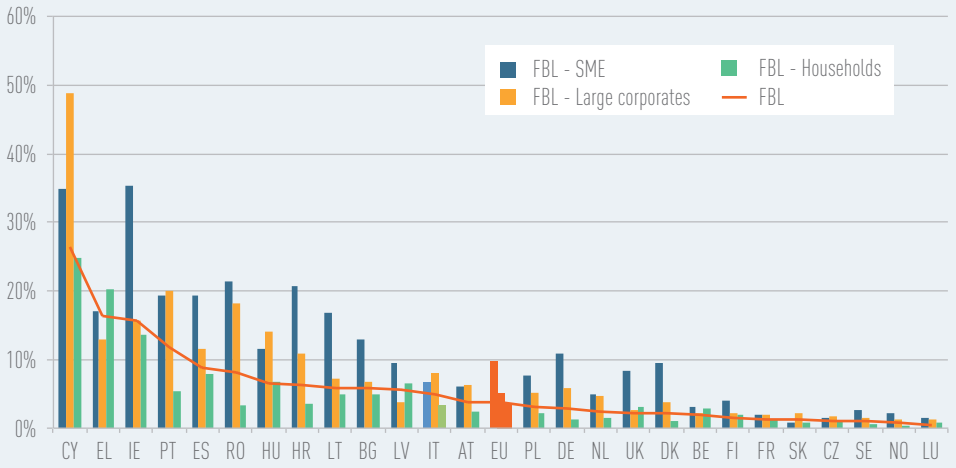
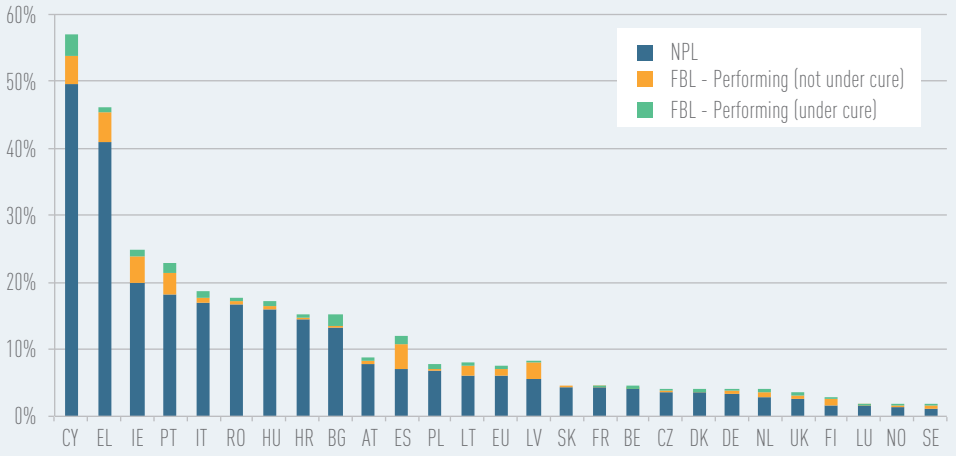


Figure 25: A composite credit weakness ratio of non-performing and performing FBLs by country, Q2 2015
Source: EBA supervisory reporting.



jurisdictions — forbearance is used for loans towards SMEs more than for loans towards other sectors. The EU weighted average ratio of FBLs to SMEs increased slightly to 9.7 % in June 2015 (9.6 % in December 2015; Figure 24). In most Member States the share of SMEs' FBLs increased during the first half of 2015. Financially stressed Member States with high NPL ratios use more forbearance, especially for loans to large corporates and households.

Forbearance of loans to large corporates showed a similar trend as the NPL ratio for this segment: the EU weighted average FBL ratio decreased by 0.4 pp to 5.1 % in June 2015 (5.5 % in December 2015). The ratio of FBLs to households remained stable at 3.5 % in June 2015, again similar to the trend of NPL ratios (Figure 24). The FBL ratio for households is generally lower than for corporate sectors.

FBLs can be considered performing or non-performing. 59 % of FBLs were non-performing in June 2015 and 41 % were performing, of which one third after being reclassified from the non-performing to the performing category (9). A couple

(9) An FBL can be considered as performing as soon as forbearance measures are applied to it, if those measures do not lead to any non-performance criteria being hit, especially if the forbearance measures are not considered as a credit event under accounting standards or as a distressed restructuring under the CRR. An FBL can also become a performing FBL once the non-performing criteria cease to apply to it. All performing FBLs must remain identified as such for at least 2 years before being considered fully performing (performing not forborne).

of Member States, however, present a significant share of FBLs classified as performing. A high a share of performing FBLs may raise supervisory concerns regarding the appropriate classification of FBLs and the quality of the loan book (the amount of performing loans may be overstated).

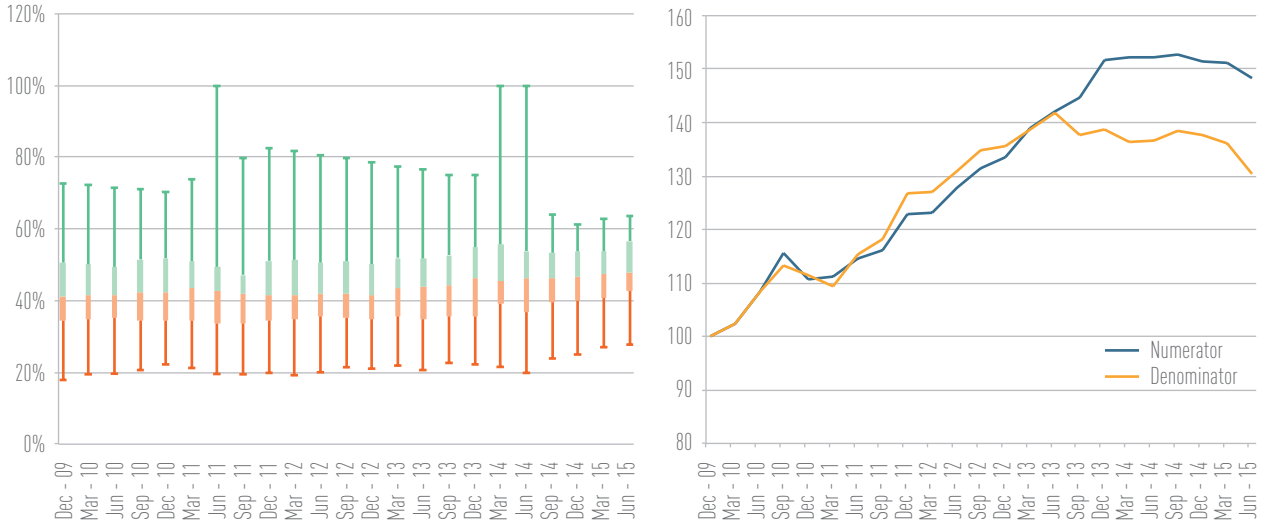
Due to their inherent characteristics — a financially weak debtor whose situation has triggered concessions — any FBL may be less resilient for further deterioration of economic conditions. To broaden the picture of credit risk, a composite credit weakness ratio of NPLs plus performing FBLs has been built and shows higher values for financially stressed Member States (Figure 25). The distribution of NPL and weak loan ratios by jurisdictions is only altered in a few cases compared to NPL ratios — and NPLs remain the main driver for the composite credit weakness ratio.

As discussed above, the majority of FBLs are classified as non-performing in most Member States. However, there are more differences in practices when the forbearance practices of NPLs are analysed. On average, 36 % of NPLs were forborne in June 2015, but this varies between 67 % and 16 % across countries.

Coverage ratios slightly increased, driven by the largest banks

Coverage ratios increased in the first half of the year from 45.8 % in December 2014 to 47.4 % in June 2015. The increase in the ratio was driven by a stronger reduction in the denominator (total impaired gross loans) versus a reduction in the numerator. The interquartile range was stable in the last year (Figure 26).

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 KRIs.



Expected default frequency — exposures towards the non-financial sector

Moody's Analytics' CreditEdge tool provides information on expected default frequencies (EDFs), an estimate of the probability of default (PD) for individual counterparties during the forthcoming year for firms with publicly traded equity. The analysts use equity prices and certain items of the companies' financial statements as input.

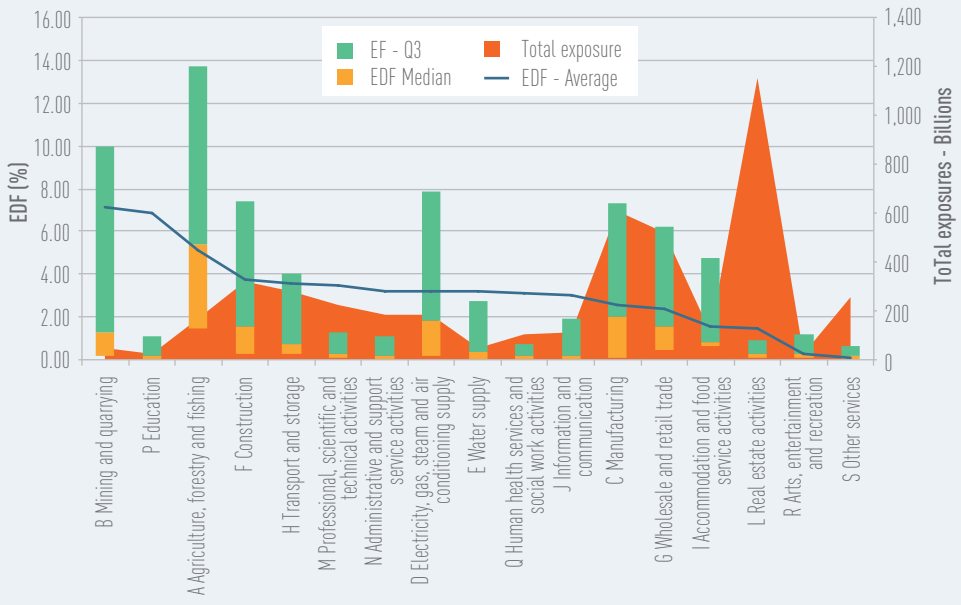
The EBA is using information on individual EDFs from Moody's to estimate the 1-year PD for the combination of non-financial sectors and/or countries/geography. And then the authority is combining the 1-year PDs estimated this way with information from supervisory reporting of financial information (Finrep) on exposures towards non-financial sectors by country of exposure, in order to produce an early warning system (EWS). This system allows the identification of the riskiest combination of sectors and geographies, i.e. those with the highest estimated 1-year PDs, and the level of exposures of EU banks towards them. It also allows for the monitoring of those exposures that are significant at EU or national level and that are associated with a high PD.

There are some caveats in the estimation of the PD for the purpose of the EWS, related to sectors, such as the real estate sector in the EU, that are relevant in terms of exposures of EU banks but are atomised and with a large proportion of corporates that are not publicly traded and whose EDF data are therefore not available.

The largest sector in terms of European exposures of EU banks is the real estate sector (28 % of total European non-financial exposures), with a low 1-year PD, but with the abovementioned caveat. The second-largest sector in terms of EU exposures (more than EUR 600 billion, 15 % of total European non-financial exposures) is the manufacturing industry, with an average PD close to 3 %, a median above 2 % and the third quartile above 7 %. The third-largest sector (around EUR 500 billion, 13 % of total relevant exposures) is wholesale and retail trade, with PDs close to 2.5 % (average), 1.6 % (median) and above 6 % (third quartile; Figure 27).

The sector with the highest 1-year PD, mining and quarrying, is less relevant in EU banks' European exposures, representing only 1.2 % of the total. In individual countries, UK, FR and NO account for more than 50 % of total EU exposures towards this sector, which represents only 2.1 %, 1.4 % and 3.8 % respectively of the banks' European non-financial exposures in those countries. Agriculture, forestry and fishing would be among the sectors with the highest 1-year PDs (5 % average, more than 13 % Q3 and 5 % median) that has some relevance in the EU banks' balance sheets.

Figure 27: EDF quartile distribution by sector (non-financial) at EU level compared to total EU banks' exposures in Europe towards non-financial corporations by sector
Source: EBA supervisory reporting, Moody's, EBA calculations.



Overall, EU banks have EUR 170 billion of exposures towards this sector in the EU. This sector represents more than 10 % of the exposures towards NFCs in NL, LV and LU (Figure 28 and Figure 29).

Figure 28: Exposures in Europe towards non-financial sectors by banks' country of origin (absolute values)
Source: EBA supervisory reporting, EBA calculations.

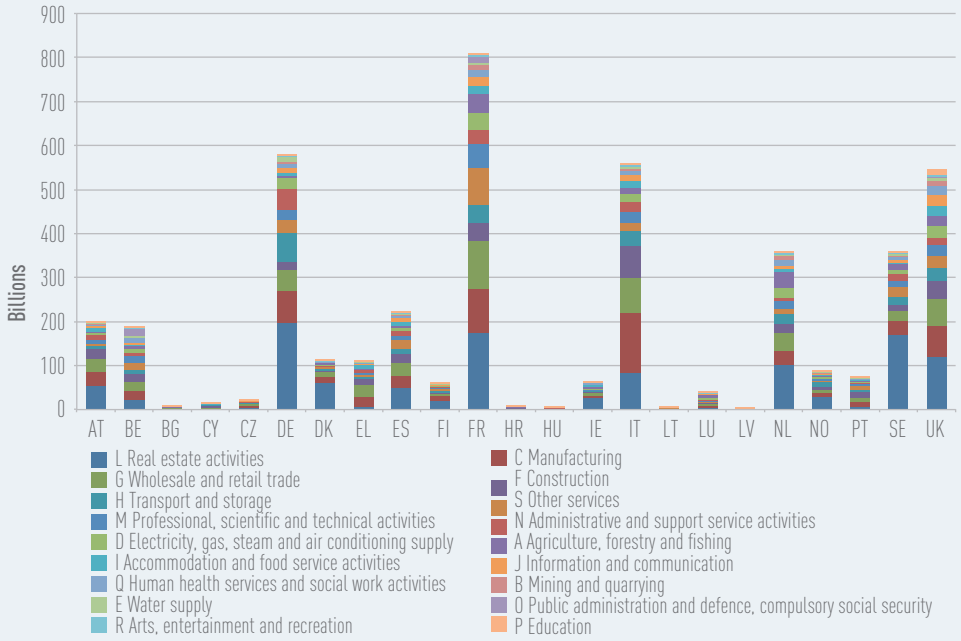
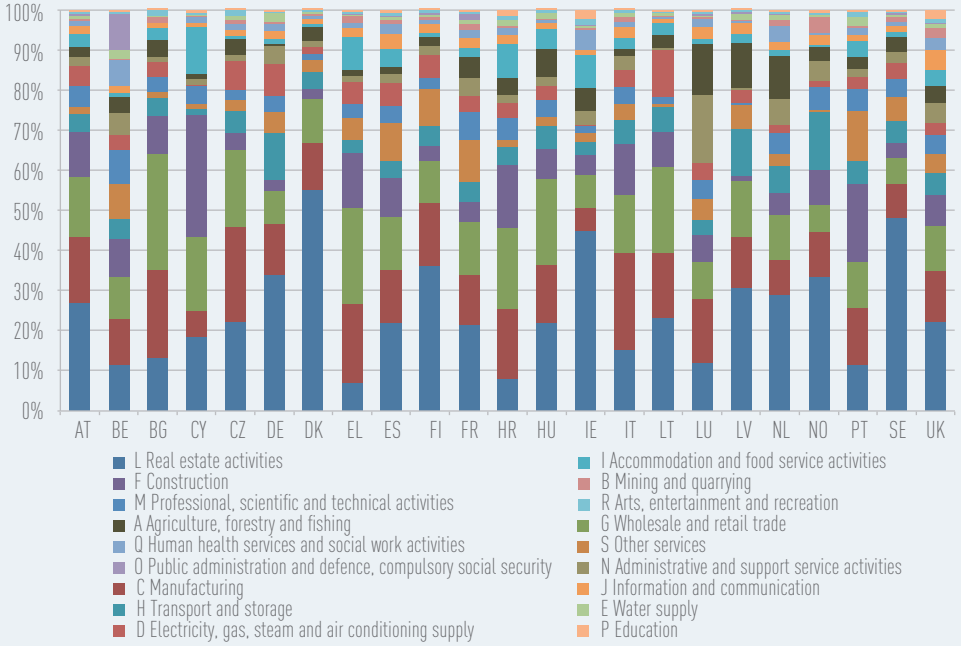


Figure 29: Exposures in Europe towards non-financial sectors by banks' country of origin (relative values)
Source: EBA supervisory reporting, EBA calculations.



The country dispersion of the coverage ratio remains significant, with values in the range of 30 % to 70 % for different countries. In addition, the dispersion between banks of different classes underwent a huge increase in the first half of the year: the top 15 banks significantly increased their median coverage ratio while the rest of the banks showed a slight decrease (Figure 30).

Levels of loan provisions are also likely to undergo changes in the future due to the implementation of IFRS 9 and its expected loss impairment model. It is expected to be applied starting in 2018 ([10]).The rules will require the calculation of loan loss provisioning based on an expected loss model, compared to the former incurred loss model under IAS 39. Performing loans will require loan loss provisions in the amount of their 1 year expected loss, whereas in case of a significant deterioration in credit quality the lifetime expected loss will be needed. The implementation of the expected loss model for the impairment calculation — in contrast to the current incurred loss model — is expected to result in an increase of provisions, assuming all other parameters in the calculation are equal.

This expectation was confirmed by the results of the banks' and market analysts' answers to the RAQ. More than 50 % of the banks and about 80 % of the market analysts expect an impact on current levels of loan loss provisions between 0 % and 20 %, whereas about 30 % of the responding banks (20 % of the market analysts) expect an impact in the range of 20 % to 40 % ([11]). Based on the RAQ results, the vast majority of the banks assume that this impact is mainly driven by the loan loss provisions for so-called stage 2 assets (exposures which have experienced a significant increase in credit risk since initial recognition but without being credit impaired). This is mainly due to the fact that the levels of impairment currently required on these underperforming exposures are likely lower than IFRS 9 will require (Figure 31).

([10]) IFRS 9 shall become effective for annual periods beginning on or after 1 January 2018. Earlier application is permitted. IFRS 9 is currently in the process of EU endorsement (http://www.efrag.org/Front/p328-6-272/IFRS-9—Financial-Instruments.aspx).

([11]) The results of the RAQ shall not be considered as setting a precedent for ongoing or further impact studies. Also the EBA will further assess the impact of IFRS 9 (http://www.eba.europa.eu/documents/10180/758123/EBA+BS+2015+269rev1+%28Final+Minutes+BoS+16-17+June+2015%29.pdf).

Figure 30: Coverage ratio — specific allowances for loans to total gross impaired loans — country dispersion — medians by country and by size class
Source: EBA KRIs.

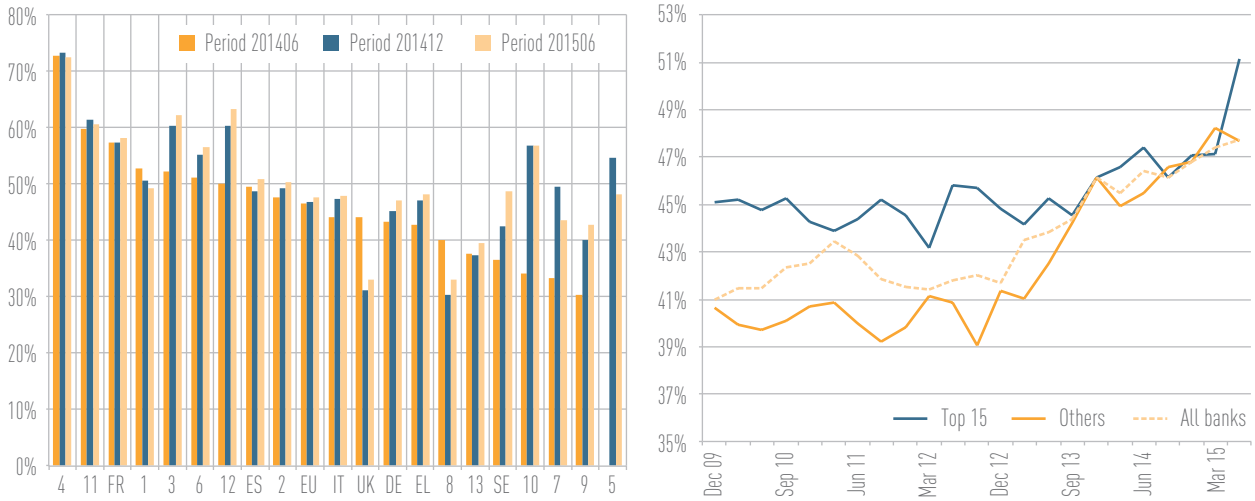
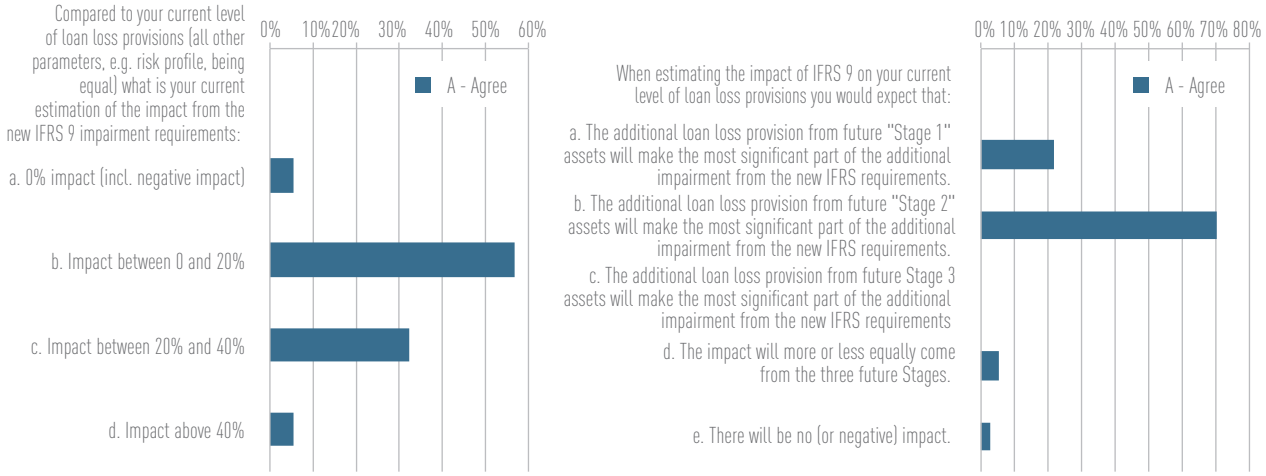


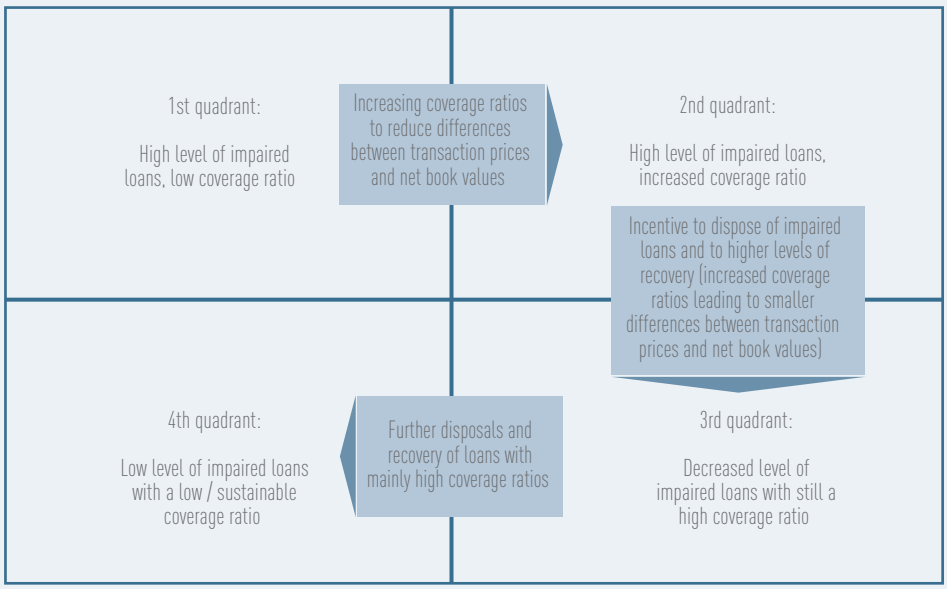
Figure 31: Impact of IFRS 9 on banks' current levels of loan loss provisions (all other parameters, e.g. risk profile, being equal)
Source: EBA RAQ for banks.



The virtuous circle of NPL and coverage ratios

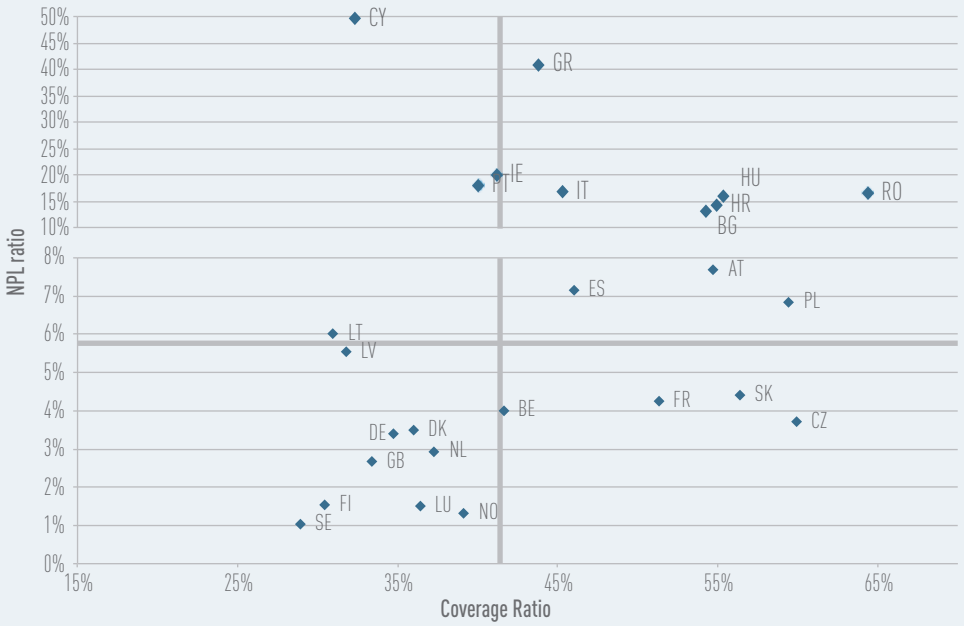
The challenge of resolving NPLs is persistent in some Member States of the EU. In addition, the progress in this context varies across them ([12]). Why certain banks cope better with resolving their NPLs might be explained by various factors. One way of identifying a country's issue with restructuring and reducing NPLs is by looking at the relationship between the coverage ratio and the NPL ratio. Coming from this angle, countries with a high level of impaired loans and a low coverage ratio might be considered to be those which are and will be struggling to address asset quality concerns and to clean up their balance sheets. Low coverage ratios in these cases might indicate a reluctance to resolve NPLs through their disposal or recovery. The reasons for this might include material differences between potential transaction prices and net book values. This reluctance, in turn, keeps levels of impaired loans high. In contrast, high cover-

Figure 32: Virtuous circle of the relationship between NPL and coverage ratios



([12]) The data for figures in this text box are based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

Figure 33: NPL ratio versus coverage ratio (of NPLs) per country
Source: EBA supervisory reporting, Q2 2015.



age ratios might motivate banks to dispose of their NPLs, leading to lower NPL levels.

One can consider this relationship as a model of a virtuous circle (Figure 35). In this model one would start — in times of economic downturn, when NPL ratios are increasing — in the 1st quadrant, with increased levels of impaired loans but (still) low coverage ratios. In a second step one would move further towards increasing coverage ratios (2nd quadrant). Elevated levels of coverage ratios would support the disposal of NPLs or the willingness to restructure them. The banks concerned or their portfolios would accordingly move to the 3rd quadrant (decrease in NPL ratios). Finally, assuming an increase in the quality of loans and collateral, they would move to the 4th quadrant.

As such, low coverage ratios — as represented in the 4th quadrant — might be considered as positive, for example in case of high-quality collaterals in conjunction with a high ratio of collateralisation. In other cases low ratios might be considered as insufficient coverage of NPLs. In any case, there are of course also other moves across the chart and between the quadrants possible.

There is an elevated risk that NPL ratios will continue to deteriorate in those countries in which loan portfolio transactions and other measures to address problem loans do not gain the momentum needed to contribute to an improvement in asset quality. Further structural reforms (e.g. improvement in legal frameworks that have an impact on time to recovery of NPLs) in such countries are needed in order to bring asset quality up again. Italy can be considered an example of a country where the time for foreclosure has been one of the longest in the EU. Accordingly, investors' interest in NPL portfolio transactions has been low, resulting in material discounts in such transactions which significantly differed from the banks' respective coverage ratio. Recent changes to the Italian insolvency and foreclosure regulation seem to have addressed these challenges, as NPL transactions picked up there.

3. Liability side

Volatile funding-market sentiment

Bank funding markets were volatile during the first three quarters of 2015. Sentiment has been positively influenced by monetary policy measures and central banks' engagement in unconventional policies to support macroeconomic stability and bank funding. In general, no major constraints could be observed in the issuance activity for secured and unsecured instruments. However, in periods of heightened general market stress — mainly during the peaks of the Greek crisis — banks significantly reduced their issuance volumes. Issuances of subordinated debt were focused on banks with strong market perception. The issuance volumes of subordinated funding instruments have been below last year's volumes (year to date). Volatility of funding markets could also be observed in fluctuations of the spreads for market funding instruments.

Except for Greece, no major volatility has been observed in deposit volumes since the beginning of the year. Even during the times of heightened general market stress during the peaks of the Greek crisis no major volatility of customer deposit volumes could be observed outside Greece. Though interest rates for deposits are at long-time lows, banks could even increase volumes of customer deposits.

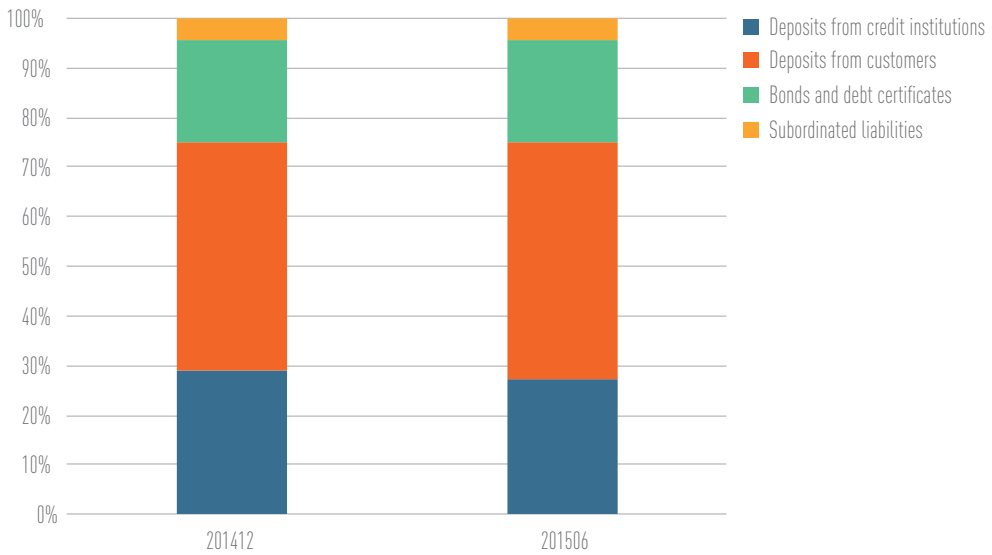
Accordingly, customer deposits increased their share in banks' funding mix. A further trend was the decrease in the share of deposits from credit institutions, whereas the share of bonds and debt certificates, as well as the share of subordinated liabilities, remained relatively stable. In parallel to growing asset volumes, overall funding volumes considered in this sample of reporting banks increased from EUR 18.8 trillion as at year-end 2014 to EUR 20.2 trillion in June 2015 (Figure 34).

Volumes of the ECB's long-term refinancing operations (LTROs) at the end of the third quarter were nearly at the same level as at the beginning of the year. However, volumes of new allocations of LTROs showed a markedly decreasing trend in the three allotments in the first three quarters of 2015.

3.1. Funding

During the first three quarters of 2015 the focus of new debt issuances has remained on unsecured funding, although covered bond issuance increased markedly. Issuance volumes of euro-denominated unsecured funding in the first three quarters were above the volumes for the same period in the previous 3 years. Euro-denominated covered bonds showed the same dynamics, and covered

Figure 34: Funding mix (weighted average)
Source: EBA KRIs.



bond issuance volumes increased more strongly than unsecured issuance volumes.

Responses to the RAQ indicate that banks intend to obtain broadly similar volumes of additional unsecured funding and covered bond issuance in the next 12 months (each between c. 30 % and 40 % of the respondents). The responses also indicate that the increasing weight of deposits in banks' funding mixes is expected to continue (agreement of more than 50 %; Figure 35).

Short maturity profile of liabilities

Market data shows an unevenly distributed maturity profile in the medium term, with volumes of debt maturing in 2016 and 2017 being substantial, at over EUR 700 billion for both years. As the asset side of the balance sheet is to a great extent long-term driven, the increase in short-term market debt raises some concerns about further maturity mismatches (Figure 36).

[13] 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: Intention to attain more funding via different funding instruments
Source: EBA RAQ for banks.

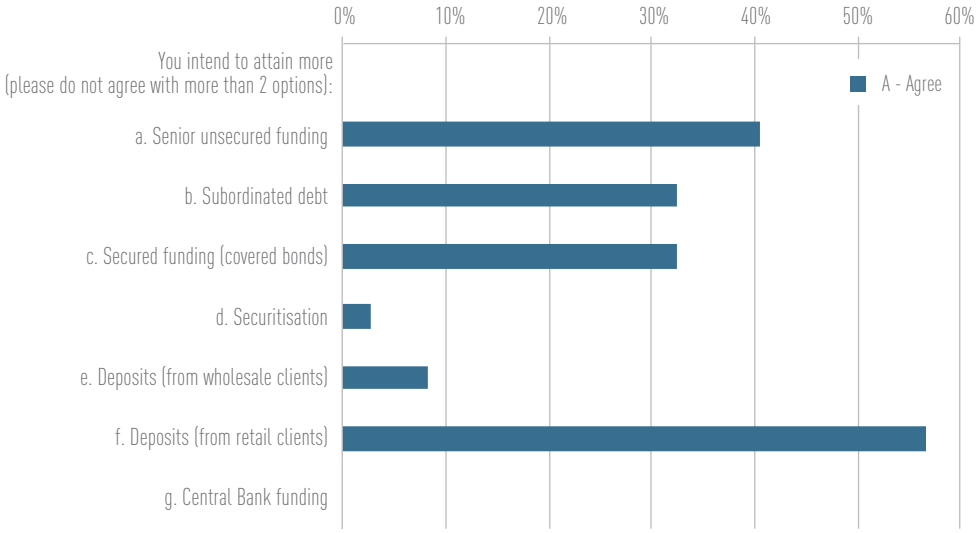
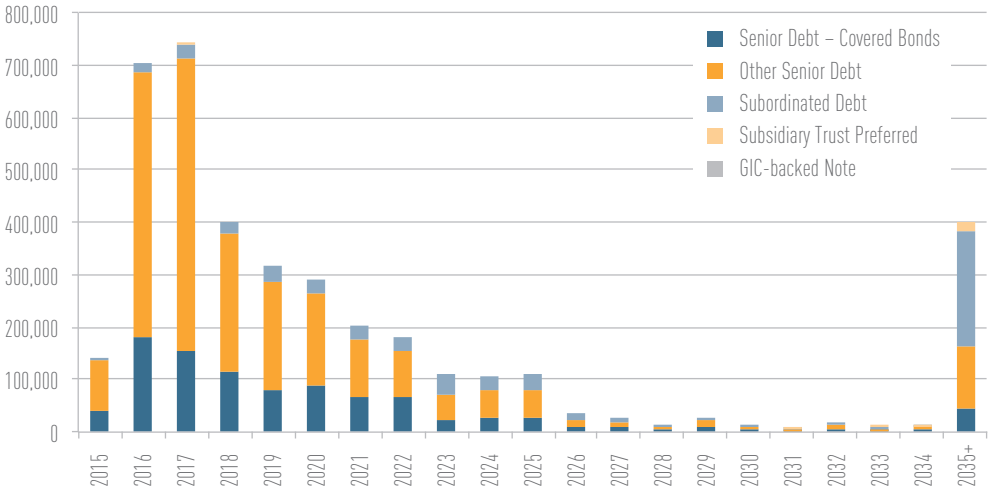


Figure 36: Bonds — aggregated debt maturity profile — 20-year breakout as of September 2015 (billion EUR)
Source: SNL Financial data, EBA calculations [14].



The RAQ results indicate that banks appear to have started to address such concerns. An increasing number of respondents are lengthening their average maturity profile of funding compared to their average asset maturity (about 30 %, compared to less than 20 % in the previous RAQ). However, more than 60 % of the banks agree that their average maturities of future funding will remain about the same compared to their average asset maturity (Figure 37).

Decreasing issuance volumes of subordinated debt in spite of increased funding needs

The trend of significant additional tier 1 (AT1) issuances as identified in the previous RAR slowed down in the second quarter of 2015 as market conditions had become more challenging. Total issuance volumes for AT1, but also for tier 2 debt, in the first 9 months of 2015 were below 2014 issuance volumes. Also, issuing banks were mostly those with strong market perception. Issuance of subordinated debt was scarce mainly for banks with weaker market perception, or for banks domiciled in a sovereign with higher risk perceptions.

However, most banks will have to issue further such instruments, driven in many cases by the MREL requirements under the BRRD. Banks will have to demonstrate that they are able to issue these instruments at reasonable costs, while markets need to be willing to absorb further material issuance volumes of these instruments. As subordinated debt has been more susceptible to market volatility, banks remain vulnerable to any snap-back in investor risk appetite, which could make it more difficult to issue these debt instruments. Subordinated debt issuance may have also slowed down temporarily while market participants await clarification of outstanding details on the implementation of the MREL requirements.

Expectations of continued subordinated debt issuance

According to the RAQ, both banks and market analysts are nevertheless optimistic regarding the capacity of banks to issue debt instruments qualifying for MREL requirements. Respondents to the RAQ indicate banks' intentions to attain additional subordinated debt in the next 12 months (Figure 38). Also, almost all market analysts expect that banks will be able to issue qualifying debt instruments (almost all respondents agree or somewhat agree; Figure 38).

Market analysts expect that attaining subordinated debt will be more popular than senior unsecured funding or secured funding. Nevertheless, there is hardly any agreement on the potential impact of other refinancing instruments on the banks' funding mix (Figure 39). In their expectation in respect of the changes in banks' funding mix, market analysts assume that on average bank funding costs will increase. Increasing funding costs could adversely affect plans to issue additional subordinated debt.

Figure 37: Term matching between asset and liability side
Source: EBA RAQ for banks.

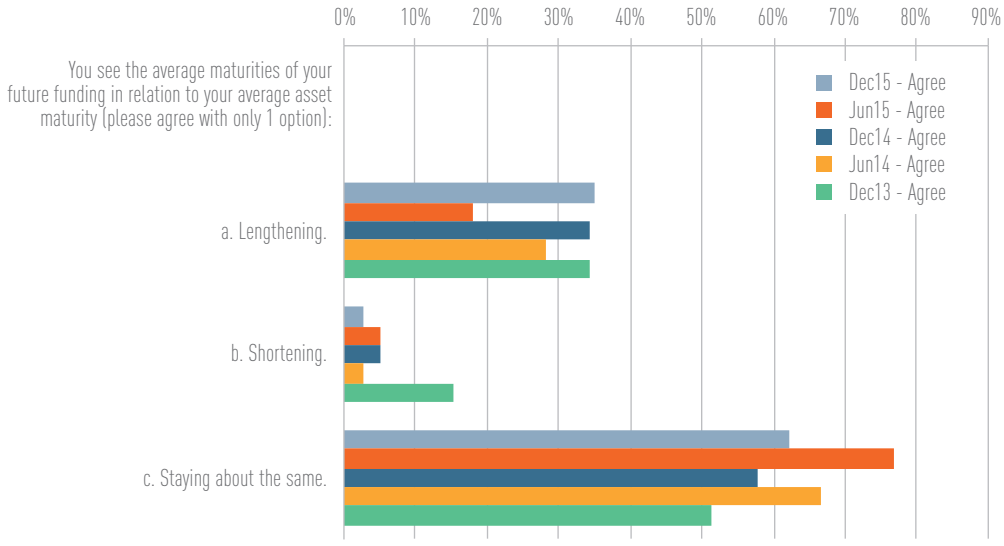


Figure 38: Expectations in respect of BRRD/MREL/TLAC-conforming funding
Source: EBA RAQ for market analysts.

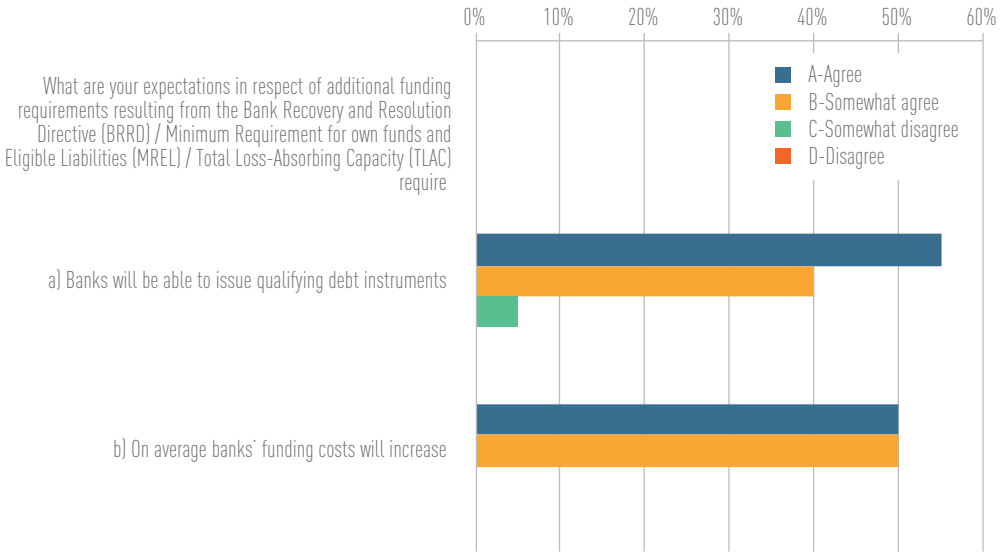
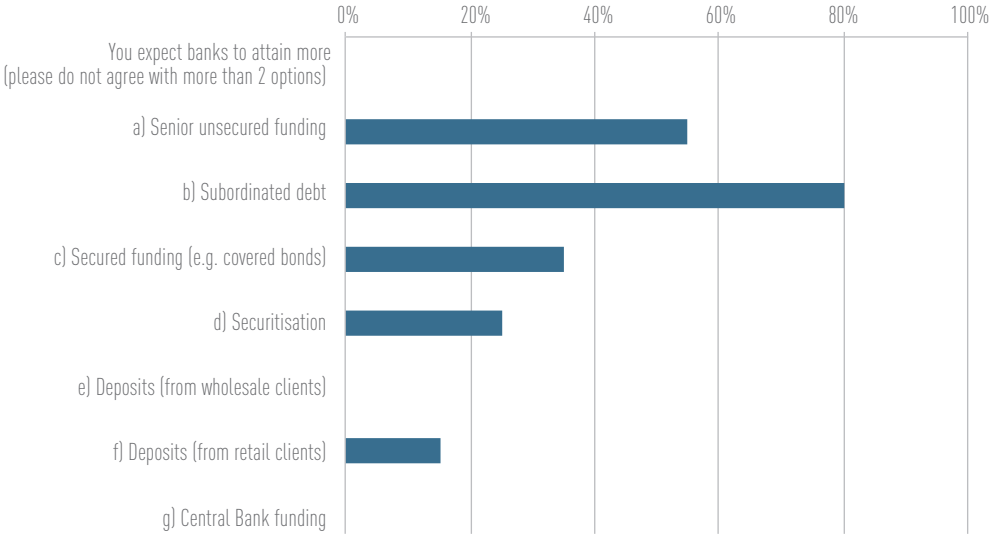


Figure 39: Intentions to attain more funding via different funding instruments
Source: EBA RAQ for market analysts.



Trading market liquidity could affect bank funding markets

Some concerns persist about potential vulnerabilities to the banks' refinancing capacity linked to decreasing trading market liquidity. Increasing market volatility of bank funding instruments may, among other factors, to some extent be attributable to decreasing volumes, and may have affected refinancing volumes and conditions.

Going forward, a substantive share of market analysts expect implications for bank funding from trading market liquidity, and almost all analysts expect banks to be most affected by decreasing trading market liquidity, rather than other market participants such as asset managers. Also, a large majority of analysts expect trading market liquidity to decrease (nearly 90 % of market analysts agree or somewhat agree), and they expect financial bond markets to be most affected (about 70 % of market analysts agree or somewhat agree; Figure 40).

Spreads are increasingly volatile

Spreads of all market funding instruments were increasingly volatile in the second and third quarters of 2015. iTraxx data for European financials for both senior unsecured

Figure 40: Expectations on trading market liquidity
Source: EBA RAQ for market analysts.

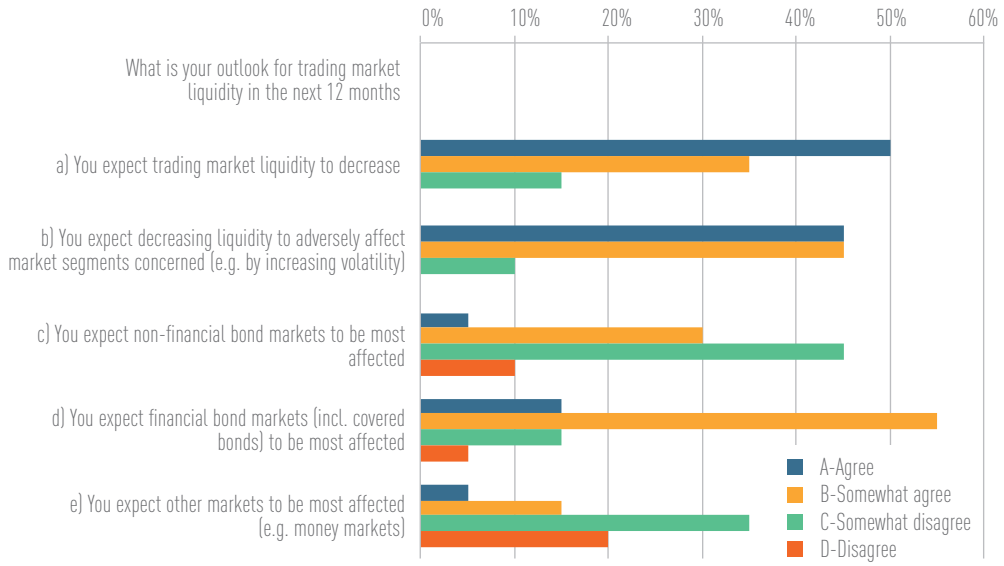
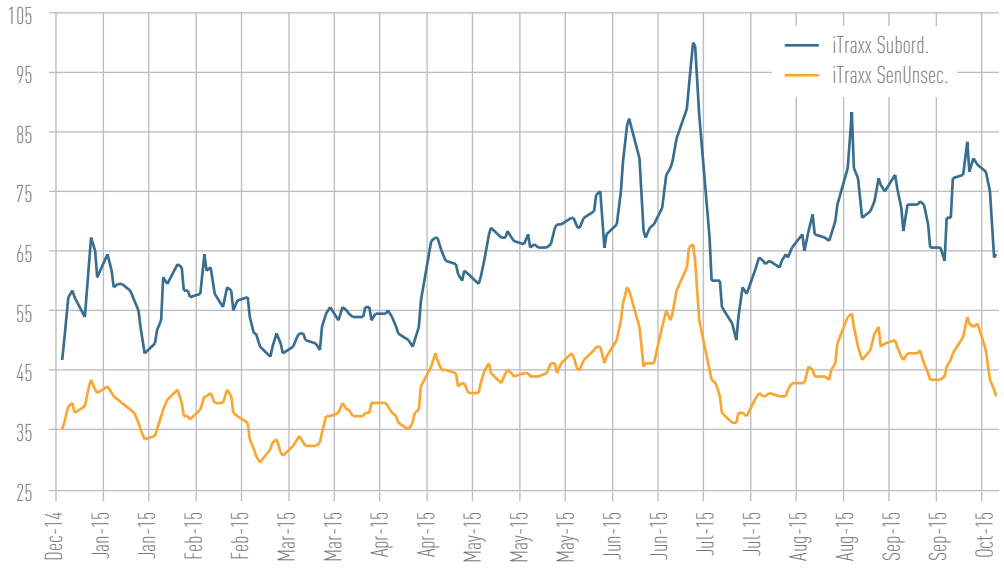


Figure 41: iTraxx financials (Europe, senior and subordinated, 5 years, bps)
Source: Bloomberg, EBA calculations.



and subordinated debt indicated substantially heightened spread volatility since the middle of the year. In addition, spread differentials between covered bonds and unsecured funding instruments widened substantially in this period, which may have contributed to more strongly increasing covered bond issuance volumes than unsecured issuance volumes.

Increased spread volatility is mainly attributable to macroeconomic factors, such as resurgent concerns about the euro area in June and rising spreads for long-term sovereign bond yields in July, but appears to a lesser extent attributable to intrinsic risk perceptions of funding instruments. Increased spread volatility may have also adversely affected issuance volumes, as accessing primary markets and identifying adequate offering prices has become more challenging (Figure 41).

Cross-border interbank lending decreasing again

After its declining trend in the second half of 2014 cross-border funding increased again in the first quarter of this year. However this seemed to be a short-term trend only, as volumes again decreased in the second quarter. The trend was similar for financially distressed and other countries (Figure 42). It is also a development reflected in responses to the RAQ, according to which about 60 % of the

Figure 42: Consolidated foreign claims of reporting European banks vis-à-vis selected countries' banks — Q4 2012 = 100
Source: BIS, EBA calculations.

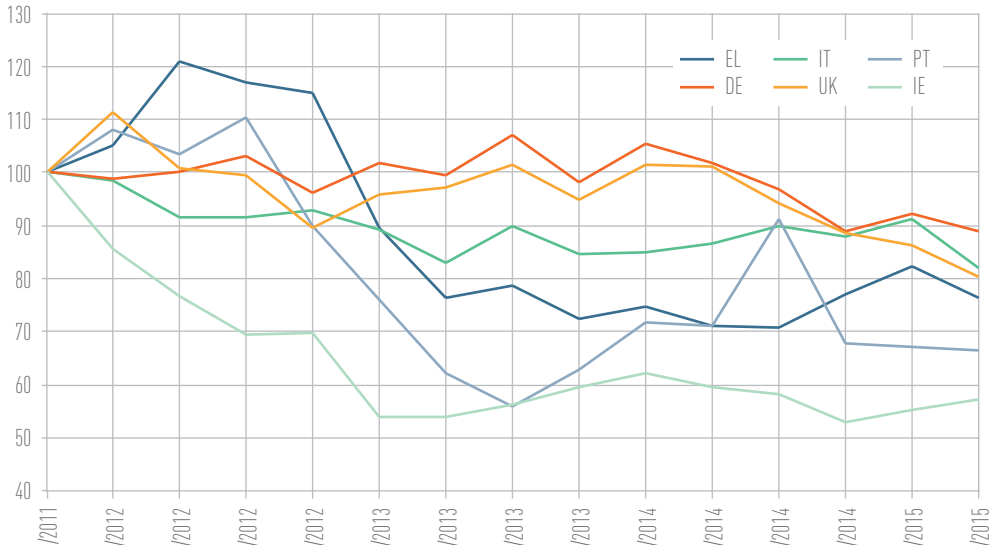
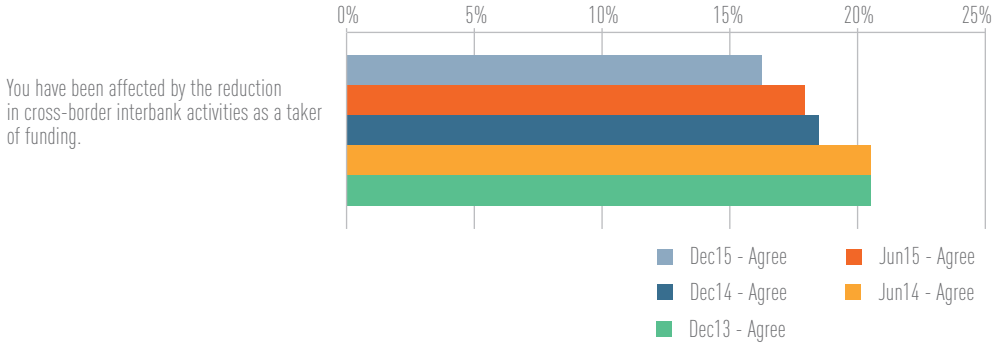


Figure 43: Banks affected by reduction in cross-border interbank lending activity
Source: EBA RAQ for banks.



banks agreed or somewhat agreed that they keep their cross-border lending as a provider of funding on a reduced level.

However, while cross-border interbank lending remains subdued, responses to the RAQ provide indication of a cautiously improving sentiment. Since the June 2014 RAQ, responses indicating that they have been affected by reductions in cross-border interbank activities have decreased steadily. 16 % of respondents in the December 2015 RAQ agree that they have been affected (Figure 43).

Correlation between sovereigns and banks loosening further

The correlation between sovereign and bank CDS spreads was volatile in the first three quarters of 2015, but continues on a decreasing trend. This means that links between banks and the sovereigns they are domiciled in are loosening (Figure 44). As rating agencies' methodologies and market valuations of some funding instruments are implying reduced considerations of sovereign support, not least driven by the BRRD's requirements, the link might be loosening further in the future.

Figure 44: Average correlation of CDSs for 18 major EU banks and respective sovereigns — 60-day rolling window
Source: Bloomberg data, EBA calculations.

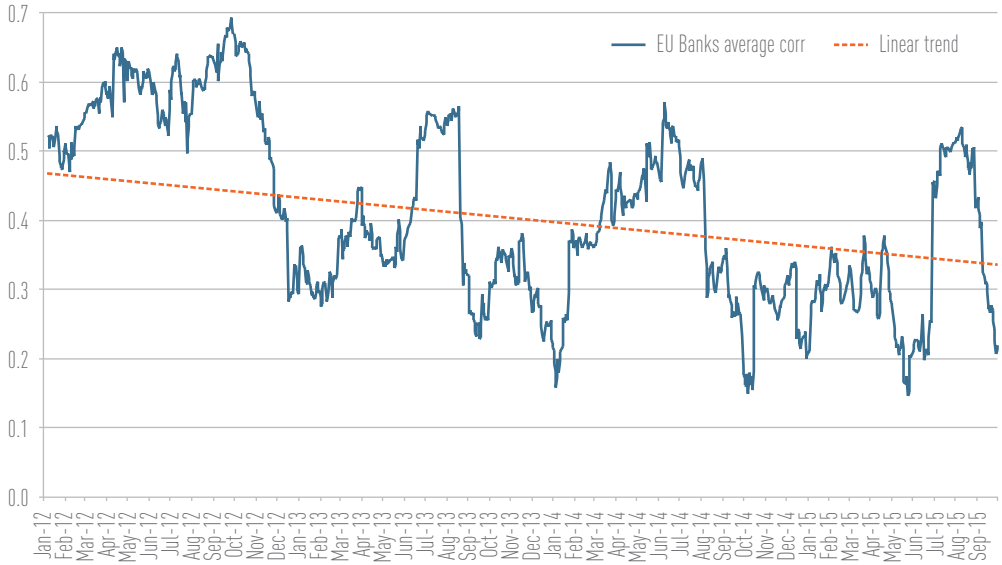
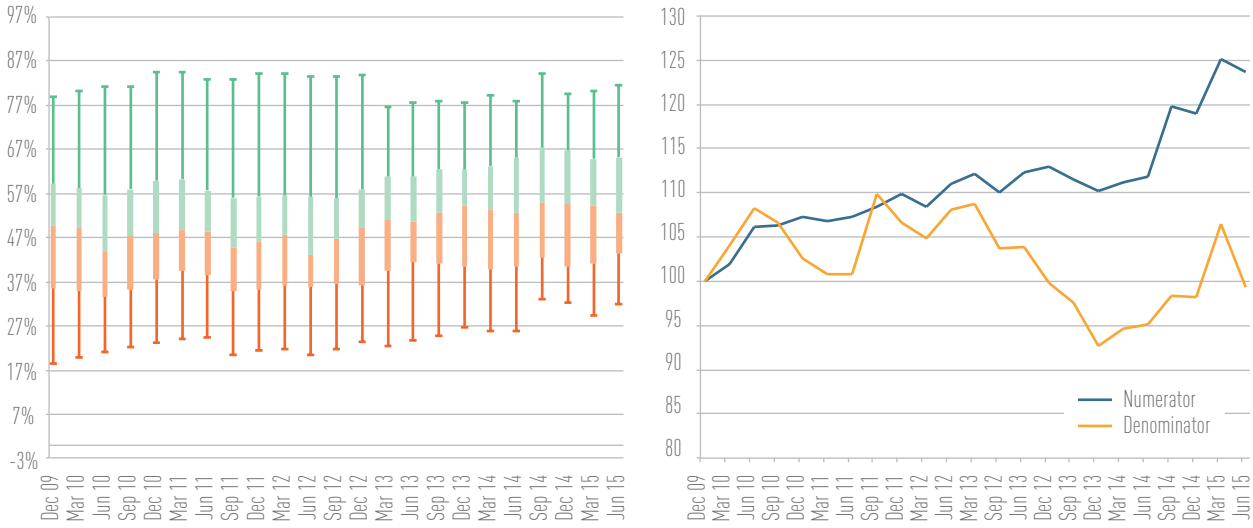


Figure 45: Customer deposits to total liabilities — 5th and 95th percentiles, interquartile range and median; numerator and denominator trends (December 2009 = 100)
Source: EBA KRIs.



3.2. Deposits

During the first half of 2015 volumes of customer deposits continued to grow. They have increased strongly since June 2014 and the growth trend continued, although average pricing decreased in the first half of 2015. The weight of deposits in bank funding mixes grew further. As a consequence of growing deposit volumes and only slightly increasing assets, the overall share of customer deposits to total liabilities further increased to about 50 % in the first half of 2015 (Figure 45).

Strong depositor confidence

Volumes of customer deposits increased further compared to total deposits, indicating sound confidence of customers in banks. Depositor confidence also remained strong during the peak of the Greek crisis and was unaffected outside Greece. Strong customer deposit volumes contributed to a stabilisation in the banks' funding mix, also as they are, in general, considered less volatile than interbank deposit funding. Customer deposits nevertheless remain vulnerable to accelerated outflows in stress scenarios, as could

be observed for domestic deposits during the Greek crisis. Some concerns also result from the uncertain behaviour of wholesale deposits, for example those of large corporates which exceed the level covered by deposit guarantee schemes and do not benefit from the preferred ranking introduced.

Stable loan-to-deposit ratio

In the first half of 2015, the loan-to-deposit ratio was stable at 108.6 %, after a substantive decline initiated at the beginning of 2013. Both the numerator and denominator moved in parallel, with deposits showing slightly higher growth rates compared to the 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.

A stable loan-to-deposit ratio at times of strong deposit growth is an indication that less loan volume depends on funding instruments other than deposits. Similarly to the ratio of customer deposits to total deposits, the loan-to-deposit ratio displays substantive country-by-country dispersion, ranging from less than 50 % to over 160 % (Figure 46).

Low and even negative interest rates for deposits

Euribor rates reduced further in the first three quarters of 2015, and moved further into negative areas (Figure 47). Deposit rates, in general, had similar movements. Furthermore, banks even introduced or maintained negative rates for wholesale deposits in some cases. For customer deposits such a development could still only be seen in very rare cases.

Importance of deposit funding also in future

Responses to the RAQ underline the importance of deposit funding and indicate expectations of continued growth of deposit volumes going forward. Nearly 60 % of the respondents indicate their intention to attract more retail deposits, making it the most important source for additional funding. Furthermore, 8 % of respondents indicate their intention to attract additional wholesale deposits (Figure 35).

Responses to the RAQ also indicate expectations of continued low deposit pricing. Notwithstanding possible policy interest rate changes, none of the respondents indicated that they would attempt to increase deposit volumes by offering better rates and terms to gain market shares. In previous RAQs, some respondents indicated such intentions in an effort to gain market shares.

Recent trends of rather stable deposit funding are confirmed by the RAQ results. A significant majority of the banks disagree or somewhat disagree with the statement that they see volatilities in retail or wholesale deposit funding (Figure 48).

Figure 46: Loan-to-deposit — country dispersion; numerator and denominator trends (December 2009 = 100)
Source: EBA KRIs.

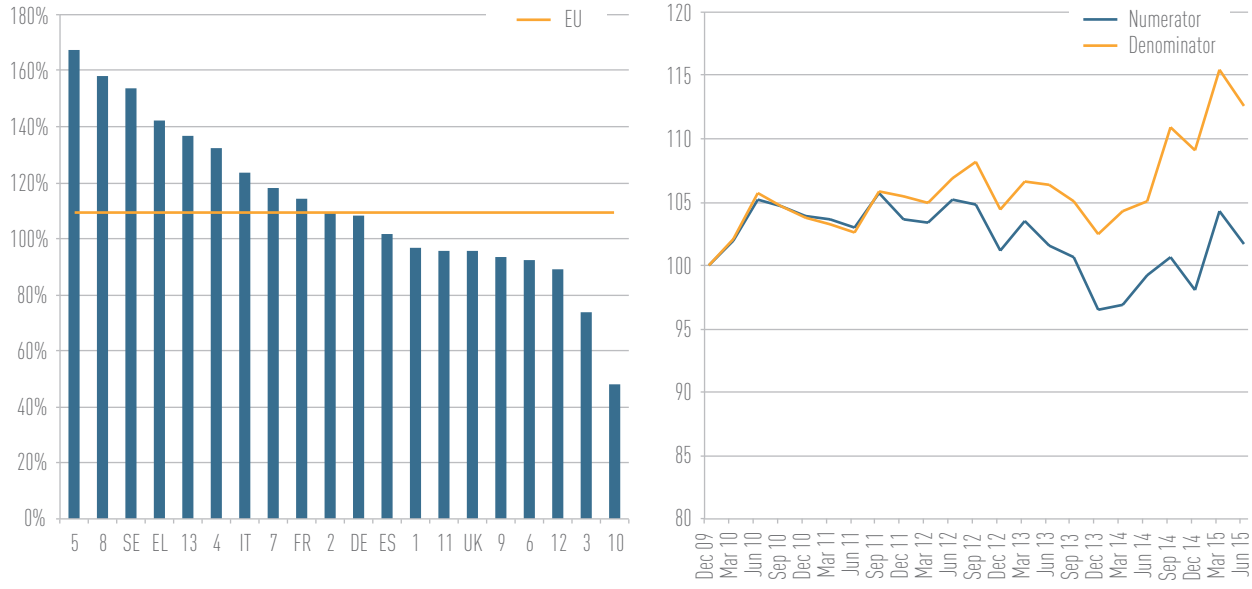


Figure 47: Euribor rates
Source: Bloomberg, EBA calculations.

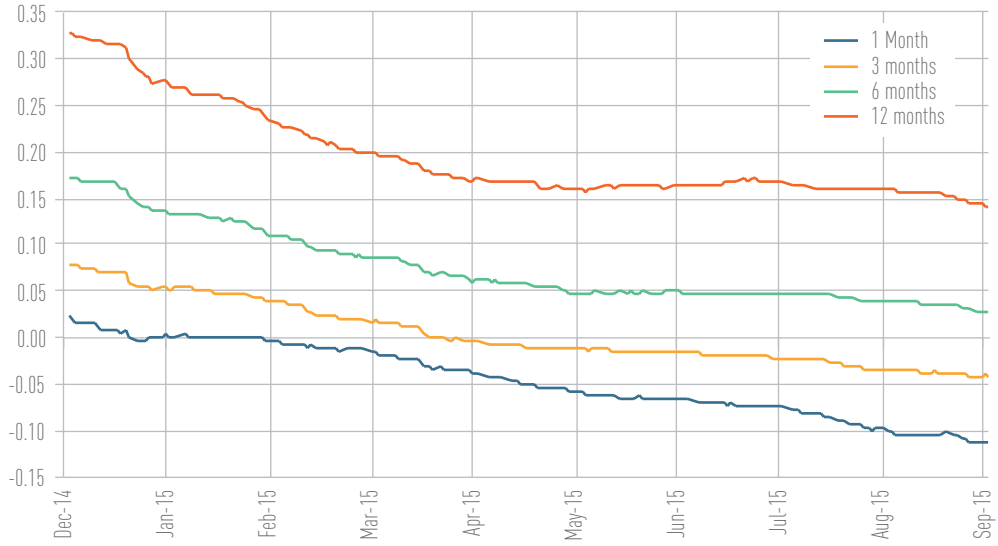
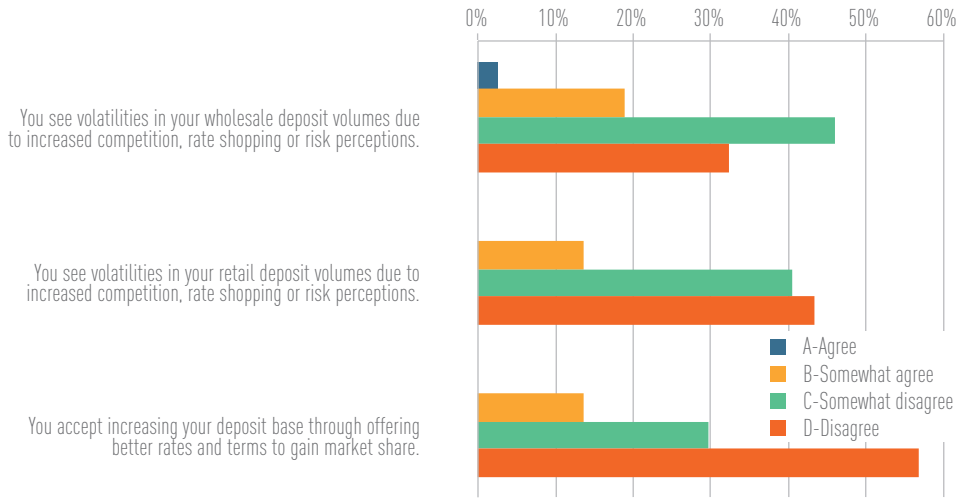


Figure 48: Deposits
Source: EBA RAQ for banks.



3.3. Central bank funding and asset encumbrance

Levels of central bank funding and asset encumbrance remained high in the first half of 2015. Banks are still benefiting from the extraordinary measures central banks adopted during the crisis.

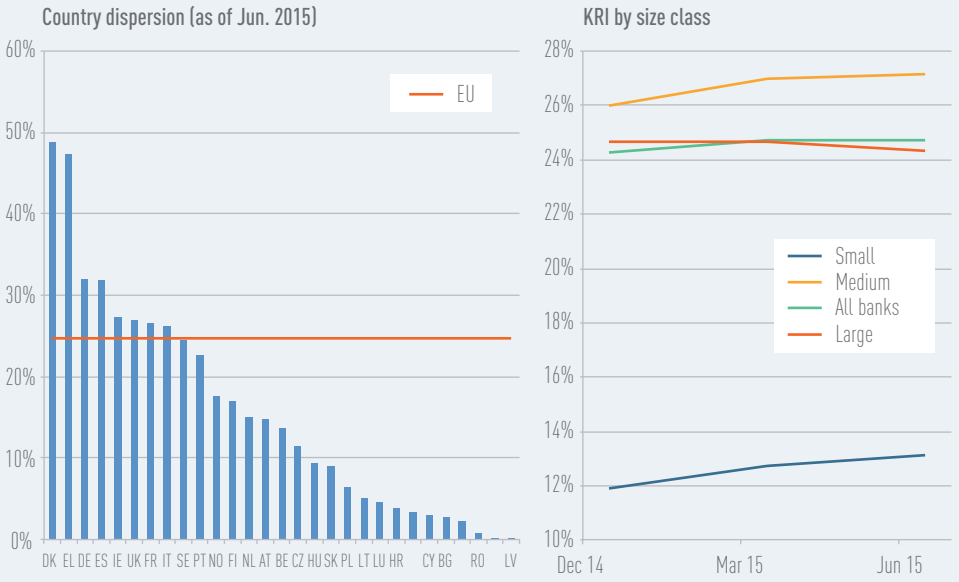
Levels of asset encumbrance

The ratio of encumbered assets to total assets (encumbrance ratio) is on average about 25 % ([14]). It was relatively stable during the first half of the year. A country-by-country analysis shows that there is wide dispersion. The ratio is particularly high for banks in financially stressed countries, as well as in countries with a significant share of covered bond funding. For the first group of banks this is most probably driven by an elevated level of central bank funding. Another driver might be that banks strongly depend on secured interbank funding due to limited access to unsecured funding.

The ratio is highest for the medium-sized banks in the sample, whereas for the small banks the ratio is relatively low. The latter might indicate that this group of banks makes less use of asset encumbrance for funding purposes. Alternatively, it might indicate that their assets are to a lower degree eligible to be pledged for funding than those of the other groups of banks (Figure 49).

The encumbrance ratio does not take into consideration whether the assets can be pledged for funding purposes — with central banks, for covered bond and repo funding or similar means — or not. As such it provides a limited indication only of to what degree fully eligible or marketable assets are pledged for funding purposes.

Figure 49: Encumbrance of assets — medians by country and by size class; banks by size class according to their average total assets
Source: EBA supervisory reporting.

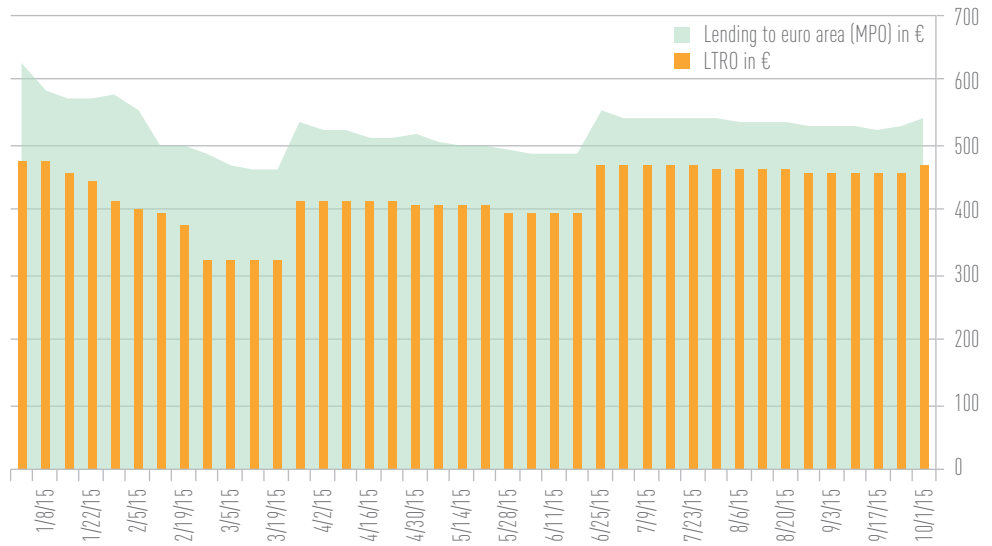


([14]) The data for figures in this text box are based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

There is still high reliance on central bank funding

LTROs remained an important funding channel for euro area banks. Even though LTROs under the first ECB programme (LTROs 1 and 2) matured in January and February 2015, there was no overall decline in outstanding volume. Allocations of targeted LTRO (TLTRO) 3 (during the second half of last year) and TLTRO 4 (two allocations until the first half of 2015) resulted in an immediate increase in total LTRO volumes again, bringing them back to the levels as of mid-year 2014 (Figure 50).

Figure 50: Evolution of the ECB's monetary policy and operations and LTRO volumes
Source: ECB, EBA calculations.



However, LTRO volumes did not increase further in spite of a third TLTRO allotment in September 2015. Also, volumes of new allocations showed a markedly decreasing trend in the three allotments in the first three quarters of 2015 and compared to allotments before 2015. Reduced allotment volumes may be explained by the reduced need to obtain central bank funding and reduced incentives, as price differentials from market funding has decreased. The differences between the levels of central bank funding for banks from different countries were significant, with more reliance on central bank funding in financially stressed countries.

The RAQ responses indicate expectations of reduced central bank funding volumes going forward, and no respondent to the RAQ for banks indicated the intention to attain additional central bank funding (Figure 35). Neither does any market analyst expect such intentions (Figure 39).

4. Capital

EU banks have continued to strengthen their capital position. The CET1 ratio increased by 40 bps between December 2014 and June 2015 to 12.5 %, and by 230 bps between June 2012 and June 2015 (Figure 51).

Improvement of CET1 capital levels has been achieved more through increases in common equity than through the evolution of RWAs

The repair process of the EU banking system initiated in 2011 continues to show a major strengthening of the banks' capital position. The increase by 40 bps in the CET1 ratio is the second biggest positive variation that has occurred in the first half of a year, after the significant increase of 100 bps in 2012. During the first half of 2015 the amount of CET1 capital grew by approximately 6.1 %, while RWAs increased by approximately 2.5 %.

This shows that the strengthening of the EU banks' capital position continues to be driven more by increases in capital than by reducing the denominator. In fact, RWAs have also been increasing since December 2013. An adjustment to the capital ratios driven by RWAs is often seen as particularly critical, as it could be the result of adjustments to internal models. It could also happen through a reduction in lending to customers with higher capital charges, which might in turn reduce the ability of the banking sector to provide lending to the real economy and contribute to the macroeconomic recovery in the EU (Figure 52).

In terms of dispersion, and comparing March and June 2015, the share of banks with a CET1 ratio above 12 % significantly increased, while the share of banks with a CET1 ratio between 9 % and 12 % decreased accordingly. At the same time, there are no banks with CET1 ratios below 9 %, but there remain differences between countries (Figure 53).

Tier 1 capital ratio continues to show a positive evolution similar to that of the CET1 capital ratio, but with a larger dispersion for higher ratios

The EU banks' tier 1 (T1) capital ratio increased by 50 bps in the first half of 2015 and by 180 bps between June 2012 (12.0 %) and June 2015 (13.8 %). The numerator and denominator also show similar behaviour as in the case of the CET1 ratio. The dispersion of the T1 capital ratio remains high and is still growing, in particular for higher ratios above the 75th percentile. The interquartile range has decreased (from 4.3 % in December 2014

Figure 51: Evolution of the CET1 ratio
Source: KRIs.

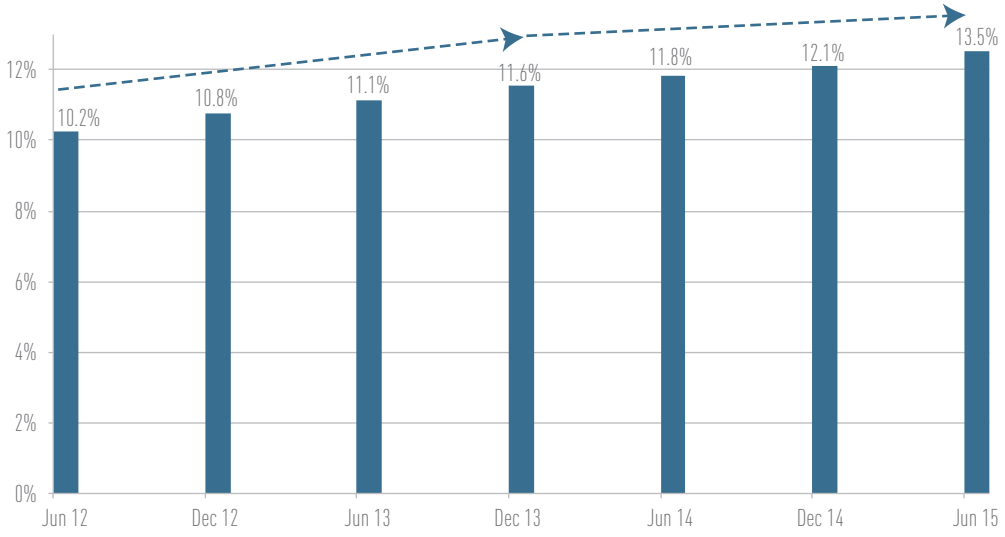


Figure 52: Evolution of CET1 capital and RWAs - numerator and denominator trends
Source: KRIs.

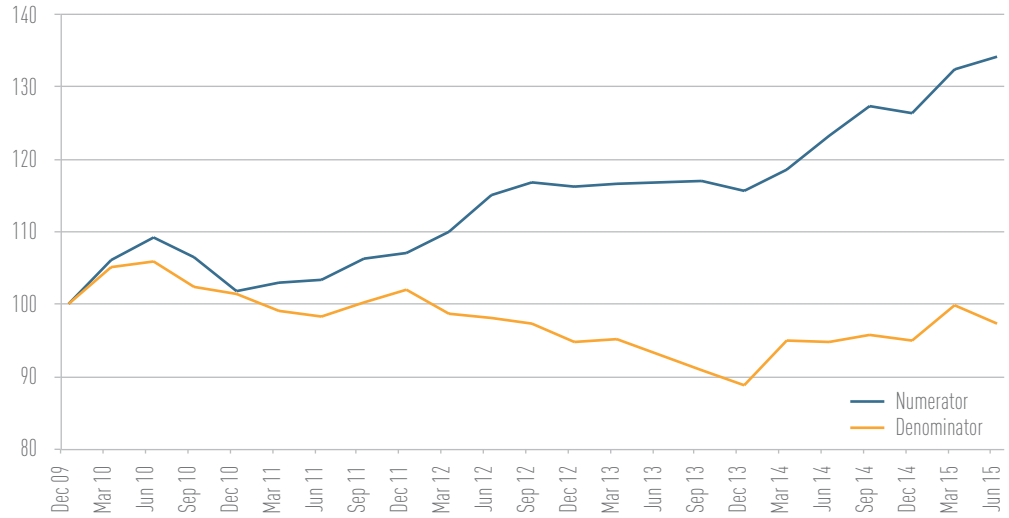
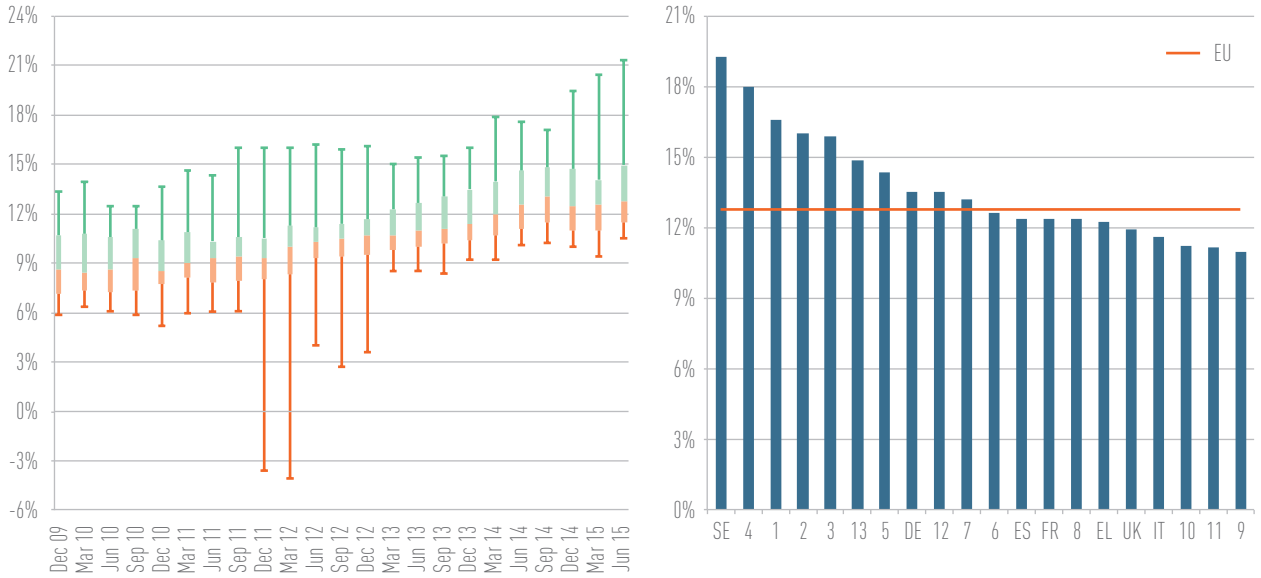


Figure 53: CET1 ratio –5th and 95th percentiles, interquartile range and median; and medians by country
Source: KRIs.



to 3.9 % in June 2015) but is still large in comparison to previous periods, such as December 2009 (2.2 %), December 2010 (3.1 %), December 2011 (3.4 %), December 2012 (3.0 %) and December 2013 (3.5 %; Figure 54).

The evolution of banks by size class now shows a closer alignment. There was a turning point during the first quarter of 2014, when the top 15 banks, which have traditionally showed T1 capital ratios that were higher than for the rest of the banks, reported lower ratios, a trend that remained until the end of 2014. However, in the second half of 2015, the top 15 banks are again showing T1 capital ratios that are higher than for the rest of the banks (Figure 55). On the other hand, the top 15 banks have shown lower CET1 ratios than the rest of the banks since 2013.

In a context of low profitability, supervisors should continue to pay attention to banks' dividend policy and the ability of banks to maintain their capital base through retained earnings. The evolution of the main components of CET1 capital for the KRI sample of banks shows the influence of retained earnings and other reserves (increase of 20 % and 27 % respectively, comparing March 2014 and

Figure 54: Tier1 ratio — 5th and 95th percentiles, interquartile range and median
Source: KRIs.

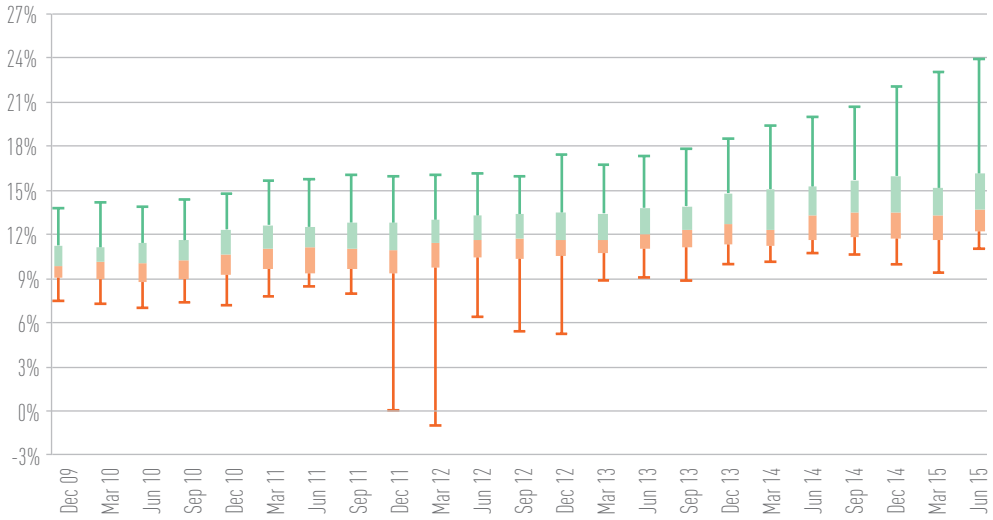
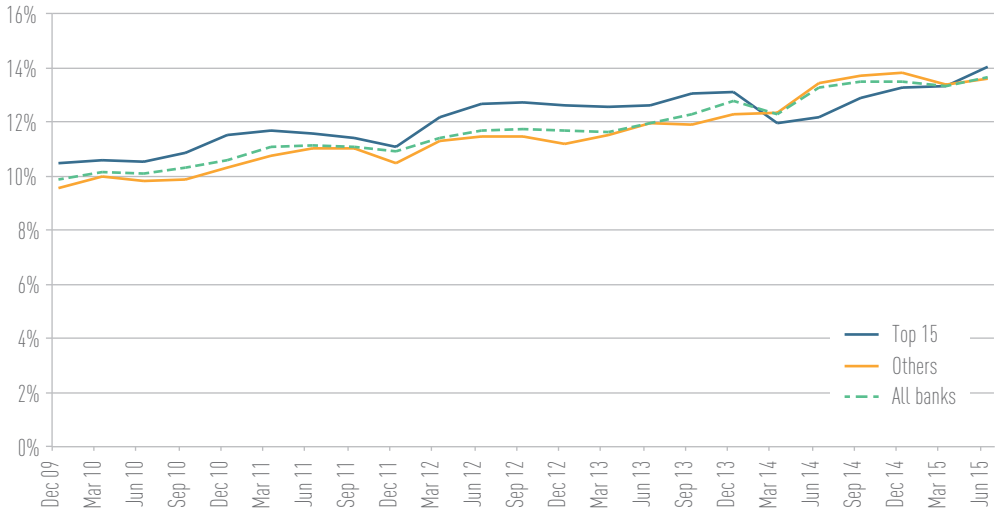


Figure 55: Tier1 ratio by size class
Source: KRIs.



June 2015) as important drivers of the CET1 ratio (Figure 56).

Further issuances of AT1 and tier 2 instruments during the second half of 2015

The total issuance of AT1 instruments and tier 2 instruments has continued to increase during the first three quarters of this year, despite a slowing down in the second quarter of 2015 as market conditions became more challenging. EU banks continued to issue contingent convertible instruments (CoCos), which can be qualified as AT1 or tier 2 instruments depending on their features, amounting to more than EUR 20 billion (Figure 57).

An important characteristic for all AT1 and tier 2 instruments of an institution is the fact that they should be capable of being fully and permanently written down or converted fully into CET1 capital at the point of non-viability of an institution. In order to achieve such an important characteristic, AT1 instruments feature the following conditions, which are more restrictive compared to tier 2 instruments: (i) they rank below tier 2 instruments in the event of the insolvency of the institution; (ii) the instruments are perpetual, while

Figure 56: CET1 capital and main components for KRI banks (billion EUR)
Source: KRIs.

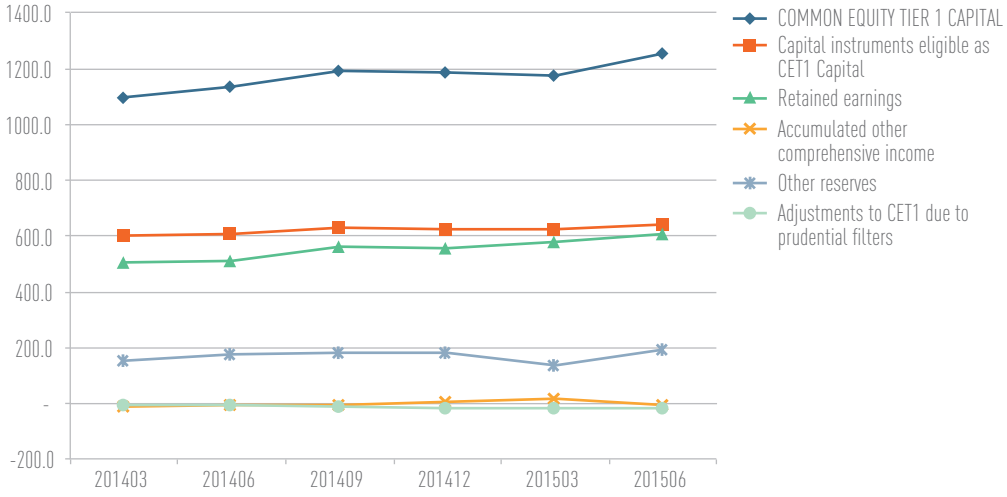


Figure 57: Total cumulative issuance of CoCos by EU banks (billion EUR)
Source: SNL Financial, Bloomberg, EBA calculations.

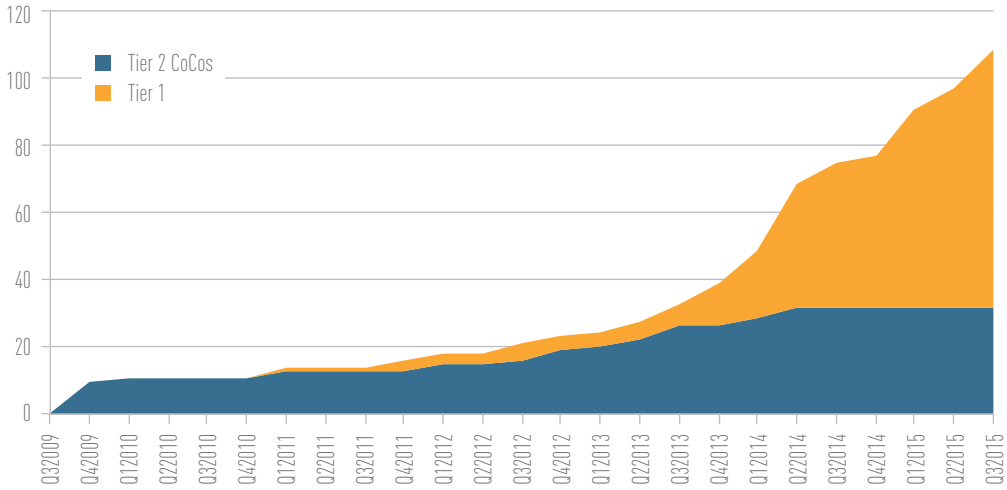
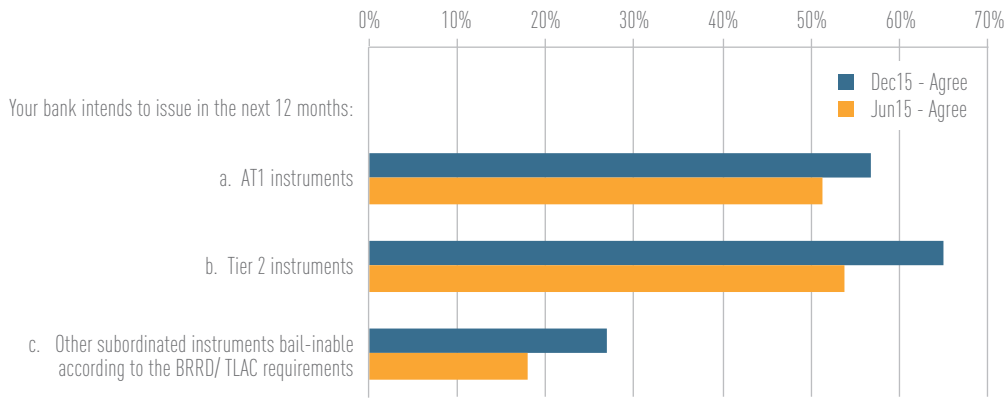


Figure 58: Planned issuance of AT1 instruments
Source: EBA RAQ for banks.



the requirement of tier 2 instruments' is that they have an original maturity of at least 5 years; (iii) the institution has full discretion at all times to cancel the payment 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).

Capital as well as MREL/TLAC requirements under the BRRD will trigger additional issuance going forward. According to the answers to the RAQ from banks, more than 50 % intend to issue AT1 instruments and tier 2 instruments in the next 12 months, and the interest increased in the second half of 2015, in particular regarding tier 2 instruments (Figure 58).

5. Profitability

EU banks reported an aggregate RoE of 7.8 % as of June 2015. This data represents a significant improvement compared to December and June 2014 (3.5 % and 5.7 % respectively. The increase during 2015 has been mainly driven by a larger net income compared to total operating income, coming primarily from lower impairments and to some extent from higher income from trading activities. The trend of growing profitability goes hand in hand with the strengthening of banks' capital positions, and reinforces the observation that banks have increased their capital ratios to a large extent through increases in common equity. Given that levels of profitability — despite their growth — have been low during the past years, this behaviour also gives a hint that banks have been conservative in their dividend policy, so they have been able to enhance their capital base through retained earnings (Figure 59).

Profitability improved in June 2015, mainly driven by the increase on the revenues side of net incomes coming from trading activities, and on the expenses side by a sharp decline in impairments.

The total profits for EU banks (after tax and discontinued operations) as of mid 2015 rose by EUR 20 billion (+ 49 %) compared to June 2014. The drivers behind this increase are mainly in absolute terms a sharp decline in impairments of financial instruments (EUR 9 billion, – 20 % on a year-to-year basis), the growth of the net interest income by EUR 10 billion in parallel with an increase in total assets and loans (+ 6 % compared to mid 2014), an increase of almost EUR 10 billion in gains and losses on financial assets and liabilities ([15]) (+ 34 % throughout the 12 months) and the rise by EUR 7 billion of net fees and commissions (+ 9 % compared to June 2014).

([15]) Includes gains and losses on instruments both measured at fair value and not measured at fair value.

Dividends income grew by EUR 1 billion during the same period. Net income grew despite an increase in operating expenses of more than 14 % (almost EUR 23 billion) since June 2014.

In relative terms and compared to the net total operating income reported, the components that had a more positive impact in the net aggregate profits of the banks were:

- from the incomes side, net gains and losses on financial assets and liabilities ([17]) (+ 2 pp on a yearly basis, +4 pp compared to December 2014);
- from the costs side, impairments, with a decrease that represented a positive impact on net income to total operating income (TOI) of +5 pp compared to June 2014 and +6 pp compared to year-end 2014.

Net other operating income increased by 7 pp compared to total operating income on a yearly basis. This item includes other operating income and expenses linked to fair value adjustments on tangible assets; rental income and direct operating expenses from investment property; income and expenses on operating leases other than investment property; and gains or losses from re-measurements of holdings of precious metals and other commodities measured at fair value. The effect of these impacts takes place at the expense of items like net interest income, which despite its increase in absolute terms on an annual and semi-annual basis reduces its relevance within the incomes mix that makes up the net operating income (TOI) (Figure 60).

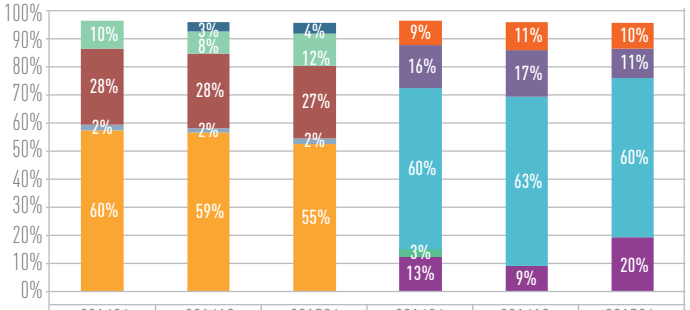
The RoE reported by EU banks as of June 2015 (7.8 %) reached its highest mid-year value since 2011 (7.1 %, 3.4 %, 7.6 % and 5.7 % in June 2011, 2012, 2013 and 2014, respectively). Both the median and the 75th percentile of

Figure 59: Comparison of RoE and CET1 ratio (weighted average, per mid-year)

Mid-year	2012	2013	2014	2015
RoE	3.4 %	7.6 %	5.7 %	7.8 %
CET1	10.2 %	11.1 %	11.8 %	12.5 %

Source: EBA KRIs.

Figure 60: Evolution of the different components incomes and expenses compared to total operating income (TOI)
Source: EBA KRIs — EBA calculations



	201406	201412	201506	201406	201412	201506
Other expenses to total operating income				9%	11%	10%
Impairments on financial assets to TOI				16%	17%	11%
Cost-income ratio				60%	63%	60%
Net other operating income to TOI				3%	0%	0%
Net income to TOI				13%	9%	20%
Net other operating income to TOI	0%	3%	4%			
Net gains on financial assets and liabilities to TOI	10%	8%	12%			
Net fee and commission income to TOI	28%	28%	27%			
Dividend income to TOI	2%	2%	2%			
Net interest income to TOI	60%	59%	55%			

Figure 61: Return on equity — 5th and 95th percentiles, interquartile range and median, and by size class
Source: EBA KRIs.

the RoE increased compared to June 2014 (from 5.5 % and 9.5 % to 7.6 % and 11.7 %, respectively, in June 2015). In addition, the dispersion continues to decrease on a yearly basis. During the first half of 2015, the top 15 banks by size reported worse RoE values (6.7 %) than the rest of the banks (8.25 %, Figure 61), breaking a trend according to which, in the past, the largest banks reported higher or similar profitability than the smaller.

The share of banks with an RoE above 8 % is increasing, and represented 50 % of total assets in June 2015 (up from approximately 23 % in June 2014 and just 13 % in December 2014), the highest share since June 2011. 50 % of banks in terms of total assets still report RoEs below 8 %, and banks with an RoE below 4 % represent 16 % of total assets in June 2015 (Figure 62).

Figure 62: RoE by bucket and percentage of banks' total assets
Source: EBA KRI data and EBA calculations.

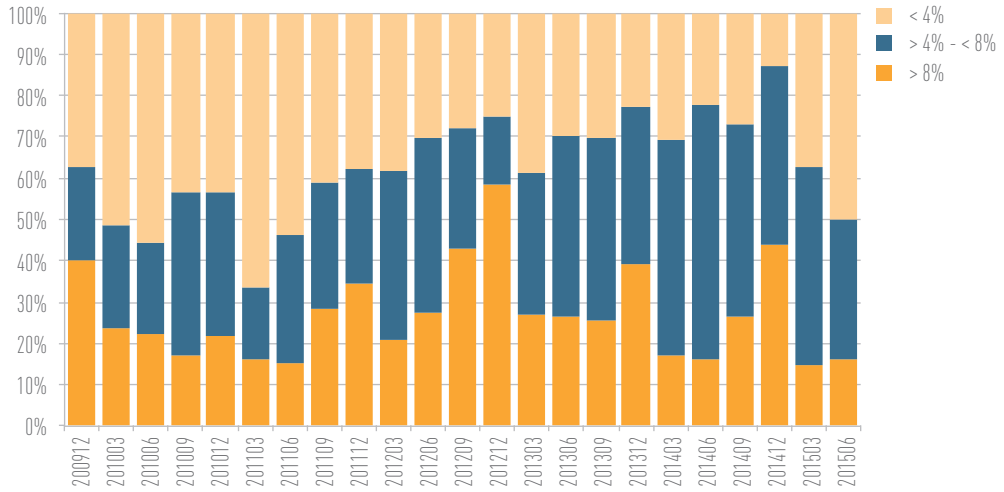


Figure 63: RoE and RoA — comparison
Source: EBA KRIs.

RoE and RoA (return on assets) both present a similar evolution since December 2009, with periods in which RoE grows at a greater pace than RoA, meaning that total assets are growing more than equity in relative terms. In other periods it is the other way round, and equity grows at a greater pace than total assets, which leads to a more pronounced upward trend of RoA. Since December 2013, the trend overall towards a better RoA, meaning that the turnaround in asset volumes from deleveraging to stabilisation/growth is supported by equivalent or even higher equity increases (Figure 63).

Banks' RoA needs to continue to improve, given lower leverage (higher equity to assets). 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.

Although improving, profitability remains a source of concern and levels of return on equity are hardly enough to cover banks' cost of equity

The increase in the RoE, 7.8 % as of June 2015, is an important step towards aligning banks' profitability with the estimated cost of equity (CoE). The CoE is above 8 % on average according to banks' own estimates and above 9 % according to EBA estimates. However, there is great dispersion across jurisdictions. Banks in nine countries still reported median values of RoE below 8 % and below the EU median of 7.6 %. In addition, some seasonal effects, mainly involving impairments, entail an overestimation of half-year profitability compared to year-end values,

Figure 64: RoE country dispersion as of June 2015 and impairments on financial assets to TOI: evolution of numerator and denominator
Source: EBA KRIs.

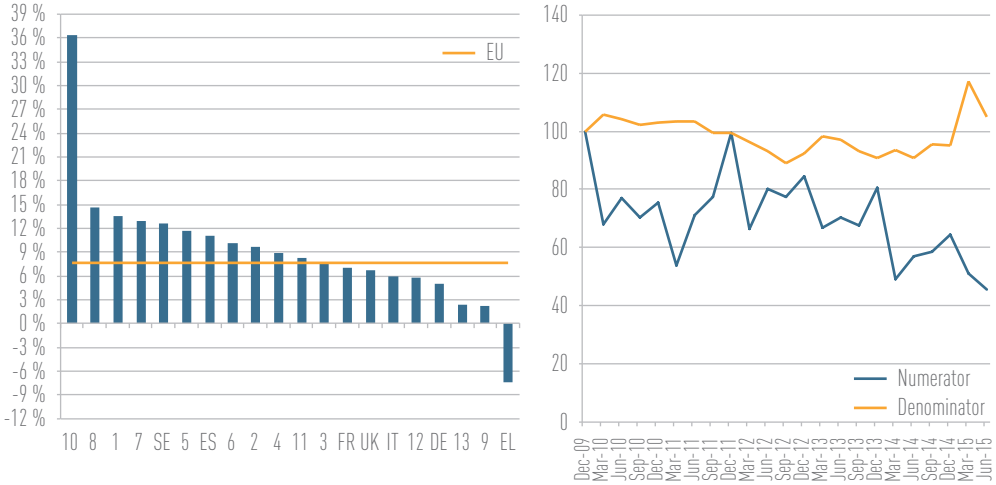
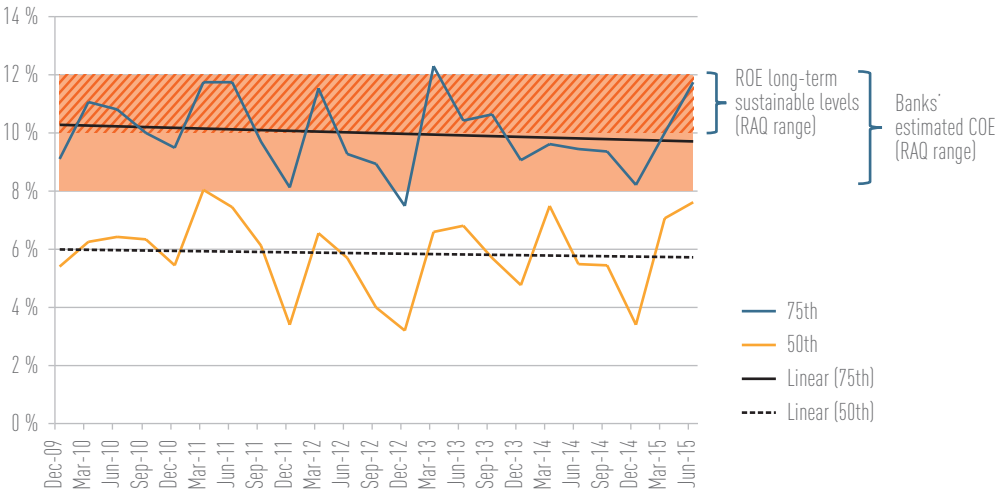


Figure 65: RoE — 50th and 75th percentiles and comparison with RAQ for banks
Source: EBA RAQ and EBA KRIs.



as impairments are mainly booked in the last quarter of the year (Figure 64).

Despite the still great relevance of banks reporting actual levels of RoE below 8 % — 50 % in terms of total EU banks' assets — the vast majority (close to 90 % of respondents to the RAQ) of banks estimate their CoE to be above 8 %. 49 % of respondents estimate a CoE in the range of 8 % to 10 % and 41 % estimate their CoE to be above 10 % (with 27 % in the range of 10 % to 12 %, and 14 % of respondents placing it above 12 %). Actual reported data on profitability contrasts with the levels of RoE that banks consider sustainable in their answers to the RAQ, with almost 90 % of banks putting their long-term target for RoE above 10 %. About 60 % of banks consider a 10 % to 12 % range to be their RoE target, 24 % place it into the 12 % to 14 % range and 8 % of banks contemplate an RoE that should be above 14 % in the long run (Figure 65).

In their answers to the RAQ banks currently estimate a CoE and a long-term sustainable RoE that are lower than the levels reflected in previous editions of the questionnaire. Less than half of the banks, specifically 49 % of the respondents to the RAQ, still consider that their current level of earnings is enough to cover their CoE. While less than half of the banks are able to generate enough earnings to cover their CoE, this figure is much higher compared to previous editions of the RAQ. The increasing optimism reflected by banks in their responses to the RAQ would be in line with the general perception that the sector is now better capitalised and less risky than in previous periods, and the returns demanded

Figure 66: CoE and RoE (banks' RAQ)
Source: EBA RAQ for banks.

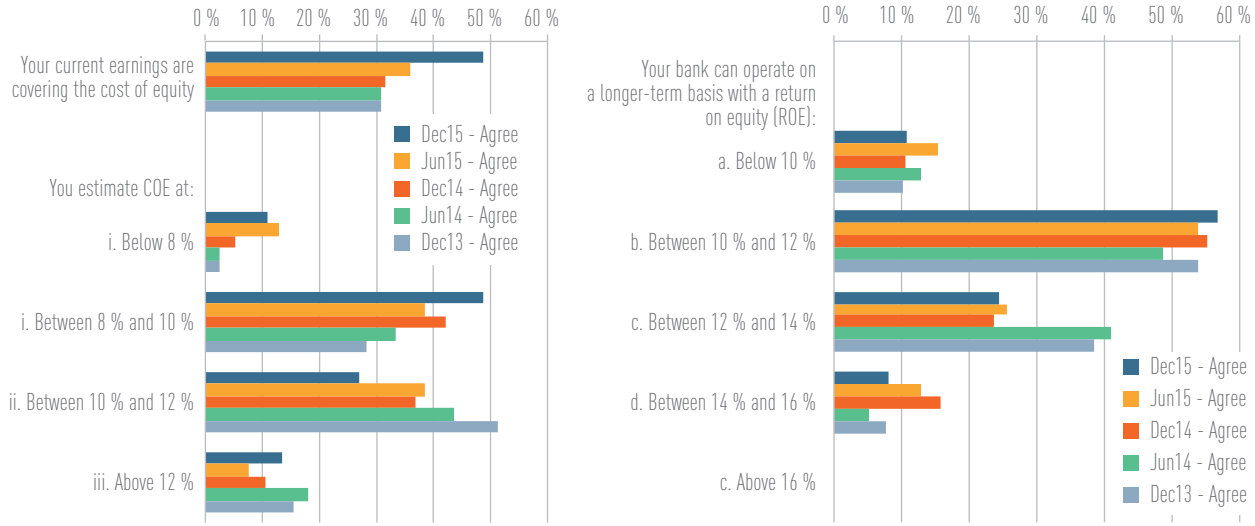
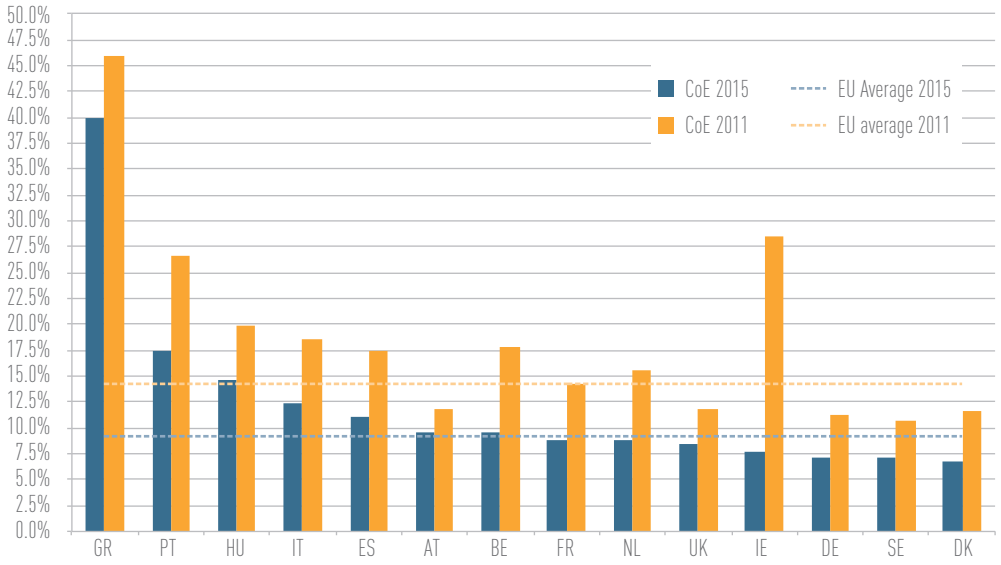


Figure 67: CoE for EU Member States
Source: Bloomberg, NYU Leonard N. Stern School of Business, EBA calculation [17].



by investors are consequently lower (Figure 66).

Banks' expectations on decreasing CoE are in line with the CAPM-based analysis carried out by the EBA on this parameter, comparing 2015 and mid-2011 data, in order to assess its evolution [17]. According to the results of the analysis, during 2015 the EU's average CoE has decreased from 9.5 % (beginning of the year) to 9.15 % (second half of 2015) (Figure 67).

[16] Estimates based on July 2011 and September 2015 data. Equity risk premium calculated in accordance with data from 1 January 2015.

[17] 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 the market capitalisation of the banks. The CoE is estimated according to the capital asset pricing model (CAPM) approach.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 (10-year 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).

Figure 68: Net interest income to total operating income — 5th and 95th percentiles, interquartile range and median; numerator and denominator trends (December 2009 = 100)
Source: EBA KRIs.

The context of continued low interest rates squeezes banks' interest margins

Interest margins remain unable to lead banks' profits up to higher levels of returns. Despite the increase in the absolute figures of net interest income (NII), the June 2015 weighted average NII compared to TOI was 55.2 % for the entire sample, 4 pp below its December 2014 level and 5 pp below the NII as of June 2014. Quartile values of NII compared to TOI are also lower than in previous periods (Figure 68).

Increased competition in the sectors, products and types of clients that banks are planning to focus on might contribute to more pressure on net interest margins

Banks indicate in the RAQ their intention to compensate for lower net interest margins with other sources of income, like fees and commissions, with about 70% of the banks relying on these sources of income to increase profits according to the RAQ. But increasing disintermediation of the financial services traditionally provided by banks and a more relevant role for shadow banking institutions may hamper the ability of banks to grow in areas that may compensate the declining net interest margins.

In this sense, the proliferation and growing market penetration of new financial technology providers of banking services (Fintechs) and rapid innovation may also increasingly affect traditional sources of banks' revenues. Fintechs have the potential to disrupt business lines with their digital services, such as traditional retail payments services.

With the quality of assets still being an issue in many geographies, impairments remain an important challenge for banks

The balance sheet repair process for the EU banking system and the impairments booked in preparation for the 2014 asset quality review (AQR) and EU-wide stress test exercise involved a significant front-loading of impairments during 2013, with additional provisioning of EUR 47 billion between December 2012 and December 2013. During 2014, provisioning levels were maintained and kept basically unchanged. Moreover, the volume of specific allowances decreased by 2% in June 2015 compared to June 2014, with a limited impact on the aggregate coverage ratio (47.4 % as of June 2015 versus 46.9 % as of June 2014; Figure 69).

Nevertheless, with the quality of assets still being an issue in many jurisdictions, impairments remain an important challenge for banks. Impairment on financial assets losses still absorbed on average 11.1 % of banks' total TOI in June 2015. This is a figure that will probably be significantly higher as of the end of 2015 considering the seasonal behaviour of impairments. On a country-by-country basis, banks in seven countries booked impairments during the first half of 2015 that represented more than 20 % of their TOI. Banks in three additional countries reported impairments representing around 15 % of their TOI (Figure 69).

Figure 69: Evolution of specific allowances for loans (billion EUR); impairments on financial assets to total operating income — country dispersion as of June 2015
Source: EBA KRIs.

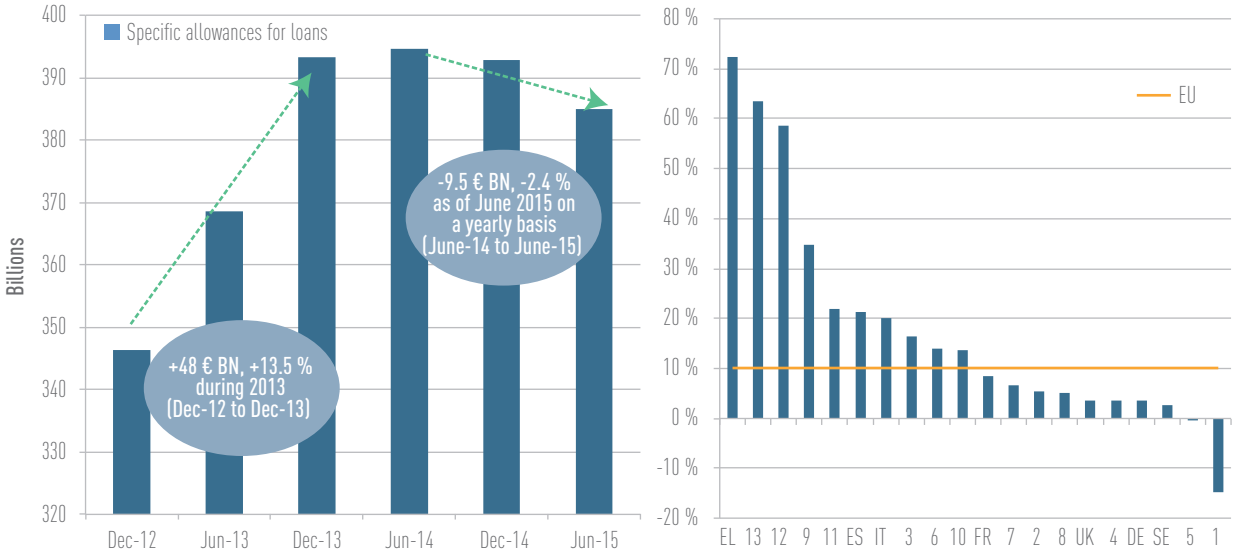
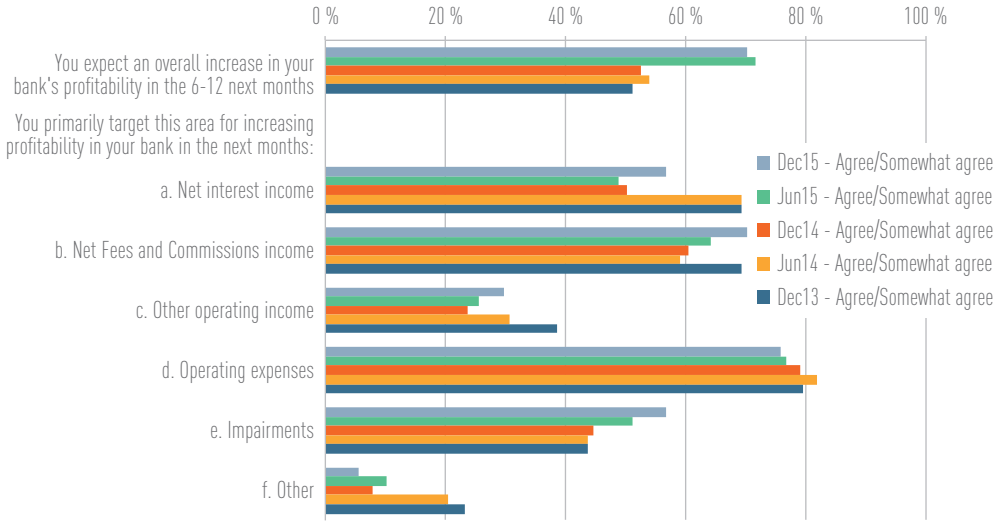


Figure 70: Evolution of profitability in the next months and main drivers
Source: EBA RAQ for banks and EBA RAQ for market analysts.



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 (57 % of banks agree or somewhat agree) and other operating expenses (76 % of the banks agree or somewhat agree; Figure 70). Nevertheless, macroeconomic uncertainty, mainly in EM countries, may represent an additional challenge for banks' profitability from the asset quality and impairments side, and may even raise concerns on the sustainability of certain business models.

Conduct-related charges and litigation costs are still a burden for banks

A decreasing but still relevant number of banks and analysts answering the RAQ, 37 % and 35 % respectively, expect banks' litigation costs to be heightened/elevated in the next 6 to 12 months. Moreover, 17 % of the banks state in their answers to the RAQ that, during the ongoing financial year, expenses arising from compensation, redress, litigation costs and similar payments have amounted more than EUR 1 billion, and an additional 14 % declare payments above EUR 100 million.

Profitability drivers — comparison between groups of banks by geography and between groups of banks by relevance of trading activity

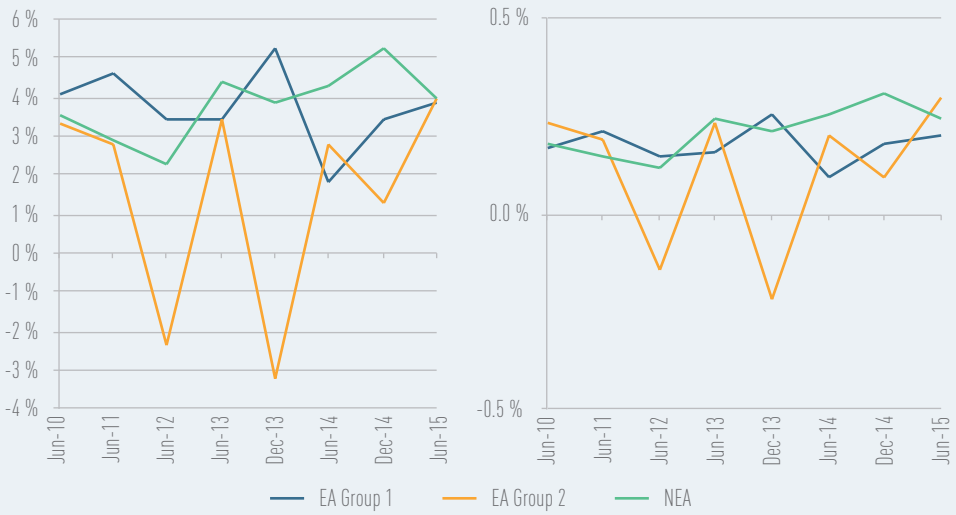
During the first half of 2015 profitability was converging for the three groups of banks clustered according to geographical criteria, i.e. banks in the euro area (EA) Group 1, banks in EA Group 2 and banks outside the EA (NEA) ([18]). The RoE of banks in EA Group 2, lower in previous periods, is similar to that of the banks of the other two groups as of June 2015. Data also shows the seasonality of the results of banks in EA Group 2, as they make the largest impairment efforts during the fourth quarter of the fiscal year, pushing year-end returns down. Despite the seasonality that will probably affect December 2015 returns for this group of banks and will most likely lead them to levels below June 2015, the trend of growing profitability moving towards levels similar to the other banks can still be observed (Figure 71).

On the expenses side, impairments are the key differentiating factor pushing down net returns in the case of EA Group 2 banks. This is all the more the case if the aforementioned seasonality of impairments is taken into account. Banks in EA Group 1 lag behind in terms of efficiency, and in June 2015 incurred operating expenses that absorbed 66 % of their TOI. Banks outside the euro area in turn reported higher levels of 'other expenses', which include, among other items, provisions.

On the income side, a different mix can be observed across the three groups in terms of the composition of banks' TOI: EA Group 1 banks report the lowest level of NII (only 50 % of TOI) and compensate for it with higher net fees and commissions (29 % of TOI) and net revenues coming from trading activities (close to 9 % of TOI); banks in EA Group 2 declare almost null net trading income and in exchange report the highest level of NII (60 % of TOI in June 2015); finally, NEA banks report the lowest levels of net fees and commissions, but in return they report levels of net trading income similar to banks in EA Group 1 (9 % of TOI) and levels of NII close to banks in EA Group 2 (58 % of TOI; Figure 72).

On the evolution of the different income components, banks outside the euro area show high volatility in the evolution of both

Figure 71: RoE (left) and RoA (right) — comparison between EA Group 1 and Group 2 banks and NEA banks
Source: EBA KRIs and EBA calculations.



([18]) In the calculations, banks in AT, BE, DE, FI, FR and NL are considered to be EA Group 1 banks and banks in CY, ES, GR, IE, IT, MT, PT and SL are considered to be EA Group 2 banks. Banks outside the euro area are considered to be NEA banks. The euro area Member States with no banks in the sample are EE, LT, LU, LV and SK.

Figure 72: Relevance of the different sources of revenues and expenses compared to total operating income — comparison between EA Group 1 and Group 2 banks and NEA banks
Source: EBA KRIs and EBA calculations.

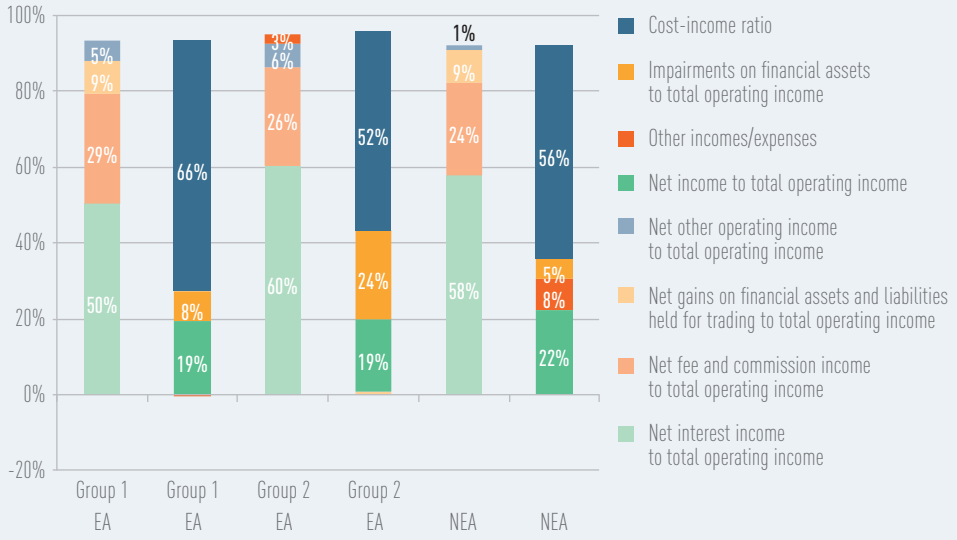


Figure 73: NII to TOI; Net fees and commissions to TOI; Impairments on financial assets to TOI; Net gains on financial instruments held for trading and at fair value through profit and loss to TOI; Cost-to-income ratio — comparison between EA Group 1, EA Group 2 and NEA countries
Source: EBA KRIs and EBA calculations.

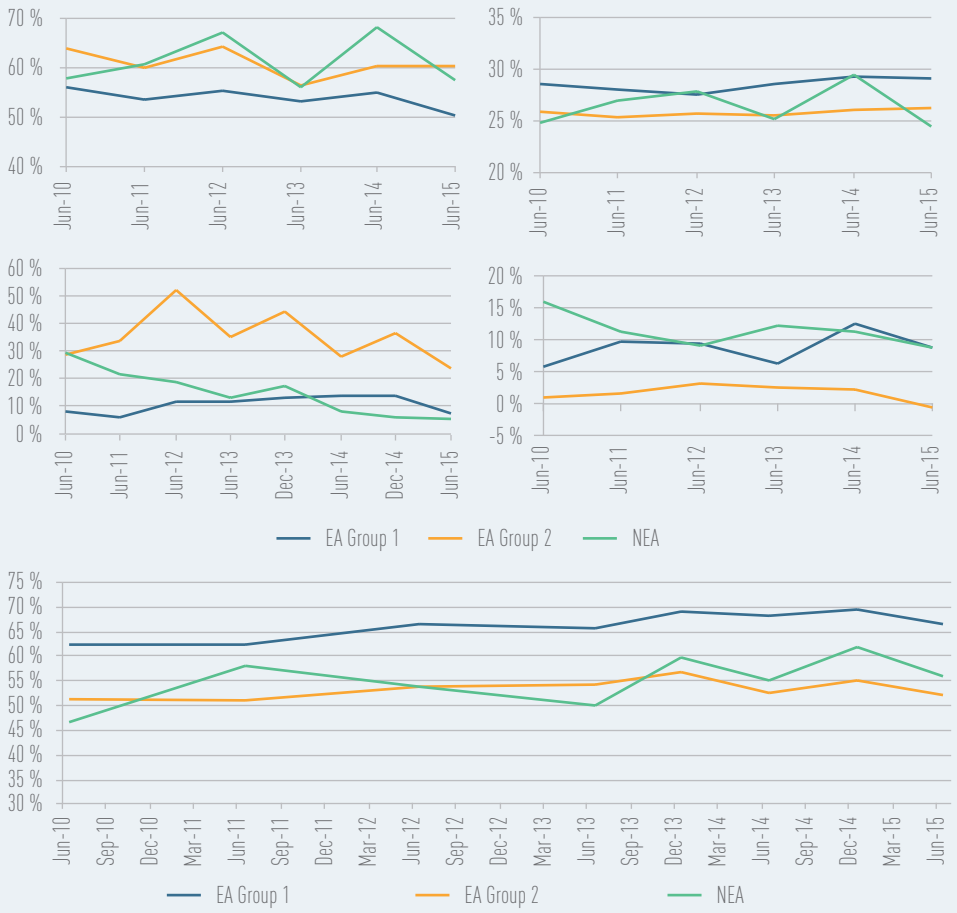
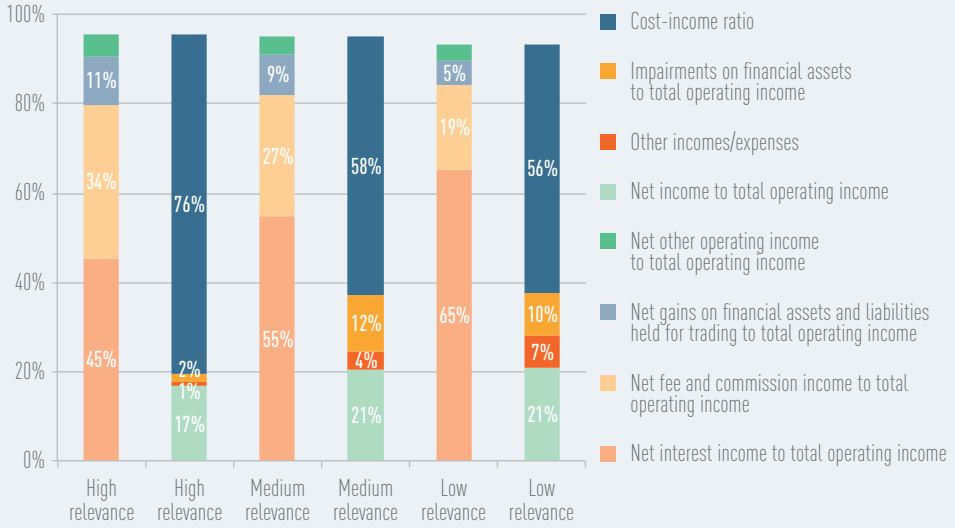


Figure 74: Profitability analysis based on the grouping of banks by the relevance of their market RWAs compared to total RWAs
Source: EBA KRIs and EBA calculations.



NII and net fees and commissions. Banks in EA Group 1 traditionally report higher levels of net fees and commissions and net trading income compared to banks in EA Group 2, though they report lower NII. Banks outside the euro area show a decreasing trend in the relevance of net income coming from trading activities. This placed them at levels similar to banks in EA Group 1 as of June 2015, after gradually losing the better comparative position that they had enjoyed for this kind of income in previous periods.

On the evolution of costs, banks in EA Group 2 still have a lot of room to improve their net profits by improving the quality of their assets. Their levels of impairments, after reaching a peak in 2012, have gradually decreased but they are still high, and represent 24 % of banks' TOI as of June 2015. Regarding efficiency, banks in EA Group 1 traditionally report higher levels of operational expenses that remain steadily high over time and prevent these banks from improving their returns despite their decreasing levels of impairments. Finally, banks outside the euro area have lower levels of impairments, continuously decreasing since June 2010, and an efficiency ratio that on average is 10 pp better than the ratio displayed by banks in EA Group 1. On aggregate, banks outside the euro area report contained costs compared to the other two groups of banks, although operating expenses overall show a gradually increasing trend (Figure 73).

An analysis based on the grouping of banks by the relevance of their market RWAs compared to total RWAs shows that a minimum degree of trading activity is good in order to have a diversified earnings mix that may help to boost profitability, even more so in the current context of low interest rates. However, above certain levels of trading, the operating expenses necessary to support these activities would appear to exceed the marginal profit obtained, resulting in lower net profits (Figure 74) [19].

[19] High-relevance banks include those banks whose market risk RWAs represent more than 10 % of their total RWAs. Medium-relevance banks include those banks whose market risk RWAs represent between 2 % and 10 % of their total RWAs. Low-relevance banks include those banks whose market risk RWAs represent less than 10 % of their total RWAs.

Limited efficiency gains also contribute to dragging down banks' net profits.

The cost-to-income ratio, 59.5 % as of June 2015, is still far from December 2009 levels (55.2 %). In addition, the increasing gap between costs and operating incomes during 2014 and 2015, with costs still growing at a great pace, raises concerns in an environment of low interest rates and struggling interest margins, where one of the banks' main expectations to increase profitability is through the reduction of operating expenses. Finally, the largest banks consistently report lower levels of efficiency compared to smaller banks. The top 15 banks in the sample in

terms of total assets reported an aggregate cost-to-income ratio of 65.4 % as of June 2015 compared to the 54.4 % cost-to-income ratio reported by the rest of the banks (Figure 75).

Finally, dispersion remains high across countries also in terms of efficiency, and banks in five countries reported cost-to-income ratios close to or above 60 % in June 2015. Banks in five additional countries reported ratios below 50 %.

Banks show a broad consensus in the RAQ on their intention to keep reducing costs through reductions in overheads and staff costs (more than 80 % of the banks agree). A large majority of banks, around 80 %, intend to achieve savings through increasing automation and digitalisation. Banks still expect to increase their efficiency by cutting non-profitable units, too (Figure 77).

Analysts share the view of the banks and also expect that profitability will increase in the near future, mainly through improvements in cost efficiency (almost 50 % of analysts responding to the RAQ).

Figure 75: Cost-to-income ratio —numerator and denominator trends (December 2009 = 100) and KRIs by size class (banks by size class according to their average total assets)
Source: EBA KRIs.

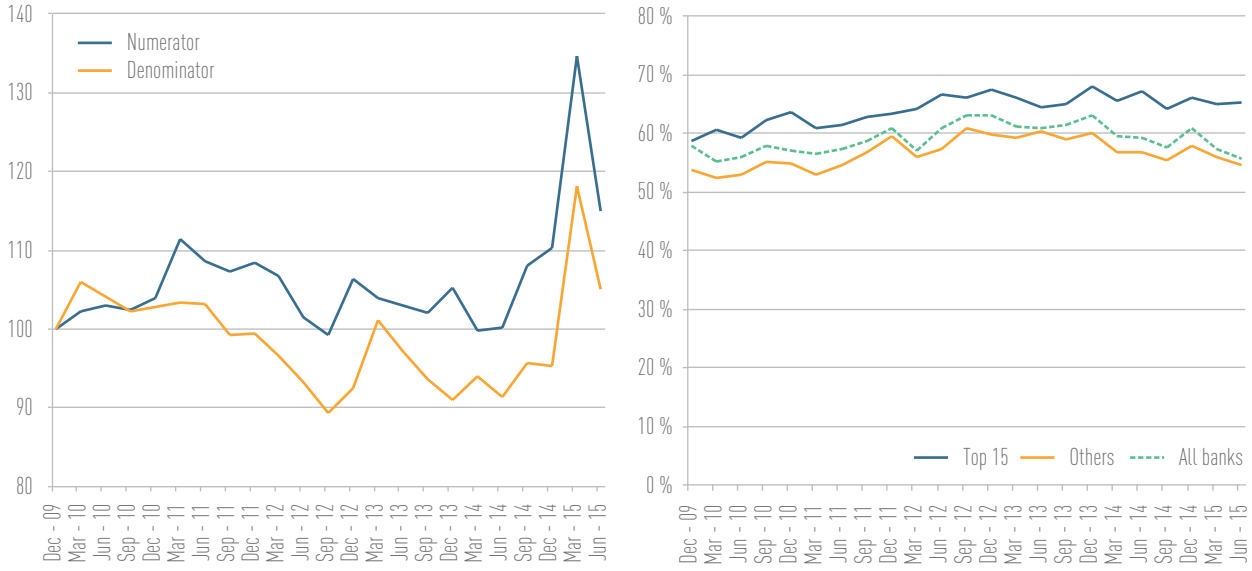


Figure 76: Cost-to-income ratio — country dispersion (median by country)
Source: EBA KRIs.

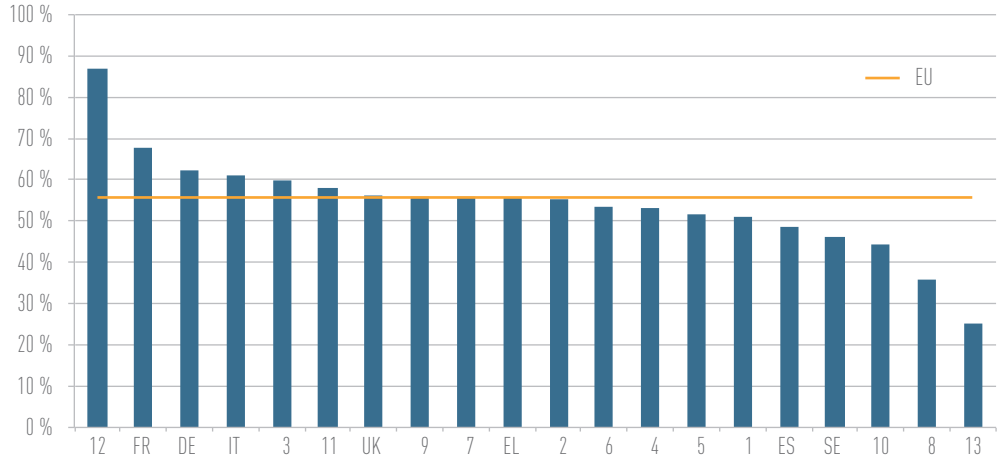
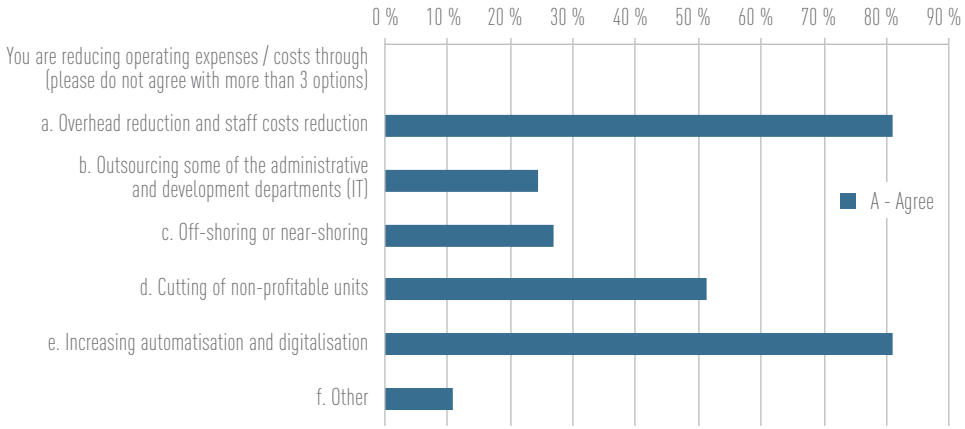


Figure 77: Reduction of costs
Source: EBA RAQ for banks.



Following the high levels of cost-to-income ratio reported by banks, it is to be expected that they have in place plans to reduce operating expenses. These plans, if carried out in a rational and orderly way, with the proper involvement of and monitoring by the banks' management and if implemented by the appropriate skilled staff, should help banks to improve their efficiency and to return to sustainable levels of profitability. Plans and their implementation should be properly monitored not only by the management of the institution but also by supervisors.

They should not result in the excessive simplification of internal control processes and procedures leading to, for example, the inadequate granting or control of credit risks that ends up pushing up levels of non performing exposures; the loss of specialised and skilled staff for complex trading-related activities leading to operational losses; or diminished controls that may result in increasing misconduct issues and related compensation, litigation and redress costs. Finally, cost-cutting plans should also be aligned with the banks' stated risk appetite in terms of revenue generation.

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

Operational risks related to information and communication technologies (ICT) at banks remain at the forefront of the attention of supervisors, banks and consumers. The dimension of ICT risks has expanded further as penetration of ICT continues to increase across the financial sector, while the complexity of ICT increases. In addition to ICT risks, risks related to detrimental business practices as a sub-category of banks' operational risks have been highlighted in past risk assessment reports, and risks have increasingly materialised.

The frequency of incidents and the magnitude of incurred costs remain high, and there should be no room for complacency. Both ICT risks and business conduct risks are key operational risks that require continued heightened attention. This is reflected in the responses to the RAQ, where 35% of respondents indicate that they have identified increased operational risks in their bank.

6.1. ICT-related risks

The increasing scope and magnitude of operational risks related to ICT has been highlighted in previous risk assessment reports. ICT risks remain key operational risks as ICT continues to proliferate and its complexity increases across business lines. Also, cyberattacks are increasing in scope and sophistication, while the skills and resources needed to commit cyberattacks have spread. Inadequate ICT infrastructure facilitates system outages and renders systems vulnerable to attacks such as distributed denials of service (DDoS). The scope and volume of banking services offered via complex and interconnected ICT platforms and the reliance on these platforms continue to increase, while the sophistication of ICT threads is growing. Accordingly, almost all banks responding to the RAQ (95%) indicate that the increased sophistication and complexity of threats are challenges to enhanced cyber and ICT resilience.

Addressing ICT risks

Adequately monitoring and responding to increasing ICT risks is also a challenge for supervisors, who have stepped up their efforts with regard to ICT risk supervision. They increasingly require institutions to reinforce ICT controls and audits, carry out targeted on-site inspections of ICT security systems or initiate cybersecurity tests. Also, national vulnerability testing frameworks using intelligence from public and commercial sources to identify and tackle potential cyber risks have been established. At the EU level, the EBA is developing a minimum common framework for the supervisory assessment of ICT risks across the EU.

ICT security for financial services has mostly remained at a national level, with limited information sharing. However, fragmented national legislation governing ICT infrastructure, digital services and outsourcing is providing challenges in implementing a level playing field of best standards and practice for ICT security across the EU. Steps to increase EU wide cooperation between financial institutions, competent authorities and ICT service providers have recently been taken. They are also facilitated by the EBA. The EBA is establishing an EU network of ICT supervisors and competent authorities to share experience and best practices on cyber risks and cloud computing. The EBA has also published requirements on the security of internet payments that apply to payment service providers across the EU, which have been applicable since 1 August 2015.

Cost pressure in an environment of low profitability entails the risk of compromising efforts to adequately address growing ICT risks and to commission and establish ICT infrastructure which is adequate to deal with increasing risks. The development of adequate infrastructure is also important as some banks are affected by past inefficient ICT investment or underinvestment, and by inadequate ICT development processes. Continuous investments are therefore critical for sound ICT risk management. In this regard

it should be an issue of concern that fewer respondents than in previous RAQs indicate that they have responded to ICT-related operational risk by increasing spending on ICT security and resilience to ICT security. Similarly, responses also indicate that budget constraints are, at around 30 %, the second largest challenge to increased ICT resilience. The increased sophistication and complexity of threats remains by far the biggest challenge.

Susceptibility to ICT risks is not only due to the sophistication of ICT threats, but also to weak ICT governance, to data theft or to fraud generated by cyberattacks. As their main approach to respond to growing ICT risks, more than 60 % of respondents to the RAQ indicate their intention to strengthen governance and enhance risk culture, and the same percentage intends to increase spending on ICT security and resilience of IT systems (Figure 78). Yet at the same time responses suggest that challenges relating to ICT governance remain high. It is also an issue of concern that around 20 % of respondents indicate that an insufficient ICT strategy and insufficient ICT integration at their bank constitutes a challenge to increased ICT resilience. Further prioritisation of ICT governance is therefore important.

6.2. Litigation issues and reputational concerns

A wide range of detrimental business practices and their implications for consumer confidence have been identified in past risk assessment reports. Detrimental practices include, besides others, failures with regard to benchmark-setting processes and the mis-selling of banking products to consumers. Such practices continue to have a substantially detrimental impact on consumers and on the banks concerned. More recently, detrimental practices have related to, for example, foreign exchange rates, violations of trade sanctions and customer-related business such as redress for payment protection insurance, and floors for mortgage loans at variable interest rates. Such practices have had a substantial impact on the banks concerned.

Redress costs have further increased since the last risk assessment report, in particular from detrimental practices which have been identified more recently. Redress costs can substantially affect profitability. EBA data indicates heightened costs related to misconduct, and suggests that incidents such as internal and external fraud can account for a considerable share of operational risk for which losses have been accrued for. Continued supervisory attention therefore needs to be maintained.

While the scope of identified detrimental business practices remains wide and misconduct costs remain high, further previously unidentified alleged mis-practices that add to the wide range of mis-practices already known have not come to the fore in the last 12 months.

Recently increasing redress costs at banks are also reflected in responses to the RAQ, and point to a wide range of banks substantially affected by misconduct costs. The share of banks indicating that they have paid out more than EUR 1 billion in compensation,

Figure 78: Information technology-related operational risk
Source: EBA RAQ for banks.

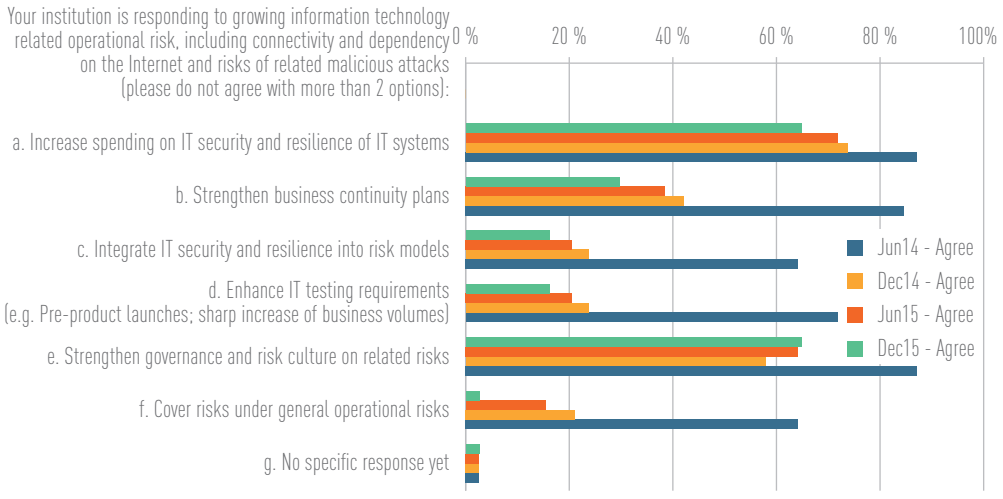
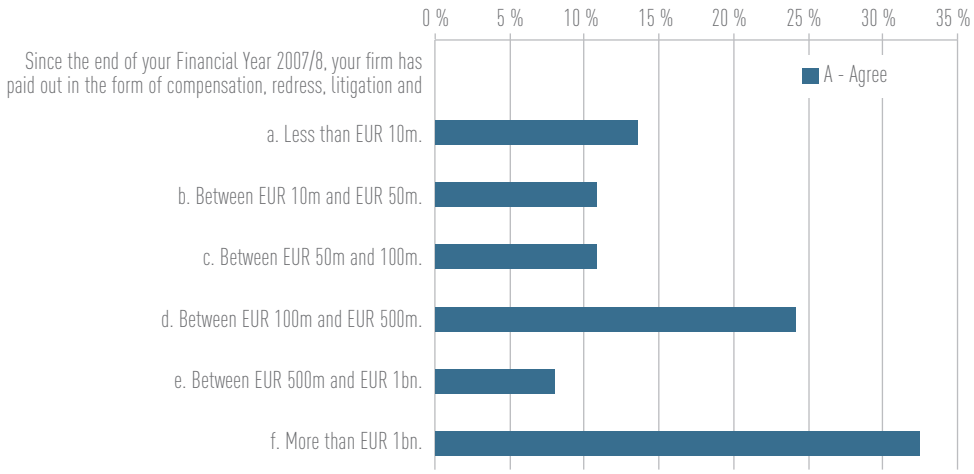


Figure 79: Compensation, redress, litigation and similar payments
Source: EBA RAQ for banks.



litigation and similar payments since the financial year 2007/2008 has increased to 32%. In the ongoing financial year, nearly 20 % of responding banks have paid out more than EUR 500 million in compensation, litigation and similar payments (Figure 79).

Regarding potential future legal issues and litigation costs, responses to the RAQ indicate the expectation of some cautious improvements, as a majority of respondents to the RAQ (nearly 60 %) do not expect litigation costs to increase in the next 6 to 12 months. EBA data nevertheless indicates that the impact of provisions for pending legal issues and tax litigation on operating income should not be neglected, in particular while profitability remains subdued.

Addressing conduct risk

Responses to the RAQ indicate that only about 10 % of banks intend to adjust products and/or business models as their main approach to addressing reputational and legal risks. As recent detrimental business practices often concerned products such as mortgages, limited intention to adjust products indicates a need for close supervisory monitoring. In this regard, EBA guidelines on financial products under the EBA's remit which affect consumers of banking products have recently entered into force. To the benefit of consumers, this may require certain adjustments to financial products that banks offer. They include guidelines on product oversight and governance, or on creditworthiness assessment, arrears, foreclosure and others.

Aiming to adjust culture and risk governance is by far the most widely considered approach to addressing reputational and legal risks (85%) at banks, as responses to the RAQ indicate. Less than 50 % of respondents have indicated an intention to adjust risk culture and governance in previous RAQs, and an increasing number of banks intending to adjust their culture and governance is a positive development. However, the roll-out and implementation of adjustments of risk culture and governance across business lines and into daily business often warrants scrutiny.

Supervisors have for some time identified the need for enhanced corporate governance, including management functions, compliance proceedings and risk culture. A lack of integration of conduct-of-business concerns into institutional governance arrangements was often identified, and governance arrangements often fell short of identifying conduct-of-business concerns. Supervisors should now monitor the introduction and full roll-out of suitable culture and governance adjustments. A recent stocktake conducted by the EBA to identify supervisory responses to conduct risk indicated that requirements for banks to improve arrangements, processes, mechanisms and strategies governing conduct risk is most widespread supervisory measure to address conduct risk. Requirements for banks to present plans to restore compliance with supervisory requirements were identified as another widespread supervisory measure.

[20] The data for this figure is based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

[21] The data for this figure is based on the supervisory reporting for the enlarged sample of banks, reported for the first time in the second half of 2014. See also the related description in the introduction about the new ITS on data reporting.

While there is evidence that boards are increasingly setting the 'tone from the top' on proper business conduct, further efforts are now needed to fully adopt messages of culture and risk governance into operating arrangements across organisational structures and to apply them with appropriate systems and controls.

Further efforts are also warranted to adequately reflect conduct risk in banks' internal capital adequacy assessment process (ICAAP). A recent supervisory stocktake conducted by the EBA covering the responses to conduct risks of 82 banks indicated that 57 % of banks do not or only partially reflect conduct risks in their ICAAP. Also, 69 % of banks do not or only partially reflect conduct risk in their stress-testing framework.

7. Policy implications and possible measures

Despite many positive developments in banks' capital positions and an improved market sentiment, there are still areas with significant risks and vulnerabilities that demand further policy and supervisory action. These areas include the following, as identified and described above.

NPLs keep their negative drag on banks' ability to provide new lending and profitability. Though setting requirements for an environment which facilitates a reduction in banks' NPL levels is in many aspects beyond the scope of regulators and supervisors, they should be supportive from their side. This includes a proactive stance towards banks' restructuring measures for their NPLs, bad bank solutions and other means to dispose of NPLs. It might prompt banks to take a more active approach on reducing their legacy stock of NPLs. Recent and planned increases in lending to SMEs also raise concerns, as these are exposures with the highest cost of risk compared to the other sectors (retail and large corporates). Supervisors should also continue to monitor lending criteria and credit risk closely.

New impairment requirements under IFRS 9 will have a major impact on banks' accounting practices for loan loss provisions and on their monitoring by supervisors. Regulators are currently working on understanding the linkages between the expected loss calculation under IFRS 9 and the respective parameters in the capital requirements. Supervisors need to be particularly vigilant about sound credit risk management as this will have a significant impact on measuring loan loss allowances. The implementation of the IFRS 9 requirements might result in increasing loan loss provisions through its focus on the expected loss model with possible impact both on own funds and RWA.

Profitability issues will lead to further cost-reduction initiatives by banks. They should in general help banks to increase their efficiency and profitability. However, these plans and initiatives will need proper monitoring by supervisors. They can lead to an increase in vulnerabilities from inadequate adjustments of their credit risk management processes or insufficient measures to prevent conduct and litigation issues. The generation of profit is also important for retaining or increasing banks' capital levels. As such, supervisors should pay further attention to banks' dividend policies so that banks maintain their capital base through retained earnings.

ICT continues to proliferate and its complexity is increasing. Threats to banks' ICT systems have increased in sophistication and scope. Supervisors should further increase their efforts to address ICT risks, such as carrying out on-site inspections of ICT security systems and initiating cybersecurity tests. They should also require institutions to reinforce ICT controls and audits. Fragmented national legislation governing ICT infrastructure, digital services and outsourcing requires further steps to increase EU-wide cooperation to create a level playing field of best standards and practice for ICT security. It remains crucial that banks maintain continuous ICT investment and further enhance ICT governance and risk culture.

Conduct risk has been included in the EBA's guidelines on the common supervisory review and evaluation process. The EBA is including conduct-of-business risks also into its stress-testing methodology, and will include it in future EU-wide stress tests. Misconduct events were covered in the EBA's RTS on the assessment of AMA operational risk models. It is also fostering cooperation between competent authorities in assessing and addressing conduct risk issues.

The EBA regularly conducts EU-wide transparency exercises. They are part of the EBA's ongoing efforts to foster transparency and market discipline in the EU and to address uncertainties on banks' exposures. The results of the exercises shall create better awareness of NPL levels on a comparable basis. They also provide a breakdown of exposures and banks' efforts in de-risking.

During 2016 the EBA will conduct an EU-wide stress test exercise, in order to assess the resilience of financial institutions to adverse market developments. The 2016 exercise will provide supervisors, banks and other market participants with a common analytical framework to consistently compare and assess the resilience of EU banks and the EU banking system to shocks. No hurdle rates or capital thresholds are defined for the purpose of this exercise, which is designed to inform the supervisory review and evaluation process carried out by competent authorities. The exercise will cover 53 banks across the EU at the highest level of consolidation. The main change compared to former exercises is the inclusion of conduct risk and FX lending.

Annex I — Samples

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

Risk assessment questionnaire

Bank name	Home country
Erste Group Bank AG	AT
Raiffeisen Zentralbank Österreich AG	AT
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
NORD/LB Norddeutsche Landesbank Girozentrale	DE
Danske Bank A/S	DK
Eurobank Ergasias S.A.	EL
National Bank of Greece S.A.	EL
Piraeus Bank S.A.	EL
Banco Bilbao Vizcaya Argentaria SA	ES
Banco Santander SA	ES
BNP Paribas SA	FR
Groupe Crédit Agricole	FR
Société Générale SA	FR
OTP Bank Nyrt.	HU
Allied Irish Banks plc	IE
Bank of Ireland	IE
Intesa Sanpaolo SpA	IT
UniCredit SpA	IT
ABN AMRO Groep N.V.	NL
ING Bank N.V.	NL
Coöperatieve Centrale Raiffeisen-Boerenleenbank B.A.	NL
DNB Bank ASA	NO
Banco Comercial Português SA	PT
Nordea Bank Group	SE
Skandinaviska Enskilda Banken AB (publ)	SE
Svenska Handelsbanken AB (publ)	SE
Swedbank AB (publ)	SE
Barclays plc	UK
HSBC Holdings plc	UK
Lloyds Banking Group plc	UK
Standard Chartered plc	UK
Royal Bank of Scotland Group plc	UK

EBA key risk indicators ([22])

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-Genossen-schaftsbank	DE
Deutsch Pfandbriefbank 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

Bank name	Home country
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-Boer-enleenbank B.A.	NL
ING Groep N.V.	NL
DNB ASA	NO
Powszechna Kasa Oszczednosci Bank Polski SA	PL
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

([22]) 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 Q2 2015
The charts of KRIs show the dispersion of data points for the relevant KRIs over time, with the 25th, 50th (median), 75th 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	Mar-15	Jun-15
Solvency	1 - Tier 1 capital ratio	Weighted average	10.2%	10.2%	10.4%	10.6%	11.0%	11.3%	11.4%	11.4%	11.1%	11.6%	12.0%	12.3%	12.5%	12.4%	12.6%	12.9%	13.1%	12.3%	12.9%	13.2%	13.3%	13.2%	13.8%
		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%	11.6%	12.2%
		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%	13.3%	13.6%
		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%	15.2%	16.1%
	2 - Total capital ratio	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%	15.1%	15.7%	16.1%	16.1%	16.0%	16.7%
		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%	14.0%	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%	15.7%	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%	18.1%	18.0%	18.7%
	3 - Tier 1 ratio (excluding hybrid instruments)	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%	12.1%	12.5%
		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%	11.0%	11.5%
		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%	12.6%	12.8%
		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%	14.7%	14.1%	15.0%

	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	Mar-15	Jun-15
Credit Risk and Asset Quality	13 - Impaired loans and past due (> 90 days) loans to total loans and avances	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%	6.8%	6.6%	6.8%	6.8%	6.6%	7.0%	7.0%	6.6%	6.4%
		First quartile	3.1%	3.1%	3.3%	2.8%	3.0%	2.9%	2.5%	2.6%	2.5%	2.5%	2.8%	2.8%	3.1%	3.0%	3.2%	2.9%	3.0%	3.0%	2.9%	3.0%	2.9%	2.7%	2.6%
		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%	6.8%	5.8%	5.5%	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%	18.3%	18.0%	17.5%	18.0%
	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%	41.0%	41.3%	41.3%	41.8%	42.4%	42.4%	44.4%	46.0%	46.9%	46.9%	45.8%	45.8%	46.0%	47.4%
		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%	39.4%	40.1%	40.7%	42.7%
		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%	47.4%	47.7%
		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%	53.8%	56.6%
	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%	1.8%	1.8%
		First quartile	1.0%	1.1%	1.1%	1.2%	1.2%	1.2%	1.1%	1.0%	1.0%	1.0%	1.1%	1.0%	1.1%	1.2%	1.2%	1.0%	1.0%	0.9%	1.0%	1.0%	0.9%	0.8%	0.8%
		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%	1.3%	1.4%
		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%	6.9%	7.0%
	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%	1.7%	1.7%
		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%	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%	1.6%	1.6%
		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%	5.0%	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%	11.2%	11.1%
		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%	7.8%	5.1%	3.6%
		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%	16.9%	11.4%	10.1%
		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%	38.1%	21.4%	23.6%

	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	Mar-15	Jun-15
Profitability	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%	6.4%	2.7%	7.5%	5.7%	5.4%	3.5%	7.5%	7.8%
		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%	1.5%	-2.9%	2.9%	2.5%	1.3%	-4.0%	2.3%	4.7%
		Median	5.4%	6.2%	6.4%	6.3%	5.4%	8.0%	7.4%	6.1%	3.4%	6.5%	5.7%	4.0%	3.2%	6.6%	6.8%	5.7%	4.8%	7.5%	5.5%	5.4%	3.4%	7.1%	7.6%
		Third quartile	9.1%	11.1%	10.8%	10.0%	9.5%	11.7%	11.7%	9.7%	8.1%	11.5%	9.3%	8.9%	7.5%	12.3%	10.4%	10.6%	9.1%	9.6%	9.5%	9.3%	8.2%	10.0%	11.7%
	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%	63.2%	61.8%	59.5%
		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%	50.4%	50.4%
		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%	57.4%	55.7%
		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%	65.7%	65.3%
	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%	59.3%	55.7%	55.2%
		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%	51.3%	49.4%	48.7%
		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%	62.8%	63.0%	64.7%
		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%	75.2%	74.2%	72.3%
	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%	27.8%	28.4%	26.9%
		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%	16.0%	14.7%
		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%	25.4%	24.0%
		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%	33.7%	31.5%
	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%	9.5%	19.8%	20.3%
		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%	-10.1%	11.6%	13.1%
		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%	20.1%	21.6%
		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%	31.7%	32.9%

	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	Mar-15	Jun-15
Balance Sheet Structure	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%	108.7%	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%	94.9%	94.4%	94.4%
		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%	111.3%	109.2%
		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%	129.7%	132.2%
	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%	47.6%	50.4%
		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%	40.6%	41.2%	43.4%
		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%	54.6%	54.3%	52.7%
		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%	66.7%	64.9%	65.2%
	36 - Tier 1 capital to [total asseets - intaginble 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%	4.7%	4.9%	4.9%	4.9%	4.7%	5.1%
		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%	4.3%	4.3%	4.4%	4.3%	4.2%	4.7%
		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%	5.1%	5.3%	5.5%	5.4%	5.2%	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%	6.6%	6.7%	7.2%	6.7%	6.8%	7.0%
	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	16.3	15.4
		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	12.1	11.9
		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	14.5	14.1
		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	19.8	18.0
	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%	18.8%	19.0%	18.3%	19.5%
		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%	13.1%	13.2%	12.6%	13.1%
		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%	17.0%	16.7%	16.4%	17.4%
		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%	20.9%	21.9%	20.0%	21.3%

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