EUROPEAN CENTRAL BANK

EUROSYSTEM

Report on financial structures

October 2016

Contents

Executive summary

The ECB Report on financial structures (RFS) in the euro area reviews the main structural features of and developments in the broader euro area financial sector. The RFS has a clear structural focus, serving as a complement to the biannual ECB Financial Stability Review (FSR) which focuses more on cyclical factors.[1]

The RFS covers the banking sector (monetary financial institutions or MFIs), insurance corporations and pension funds (ICPFs) as well as other financial intermediaries (OFIs).[2] Parts of the OFI sector have grown substantially over the past decade and sometimes perform bank-like functions. This calls for a more holistic approach to the structure of the euro area financial sector going forward.[3]

Chapter 1 presents the evolution of the overall structure and composition of the financial sector, discusses the role of the financial sector in financing non-financial corporations (NFCs) and analyses interconnectedness across different parts of the financial sector in order to assess possible structural risks to financial stability. The analysis points out the increase in the size of the euro area financial sector relative to GDP between 2008 and 2015. It also exposes a relative and absolute increase in assets held by ICPFs and OFIs over the period from 2008 to 2015, while the MFI sector tended to deleverage. This trend continued between 2014 and 2015.

Turning to interconnectedness across different parts of the financial sector, the chapter looks at direct exposures between various parts of the euro area financial sector. The analysis shows that banks and OFIs are the largest holders of loans. MFIs are also the largest counterparties. For debt securities, banks are both the largest holders and the largest counterparties. For investment fund shares, ICPFs and OFIs are the largest holders, while OFIs are the largest counterparty.

Turning to the largest cross-country exposures of MFIs, the three most important counterparty countries are Germany, France and – outside the euro area – the United Kingdom. Looking at exposures to common assets, the analysis shows that MFIs in the largest economies are particularly exposed to long-term debt, often issued domestically. In countries with a significant OFI sector, the largest exposures are concentrated mainly in domestic investment fund shares.

Chapter 2 of the report presents structural developments in the euro area banking sector, providing a wide set of structural information from both a cross-sectional (i.e. different banking types, business models, etc.) and a time perspective.

[1] The RFS focuses on euro area/Single Supervisory Mechanism countries. The report may contain, however, occasional references to the financial sectors of other EU countries. Lithuania is included in the report whenever comparable data are available, although it only became a member of the euro area on 1 January 2015.

[2] This latter part of the wider financial sector is often referred to as the “shadow banking” sector.

[3] The period covered in the report is not uniform. As regards MFIs, the period covered is 2008 to 2015, with special attention being paid to changes that have occurred since 2014. As regards ICPFs and “shadow banks”, the availability of data is more heterogeneous and generally more limited than for the banking sector.

Section 2.1 reviews developments in the market structure of the euro area banking system, i.e. the capacity, consolidation and concentration of the banking sector over time, using unconsolidated data, including the annual structural financial indicators and MFI balance sheet indicators. In 2015 the euro area banking sector continued its consolidation process, driven by continued pressure to achieve cost containment, deleveraging and restructuring. This process resulted in a further reduction in the total number of credit institutions in the euro area to 5,475 (down from 5,614 in 2014 and 6,767 in 2008). Market concentration has been on an increasing path at the euro area level over the last ten years, reaching a historical maximum at the end of 2014. However, concentration ratios declined somewhat in 2015 and developments continued to be heterogeneous across countries. The rationalisation and resizing process in the euro area banking system suggests that the overall efficiency of the system continues to be enhanced. Merger and acquisition (M&A) activity, especially cross-border (intra-euro area) and outward (with euro area banks as acquirers) transactions, has however followed a declining trend in recent years, both in terms of the number of transactions and the total value. In 2015 and the first half of 2016, M&A activity focused on the consolidation of the banking sector within the euro area and efforts to spread risks geographically, by diversifying into non-euro area EU countries and countries outside the EU.

Section 2.2, using consolidated banking data, reviews changes in the balance sheet structure, financial performance, capital position and leverage of the euro area banking sector during the period from 2008 to 2015, again with a focus on developments during the last year.[4] The analysis shows that total consolidated assets of the euro area banking sector, including foreign branches and subsidiaries, stood at €27.7 trillion at the end of 2015, a decline of 17% vis-à-vis 2008. Lending by the euro area banking system as a whole grew at a moderate pace in 2015, although there was a high degree of heterogeneity across jurisdictions. On the liabilities side, the trend towards greater reliance on deposit funding gained traction in 2015, as the median share of customer deposits increased by 3 percentage points to 45%. By contrast, the use of wholesale funding continued to drop in 2015, falling to 23%, well below its peak of 38% in 2009. In addition, most banks continued to reduce their reliance on central bank funding. Capital increases resulted in an increase in solvency ratios and a reduction in leverage ratios. More specifically, the median Tier 1 ratio increased to 15.6% in 2015 from 14.4% in 2014. The median phased-in common equity Tier 1 (CET1) ratio increased to 14.6% in 2015 from 14.0% in 2014. Altogether, these movements indicate a continuation of the trend towards a more traditional banking business model for euro area domestic banks which has already been observed for a couple of years. The legacy of the crisis is still visible in structural deficiencies. Although the median non-performing loan (NPL) ratio of banks declined in 2015 for the first time since 2008, NPLs remain persistently high in a number of countries and have increased further in some cases. This highlights the need to take additional measures to tackle this problem in order to free up bank capital and allow credit growth to support the economic recovery. Although euro area

4 The domestic banking sector comprises the consolidated accounts of banks that have their headquarters in a given country or economic area, including their foreign branches and subsidiaries abroad.

banks were able to increase their median return on assets (ROA) and return on equity (ROE) in 2015 compared with the previous year, in a low interest rate environment they face increasing challenges to sustaining their profitability. Against this background, banks are continuing with their cost-cutting efforts (the median euro area bank cost-to-income ratio fell from 67% in 2008 to 58% in 2015). Large banks in particular have stepped up efforts to reduce staff costs. As in previous years, structural developments in the euro area banking system continued to differ across countries in 2015, with the banking sectors of the euro area countries most strongly affected by the financial crisis generally also experiencing the most pronounced structural changes.

Chapter 3 discusses structural developments in euro area insurance corporations and pension funds, using publicly available data from the balance sheets of ICPFs and data from the European Insurance and Occupational Pensions Authority (EIOPA).[5] In 2015 the financial assets of euro area ICPFs continued to grow and the sector remained strongly concentrated in a relatively small number of countries. Despite increases in the overall size of the insurance sector, the number of firms continued to shrink. In the current low-yield environment, ICPFs have partially reversed the long-term trend of de-risking their portfolios and life insurers have recently increased sales of unit-linked products, which make them less vulnerable to a prolonged low-yield period. Still, non-unit-linked and defined-contribution pension products constitute the bulk of the policies on the balance sheets of life insurers and pension funds. The profitability of the insurance sector, and in particular the life insurance sector, has been constrained in recent years by the low-yield environment and weak macroeconomic conditions. The solvency positions of the life and non-life insurance sectors are, however, well above the solvency requirements of Solvency I, which was in place until end-2015. Thereafter, the Solvency II regime, which is a harmonised, more fair value-based and more risk-sensitive supervisory regime for EU insurance companies, came into force.

Chapter 4 reviews the structural features of the euro area non-bank financial sector (OFIs), including all other financial intermediaries except ICPFs. Structural features of different parts of the non-bank financial sector are outlined in more detail, namely for non-money market investment funds (non-MMFs), money market funds (MMFs) and financial vehicle corporations (FVCs). The chapter looks at a broad and a narrow measure of the non-bank financial sector. The broad measure includes all financial intermediaries except banks and ICPFs. The narrowly defined measure covers investment funds, MMFs and FVCs only. Growth of the non-bank financial sector, which was previously helped in the euro area as well as globally by credit disintermediation, the low interest rate environment and enhanced banking sector regulation in the aftermath of the global financial crisis, has stalled over the past year. Notably the investment fund sector, which had previously grown strongly, has not expanded further. A slowdown in net inflows and declining valuations, including through exchange rate effects, contributed to this. Expansion of euro area MMFs

5 In general, publicly available data are more limited for the insurance sector than for the banking sector. The reporting under the Solvency II regime, which came into force on 1 January 2016, is expected to markedly improve the situation.

also slowed, while growth in euro area FVCs has continued to slightly decline over the past year, owing to continued weak securitisation activity by euro area credit institutions. Since 2009 total assets of FVCs have fallen by over 20% mainly due to weak demand for securitised products and the collapse of mortgage activity in certain euro area countries.

The report makes use of a number of publicly available data sources. Aggregate banking sector statistics are compiled by the ECB with input from national authorities and are published on an annual basis. Individual bank-level data are derived from banks' published accounts or information from market data providers. Data on the insurance and pension fund sectors are available from the ECB statistics on balance sheets of insurance corporations and pension funds (ICPFs) and from the European Insurance and Occupational Pensions Authority (EIOPA). For the remaining non-bank financial sector, data were used from a number of ECB statistical sources, including from the euro area accounts (EEA), the FVCs asset and liabilities statistics, the MFI balance sheet items (BSI) statistics, and the investment funds' balance sheet statistics.

1 The euro area financial sector – overview and interconnectedness

This chapter presents the evolution of the overall structure of the euro area financial sector, discusses the role of the euro area financial sector in financing non-financial corporations and analyses interconnectedness across different parts of the financial sector in order to assess possible structural risks to financial stability in the euro area. Given the severe limitations in data availability, the chapter focuses mainly on developments between 2014 and 2015. Whenever possible, it also looks at developments since 2008.

The analysis shows that ICPFs and OFIs increased assets held over the period from 2008 to 2015, while the MFI sector tended to deleverage. Looking at the structure of financing provided by each financial sub-sector, most of the loans are provided by MFIs, while most of the securities are held by ICPFs and investment funds (IFs).

Looking at direct exposures between various parts of the euro area financial sector, the analysis shows that banks and OFIs are the largest holders of loans, and MFIs are also the largest counterparties. For debt securities, banks are both the largest holder and the largest counterparties. The three most important locations for cross-country bank counterparties are Germany, France and the United Kingdom. Looking at exposures to common assets, the analysis shows that the most significant exposure of banks in the largest economies is long-term debt issued domestically.

1.1 Structure of the euro area financial sector

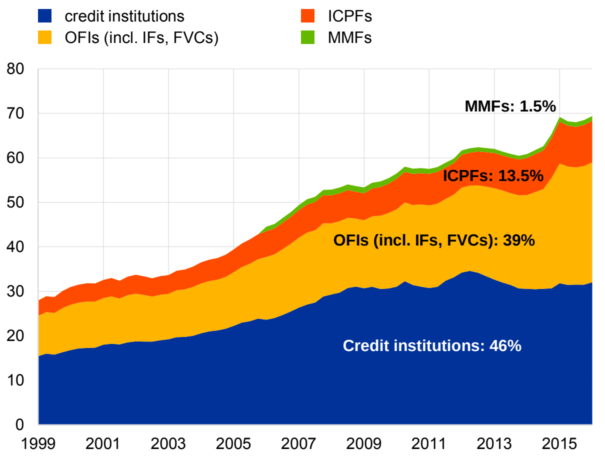
At the end of 2015 the size of the overall euro area financial sector (assets held by MFIs, MMFs, ICPFs and OFIs) stood at about €68.5 trillion (see **Chart 1.1**).[6] The largest share of assets was held by MFIs (46% of the total), followed by OFIs (39%). Among OFIs, IFs and the remaining other financial institutions held the bulk of the assets (15% and 21% of the total, respectively), whereas FVCs held a comparatively small share (2.4%).

[6] The OFI sector in this subsection comprises non-MMF IFs, FVCs and the remaining other financial institutions for which a detailed statistical breakdown is not readily available. See the discussion in Chapter 4 for more details regarding the different definitions of the non-bank sector.

Chart 1.1

Total assets of the euro area financial sectors

(Mar. 1999 – Mar. 2016; EUR trillions)



Source: ECB (EAA) and ECB calculations.
Notes: OFIs refer to non-monetary financial corporations excluding ICPFs. Non-money market investment funds and financial vehicle corporations are included in the OFI sector.

The share of the non-bank financial sector (ICPFs, MMFs and OFIs) has been steadily increasing since the global financial crisis, on account of rising valuations as well as net inflows (from 42% in 2008 to 54% at the end of 2015). The OFI sector, including IFs, increased its share of the total assets of the financial sector from 29% in 2008 to 39% at end-2015. In absolute amounts, the investment fund sector has more than doubled in size since 2008, while assets held by the remaining other financial institutions increased by about 25%. By contrast, the share of credit institutions in total financial sector assets declined from 58% to 46% over the same period. Looking at more recent developments since end-2014, the share of the non-bank financial sector (ICPFs, MMFs and OFIs) increased from 53% in 2014 to 54% at the end of 2015, while the share of credit institutions decreased from 47% to 46%.

There are very significant differences across euro area countries in terms of the size and structure of the financial sector. The size of the overall financial sector ranged from almost 200 times GDP (Luxembourg) to slightly below 100% of GDP (Lithuania). Other countries with a financial sector of more than ten times GDP are Malta, Ireland, Cyprus and the Netherlands (see **Chart 1.2**).[7] At the other end of the spectrum, the size of the financial sector stood at about 200% of GDP or less at the end of 2015 in most eastern European euro area countries. In most central euro area countries, such as France, Belgium, Germany or Austria, the ratio of total financial sector assets to GDP was between 400% and 600%.

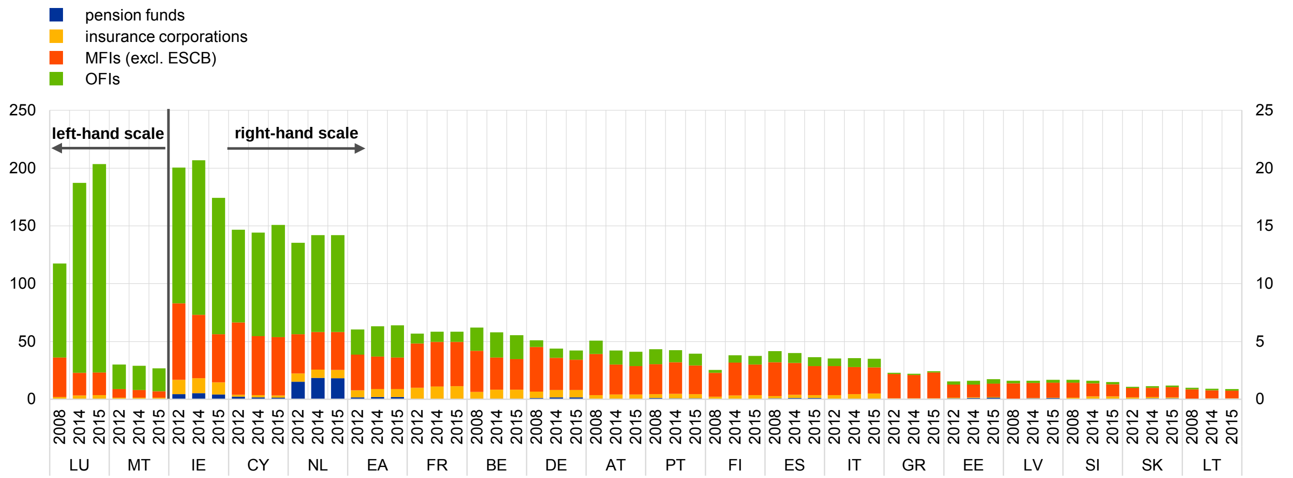
The relative size of the euro area financial sector has increased between 2008 and 2015 (from 5.3 to about 6.1 times GDP), while it remained broadly unchanged in comparison with 2014. The overall stability in the size of the euro area financial sector since 2014 conceals some heterogeneous dynamics across countries. The relative size of the financial sector contracted in Germany, Spain and Belgium, while it remained broadly unchanged in Italy and the Netherlands between 2014 and 2015. In Luxembourg, the size of the financial sector increased from 189 to 200 times GDP. The increase in Greece is mainly a result of the increase in assets held by MFIs, but is also explained by a contraction in GDP.

[7] Assets of the sectors in the financial system comprise monetary gold and special drawing rights, currency and deposits, debt securities, loans, equity and investment fund shares, insurance, pension and standardised guarantees, financial derivatives, employee stock options and other accounts receivable.

Chart 1.2

Size of the euro area financial sector, 2008, 2014 and 2015

(ratio of assets to GDP)



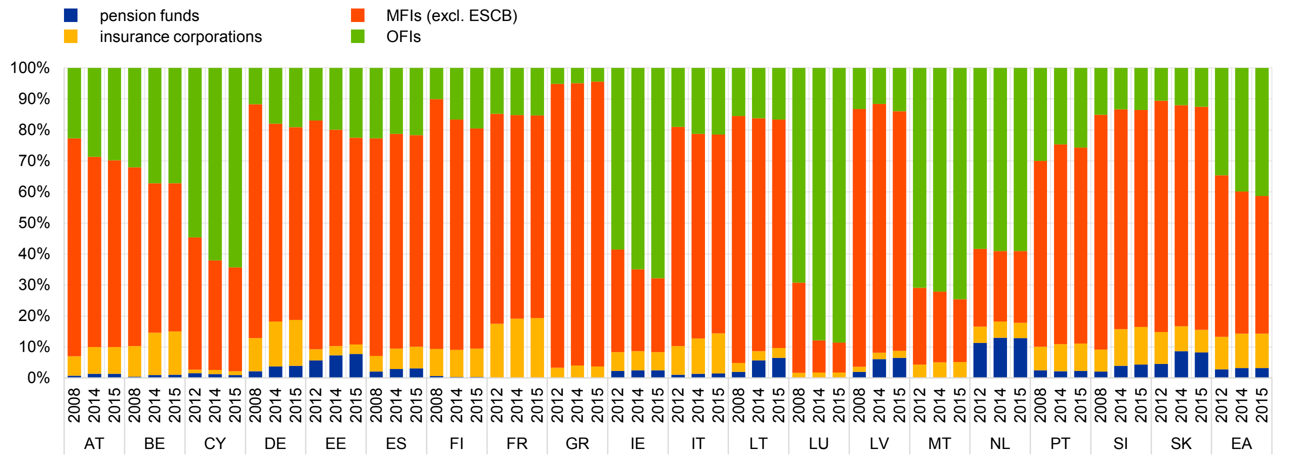
Source: ECB (EAA, MFI BSI statistics) and ECB calculations.
Notes: "MFIs (excl. ESCB)" refers to the difference between MFI total assets (including national central banks (NCBs)) from the QSA and NCB assets from the MFI BSI statistics. Data for 2008 are not available for all the countries, and in such cases data for 2012 are used. EA (euro area) is the sum of individual euro area countries and is therefore also a combination of data for 2008 and 2012 for the starting date. Complete figures are available in Table 1 of the statistical annex.

MFIs represent the largest share of the financial sector in most euro area countries except Luxembourg, Malta, Ireland, Cyprus and the Netherlands (see **Chart 1.3**). OFIs account for a large share of the overall financial sector in Luxembourg, Malta, the Netherlands, Ireland, Belgium and Cyprus, ranging from about 37% to 89% of total assets depending on the country. The insurance sector ranges from about 1% to 19% of total financial assets and is particularly developed in France, Germany, Belgium and to some extent also in Italy. Finally, the pension fund sector is the smallest of the four sectors and is more developed in the Netherlands.

Chart 1.3

Composition of the euro area financial sector, 2008, 2014 and 2015

(% of total assets of the financial sector)



Source: ECB (EAA, MFI BSI statistics) and ECB calculations.
Notes: "MFIs (excl. ESCB)" refers to the difference between MFI total assets (including NCBs) from the QSA and NCB assets from the MFI BSI statistics. Data for 2008 are not available for all the countries. In such cases data for 2012 are used instead. EA is the sum of individual euro area countries and is therefore also a combination of data for 2008 and 2012 for the starting date.

At the euro area level, the share of MFIs has fallen in favour of OFIs since 2008. This change in composition was particularly marked in the case of Luxembourg. The composition of the overall euro area financial sector changed slightly between 2014 and 2015, following the same pattern as for the period between 2008 and 2014.

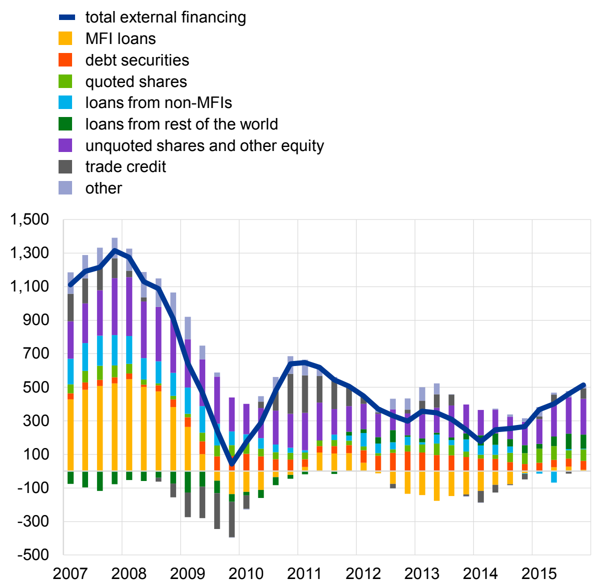
1.2 The role of the euro area financial sector in financing non-financial corporations

This section looks at the financing of non-financial corporations (NFCs) by different segments of the overall euro area financial system, both for the euro area as a whole and across euro area countries.

Chart 1.4

Sources of external financing provided to euro area non-financial corporations by component

(annual flows; EUR billions)



Source: ECB (EAA) and ECB calculations.
Note: The last observations are for the fourth quarter of 2015.

Chart 1.4 shows the flows of total external financing to euro area NFCs and its components over time. MFI loans accounted for about half of the external financing provided to euro area NFCs before the crisis, with the rest coming mainly from the issuance of unquoted shares but also from loans by non-MFIs and trade credit. During and in the aftermath of the crisis, the net flow of loans provided by MFIs to NFCs tended to contract and turned negative in 2009 and 2010, but also between 2012 and 2014. By contrast, the flow of finance from other sources (issuance of quoted and unquoted shares and debt securities) remained positive throughout this period, suggesting that the provision of other forms of funding helped to finance the euro area economy since the outbreak of the crisis.

Chart 1.5 shows the structure of financing provided by the overall euro area financial sector to NFCs for three instruments (loans, debt securities and quoted shares), their share relative to GDP and the share of these instruments with respect to the total stocks outstanding.

First, the chart shows that financing provided by the overall euro area financial sector in 2015 accounted for 70% of the stock of securities issued by NFCs. The shares for loans and quoted shares stood at about 56% and 27% respectively in 2015.[8] Compared with 2013 and 2014, the main difference is a small decline in the share of loans received from the overall financial sector.[9]

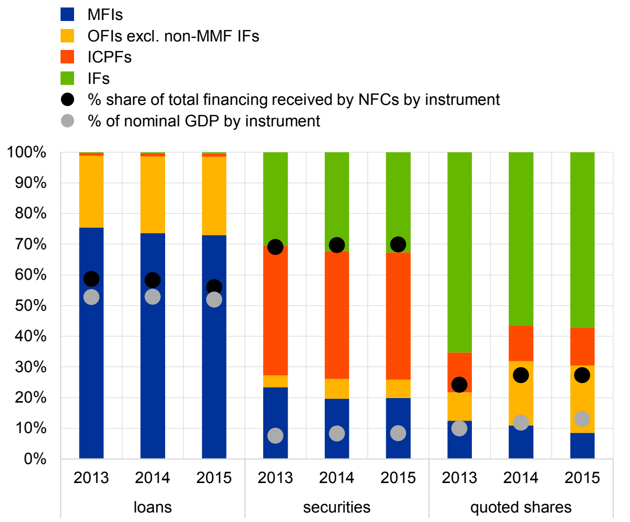
[8] Total financing received by NFCs includes inter-company loans and holdings of securities and quoted shares.

[9] “Who-to-whom” data for securities and quoted shares are unavailable before 2013.

Chart 1.5

Financing provided by the overall euro area financial sector to non-financial corporations by instrument

(% based on stocks at the end of the period)



Source: ECB (EAA) and ECB calculations.
Note: Total financing received by NFCs includes inter-company loans and holdings of securities and quoted shares.

Second, loans are the most important instrument provided by the overall financial sector, accounting for 52% of euro area GDP in 2015. Quoted shares accounted for about 13% of GDP and have increased since 2013, while securities represented about 8% in 2015, slightly above the values recorded in 2013 and 2014. These figures suggest that loans are by and large the most important source of financing provided by the overall euro area financial sector to NFCs.

Third, most of the loans provided in 2015 by the overall financial sector were provided by MFIs (about 73%), followed by OFIs excluding non-MMF investment funds (about 26%). About 40% of securities were held by ICPFs, followed by investment funds (about 32%). MFIs hold about 20% of securities. IFs hold the largest part of quoted shares (about 52%), followed by OFIs excluding non-MMF investment funds (about 21%). Compared with 2013 and 2014, a decline in the share of each instrument held by MFIs in favour of the other sectors can be noticed.

Taking a cross-country perspective, **Chart 1.6** reports the total financing provided by the domestic financial sector to NFCs located in the same country and in other euro area countries.[10] Reflecting the absolute size of their economies and their financial sectors, the largest absolute amounts are recorded in France, Germany, Italy, the Netherlands, Luxembourg and Spain. Among the economies with the largest exposures, noticeable increases in the amount of financing between 2014 and 2015 were observed in France, Germany and particularly Luxembourg (increases ranging between about 5% and 20%). By contrast, a decrease was observed in Spain (of about 5%).

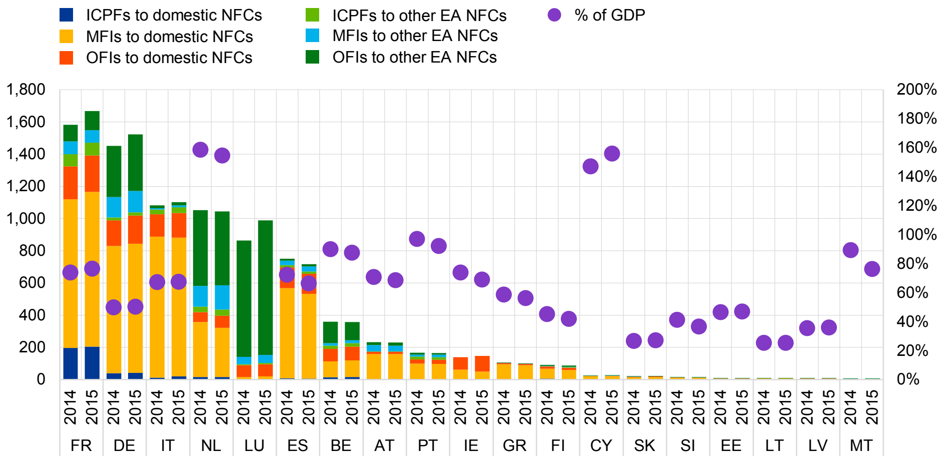
In most euro area countries, the largest share of NFC financing is provided to domestic NFCs, mainly by MFIs, although domestic OFIs play an important role in Belgium, Ireland and Luxembourg (accounting for between 42% and 79% of the financing provided to domestic NFCs in 2015). Countries where the domestic financial sector is active in financing NFCs located in other euro area countries include Luxembourg, the Netherlands and Belgium (accounting for between 43% and 90% of the total financing provided to NFCs). In these cases, most of the financing to foreign NFCs is provided by OFIs.

[10] Data on the financing provided by the domestic financial sector to NFCs located in the same country and in other euro area countries are not available before 2014.

Chart 1.6

Financing provided by the domestic financial sector to NFCs located in the same country and in other euro area countries, 2014 and 2015

(EUR billions and % of domestic GDP)



Source: ECB (EAA) and ECB calculations.
Notes: Financing is computed for three instruments combined: loans, debt securities and listed shares. Data for foreign exposures in Ireland are not reported due to confidentiality reasons. The share of financing in GDP for Luxembourg stood at 1,765% (2014) and 1,899% (2015). The countries are placed in order according to the absolute amount of financing recorded in 2015.

The picture is rather different when focusing on NFC financing relative to domestic GDP. Countries where financing of NFCs in the same country and other euro area countries by the domestic financial sector is particularly large include Cyprus and the Netherlands (about 160% of GDP). By contrast, countries where the level of financing is relatively low (below 50%) include Finland, Slovakia, Slovenia, Estonia, Lithuania and Latvia. The ratio increased noticeably between 2014 and 2015 in Cyprus (due to an increase in financing rather than a fall in GDP). By contrast, a decline was observed in Malta and to a smaller extent in Slovenia, Portugal, Belgium, Finland, Spain and the Netherlands.

1.3 Interconnectedness in the euro area financial sector

Understanding financial interconnectedness across different parts of the wider financial sector as well as across countries is necessary to better assess the transmission of possible shocks and contagion throughout the various parts of the financial system. Against this background, this section looks at direct bilateral exposures across different parts of the wider euro area financial system, across instruments and across geographical regions.[11] In addition, it analyses exposures of MFIs located in different countries to non-residents.

[11] Direct bilateral exposures are the most direct mechanism of transmission of shocks within the financial system. A summary of existing approaches to assess interconnectedness can be found in Chapter 1 of the 2015 ECB Report on financial structures.

1.3.1 Interconnectedness among sectors of the wider financial system

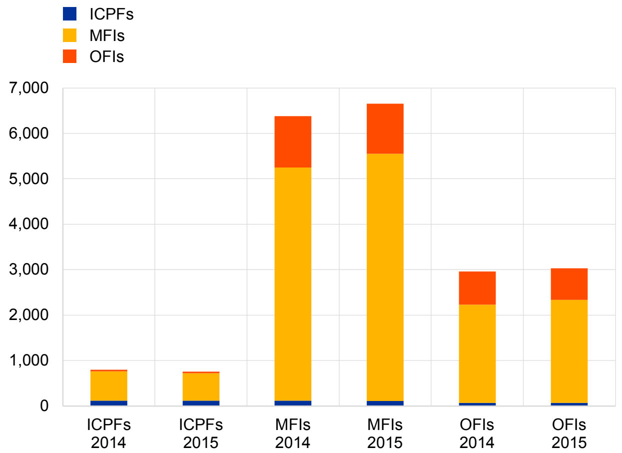
Chart 1.7 to **Chart 1.10** present the direct exposures across different sectors of the wider euro area financial system by instrument type in the last quarter of 2014 and in 2015.[12] The lender (in the case of loans) or the holding sector (for securities, listed shares and investment fund shares) is reported on the horizontal axis, while the borrower or the issuing sector, respectively, is reported on the vertical axis. The size of the exposures differs significantly according to the type of instrument. In absolute terms, the largest exposures are loans granted by MFIs and OFIs, followed by debt securities held by MFIs and investment fund shares held by ICPFs and OFIs. Holdings of listed shares are comparatively smaller.

Looking at loans, MFIs are – unsurprisingly – the largest lenders, followed by OFIs (see **Chart 1.7**). MFIs are also the largest counterparty to both MFIs and OFIs, representing 82% and 75% of the total loans granted by both sectors, respectively. OFIs account for almost all the remaining exposures. ICPFs play a relatively small role for loans. Since last year, a moderate increase in the amount of loans granted by MFIs and OFIs to MFIs can be observed. By contrast, loans by ICPFs tended to remain broadly unchanged or decline.

Chart 1.7
Cross exposures among sectors of the euro area financial system: loans

(EUR billions; fourth quarter of 2014 and 2015)

y-axis: Exposure to counterpart sector
x-axis: Lender

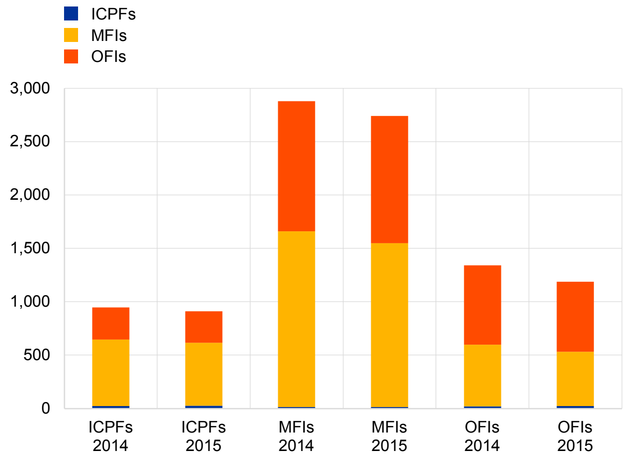


Source: ECB (EAA, MFI BSI statistics) and ECB calculations.
Notes: Loans by MFIs include both interbank lending and longer-term loans and exclude ESCB lending. The data also include intra-group positions.

Chart 1.8
Cross exposures among sectors of the euro area financial system: debt securities

(EUR billions; fourth quarter of 2014 and 2015)

y-axis: Exposure to counterpart sector
x-axis: Holding sector



Source: ECB (EAA) and ECB calculations.
Notes: Holdings of debt securities by MFIs exclude debt securities held by the ESCB in the context of the asset purchase programmes. The data include intra-group positions.

Regarding debt securities, the largest holders are also MFIs, followed by OFIs (see **Chart 1.8**). MFIs are the main counterparty for debt securities to all three sectors of

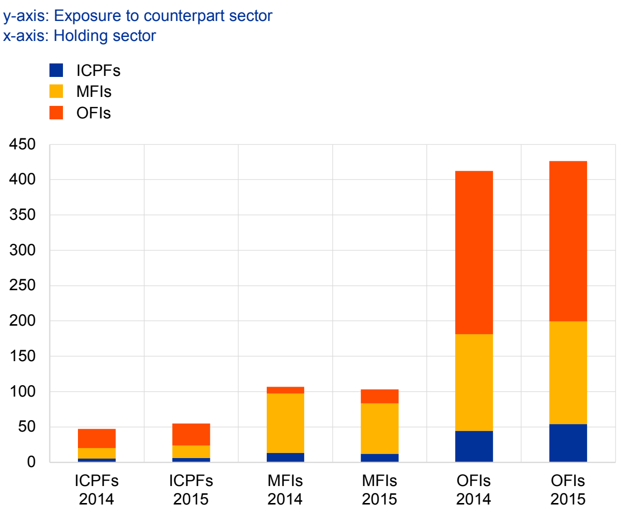
[12] Data regarding direct exposures across different sectors of the wider euro area financial system are not available before 2014.

the wider financial system, followed by OFIs. Compared with 2014, a slight decline in debt securities issued by MFIs and held by the three sectors is noticeable.

Turning to listed shares (see **Chart 1.9**), the largest holders are OFIs. MFIs and even more so ICPFs hold much smaller amounts. In terms of counterparties, OFIs are particularly exposed to the same sector. Equity issued by MFIs also represents a large share of the total OFI exposure. MFIs appear largely exposed to equity issued by other MFIs, while ICPFs are largely exposed to equity issued by OFIs. Compared with 2014, the main difference is a slight increase in the exposure of OFIs to MFIs.

Chart 1.9
Cross exposures among sectors of the euro area financial system: listed shares

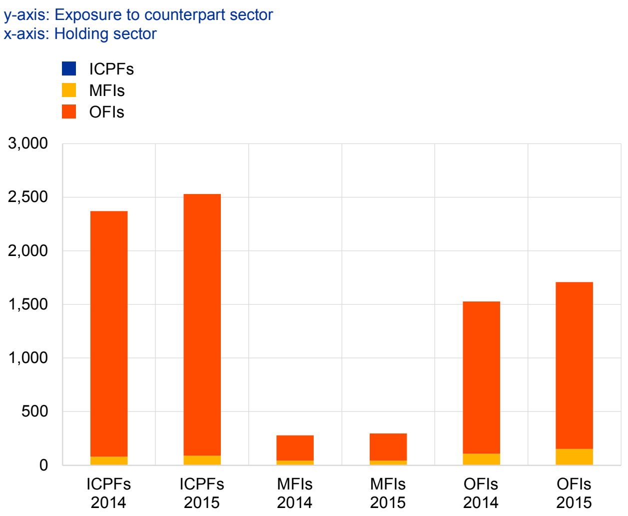
(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (EAA) and ECB calculations.
Note: The data include intra-group positions.

Chart 1.10
Cross exposures among sectors of the euro area financial system: investment fund shares

(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (EAA) and ECB calculations.
Note: The data include intra-group positions.

Finally, turning to investment fund shares (see **Chart 1.10**), the largest holders are ICPFs, followed by OFIs. MFIs tend to hold a much smaller amount of investment fund shares. In terms of counterparties, the major issuers of this instrument are OFIs.

1.3.2 Interconnectedness across individual countries

This section presents two different approaches to look at structural interconnectedness across countries for different parts of the wider euro area financial sector.

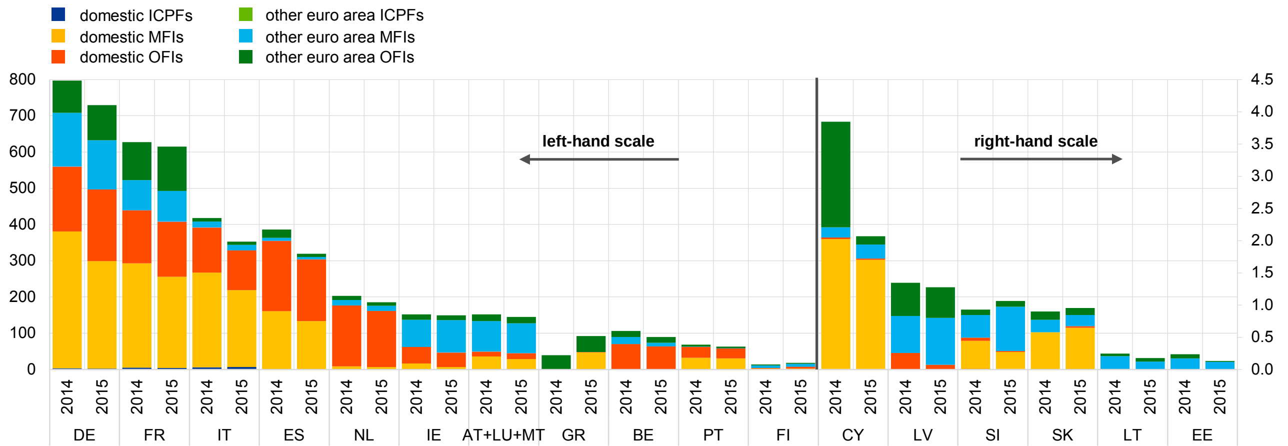
Chart 1.11 to **Chart 1.13** show the exposures of MFIs, ICPFs and OFIs to their home country (domestic exposures) and to the rest of the euro area (other EA exposures). Exposures of each sector are computed for three instruments combined, namely debt securities, listed shares and investment fund shares. The charts are calculated on the basis of SHS (Securities Holdings Statistics) data.

Reflecting in part the absolute size of their banking systems, exposures of MFIs tend to be particularly sizeable in the four largest economies of the euro area (Germany, France, Italy and Spain) (see **Chart 1.11**). In Italy, Germany and France, most MFI exposures are to other MFIs in the same country, but there are also sizeable exposures to other euro area countries in the latter two. MFI exposure to OFIs (in the same country or in other euro area countries) is particularly large in Spain and the Netherlands, and is non-negligible in Germany, France and Italy.[13] By contrast, MFIs in Ireland, and in Austria, Luxembourg and Malta combined, tend to be exposed mainly to sectors located in other euro area countries. Compared with 2014, a noticeable pattern is that MFIs' exposures are on a declining path across the board, mostly due to a decrease of the domestic exposures to MFIs.[14]

Chart 1.11

Exposure of MFIs to financial sectors located in the same country and in other euro area countries

(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (SHSS) and ECB calculations.
Notes: Exposures of each sector are computed for three instruments combined: debt securities, listed shares and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data include intra-group positions.

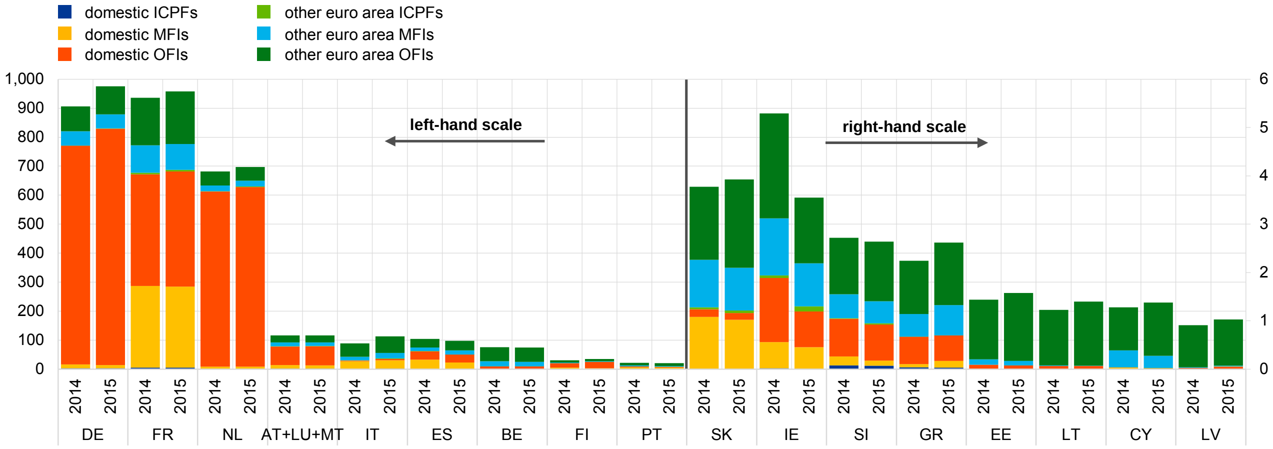
13 At least in the case of Spain, the large exposure of domestic MFIs to domestic OFIs reflects retained securitisations for collateral purposes, without implications for risk or contagion.

14 In the case of Greece, the increase recorded between 2014 and 2015 is due to the fact that MFIs reported holdings of securities issued by themselves in the first half of 2015.

Chart 1.12

Exposure of ICPFs to financial sectors located in the same country and in other euro area countries

(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (SHSS) and ECB calculations.
Notes: Exposures of each sector are computed for three instruments combined: debt securities, listed shares and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data also include intra-group positions.

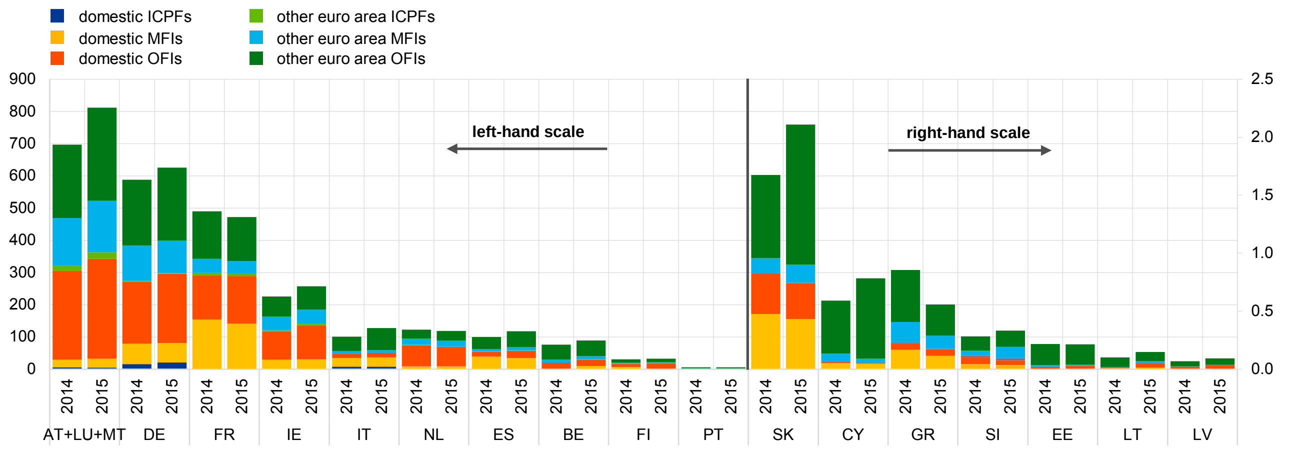
Chart 1.12 shows that the ICPF sector is still rather small in most euro area countries, except for France, Germany and the Netherlands. In France, the ICPF sector is exposed particularly to French MFIs and OFIs, but also to other parts of the euro area. In Germany and the Netherlands, the ICPF sector is mainly exposed to the domestic OFI sector. In comparison with 2014, the ICPF sector recorded an increase in France, Germany and the Netherlands, mainly due to an expansion of exposures to OFIs.

OFI exposures are particularly sizeable in Austria, Malta and Luxembourg combined, as well as in Germany and France, followed by Ireland (see **Chart 1.13**). Austria, Malta and Luxembourg combined and Germany are highly exposed to OFIs and MFIs in other euro area countries, with non-domestic exposures representing slightly more than half of the total exposure. In France, where domestic exposures represent more than 60%, these are concentrated mainly in domestic MFIs and OFIs. In Ireland, OFIs are mainly exposed to domestic and non-domestic OFIs and also to domestic and non-domestic MFIs. Looking at the evolution of OFIs' exposures since 2014, an increase in the absolute size of the OFI sector can be observed (except in France).

Chart 1.13

Exposure of OFIs to financial sectors located in the same country and in other euro area countries

(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (SHSS) and ECB calculations.
Notes: Exposures of each sector are computed for three instruments combined: debt securities, listed shares and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data also include intra-group positions.

The second analysis performed in this section looks at MFI exposures to MFIs and non-MFIs in other EU countries. For this analysis, several non-euro area EU Member States are included, because they are large counterparties for many euro area countries. The main difference to the cross-country analysis presented above is the focus on the three largest cross-country exposures per country. Moreover, the focus of this analysis is on MFIs, given that the euro area is a largely bank-based economy. Exposures are computed for the sum of loans and debt securities.

Chart 1.14 and **Chart 1.15** report for each euro area country, the share of the three largest cross-country exposures (relative to total assets) of MFIs to foreign MFIs and to foreign non-MFIs.[15]

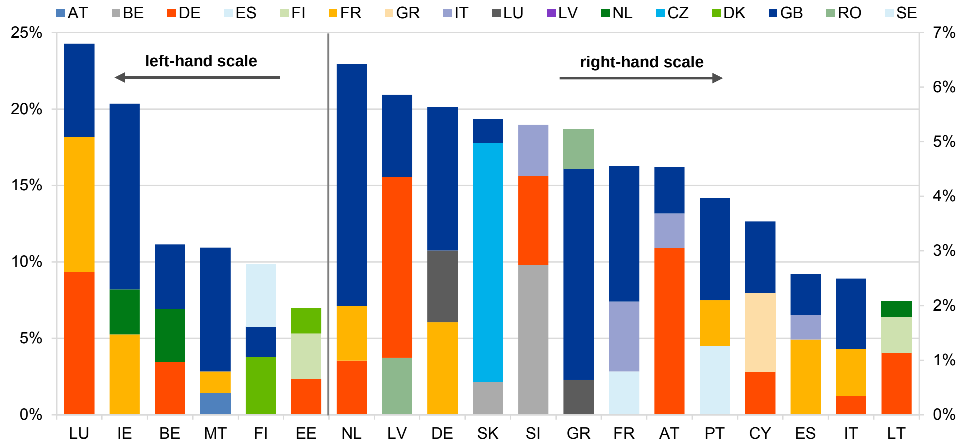
Looking at the exposures of MFIs to foreign MFIs (see **Chart 1.14**), the two countries with the largest exposures (relative to total assets) are Luxembourg and Ireland. For these two countries, the three aggregated largest exposures represent about 24% and 20% of total assets, respectively. Countries with significant, although much smaller, foreign exposures, are Belgium, Malta, Finland and Estonia. MFIs in the remaining euro area countries tend to be less exposed to non-domestic MFIs. As regards counterparties, the most important countries appear to be the United Kingdom, Germany and France. Geographical proximity or cultural background matter as well. For example, Belgium is strongly exposed to the Netherlands, Cyprus to Greece, and Portugal to Spain, while Estonia and Finland are exposed to Denmark, Latvia is exposed to Finland, and Slovakia to the Czech Republic.

[15] Unlike the cross-country analysis performed before, which is based on SHS data, this analysis is based on country-by-country MFI BSI data, which also contain information on non-euro area EU counterparty countries.

Chart 1.14

Three largest exposures of MFIs to foreign MFIs

(% of total assets; December 2015)



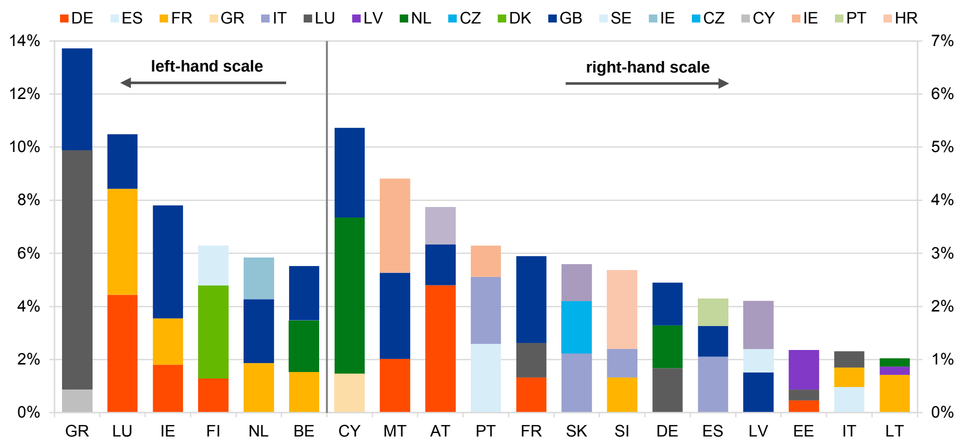
Source: ECB (MFI BSI statistics).
Notes: Exposures of each sector are computed combining MFI loans and holdings of debt securities. The series on loans used in this chart are not adjusted for loan sales and securitisations.

MFI exposures to foreign non-MFIs (see **Chart 1.15**) tend to be smaller than those to foreign MFIs. The countries with the largest exposures are Greece, Luxembourg and Ireland, where the shares vary between 8% and 14%. In the remaining countries, the share of the three largest exposures to non-domestic non-MFIs is less than 7% of total assets. The geographical distribution of counterparties appears to be more diverse than that for non-domestic MFIs. In particular, while the United Kingdom, Germany and France are major counterparties, the Netherlands, Luxembourg and Italy also tend to be significant across the board.[16] Some clustering of countries is, however, also present. For example, Slovenia is exposed to Croatia, Cyprus to Greece, Estonia to Latvia, Portugal to Spain and Slovakia to the Czech Republic.

[16] In the case of Greece, the large exposure to Luxembourg is due to large holdings of European Financial Stability Facility bonds as a result of Greek bank recapitalisation and restructuring in the context of the economic adjustment programme.

Chart 1.15
Three largest exposures of MFIs to foreign non-MFIs

(% of total assets; December 2015)



Source: ECB (MFI BSI statistics).
Notes: Exposures of each sector are computed combining MFI loans and holdings of debt securities. The non-MFI sector includes general government, financial corporations except MFIs, non-financial corporations, households and non-profit institutions serving households.

1.3.3 Interconnectedness arising from exposures to common assets

While the previous section focused on direct exposures across sectors and countries, this section assesses interconnectedness in the euro area financial sector arising from exposures to common assets. In particular, it analyses the exposures of financial systems of different countries to particular instruments, while distinguishing whether the instrument is held in the same country (domestic exposures) or in the rest of the euro area.

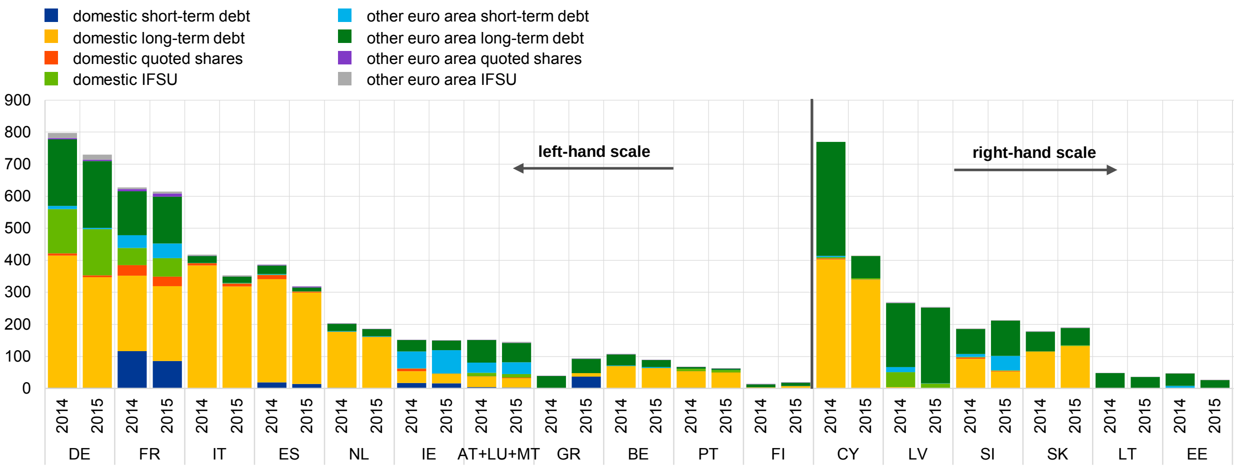
Chart 1.16 to **Chart 1.18** show the exposures of MFIs, ICPFs and OFIs located in euro area countries to different instruments, either issued in the same country or in the rest of the euro area. The focus is on short and long-term debt securities, quoted shares and investment fund shares/units (IFSU).

The countries with the largest exposures of MFIs, in absolute amounts, are Germany, France, Italy, Spain and the Netherlands (see **Chart 1.16**). In these countries, domestic long-term debt tends to be the main instrument held. While in Germany and France domestic long-term debt accounts for 47% and 38% respectively, in Italy and Spain this instrument represents the vast majority of the instruments held, accounting for 90% of the total exposure. However, in Germany and France, long-term debt issued in other euro area countries also tends to be significant (29% and 24% of total exposures, respectively). Germany is also to some extent exposed to investment fund shares (20%) and France is exposed to domestic short-term debt (14%). Compared with 2014, figures in 2015 point to a decrease of more than 10% in the amount of domestic long-term debt for Germany, Italy, Spain and the Netherlands. In the case of France, a reduction by 26% of domestic short-term debt can be noticed.

Chart 1.16

Holdings of instruments by MFIs

(EUR billions; fourth quarter of 2014 and 2015)



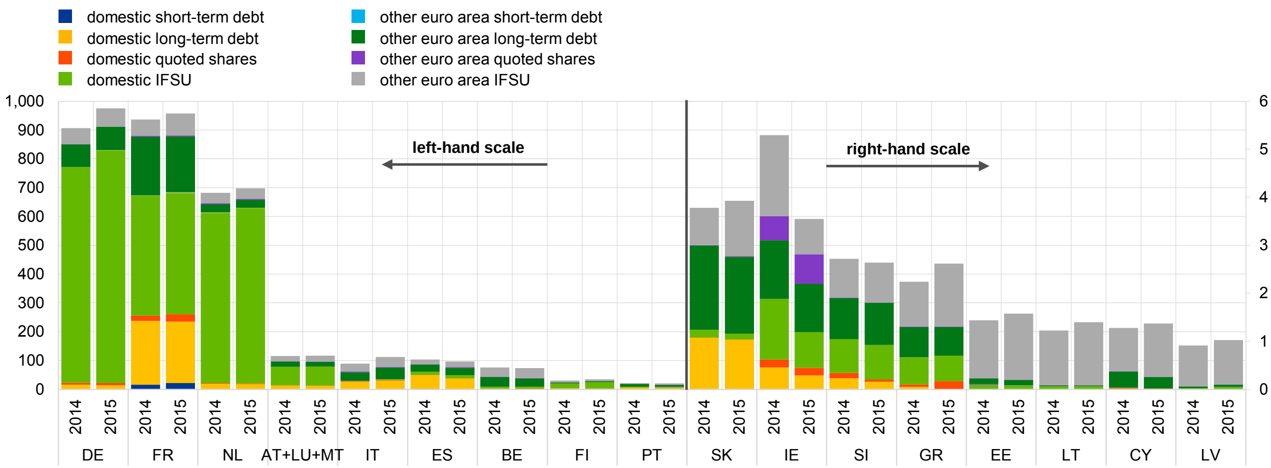
Source: ECB (SHSS) and ECB calculations.
Notes: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data also include intra-group positions.

As mentioned before, the ICPF sector is particularly developed in Germany, France and the Netherlands (see **Chart 1.17**). In these three countries, the ICPF sector is particularly exposed to domestic investment fund shares and in France also to domestic and foreign long-term debt. In comparison with 2014, the two biggest economies of the euro area, Germany and France, experienced an increase of 8% in holdings of domestic investment fund shares and an increase of 37% in holdings of foreign investment fund shares, respectively.

Chart 1.17

Holdings of instruments by ICPFs

(EUR billions; fourth quarter of 2014 and 2015)



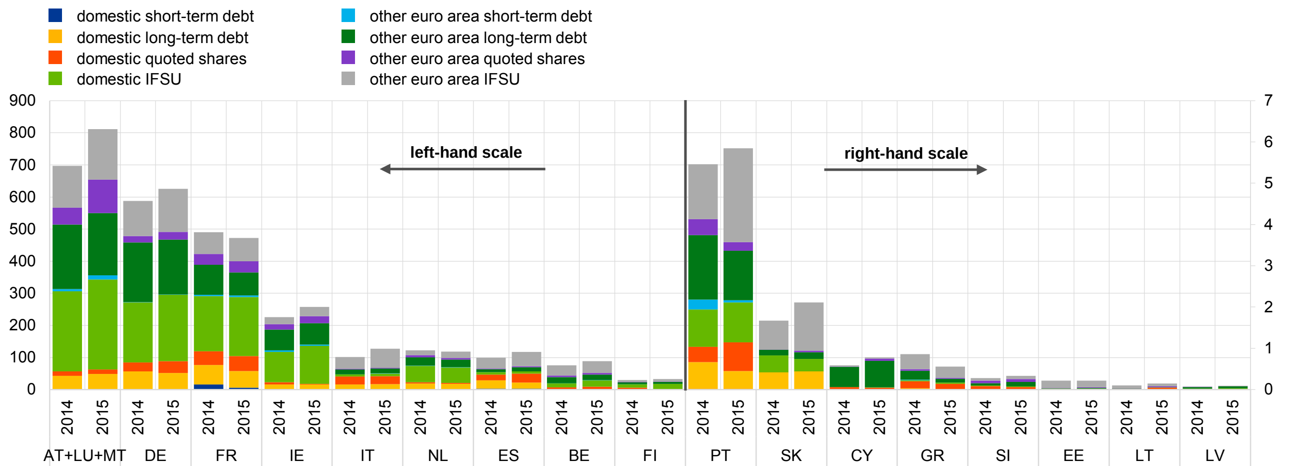
Source: ECB (SHSS) and ECB calculations.
Notes: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data also include intra-group positions.

OFI exposures were already reported to be particularly large in Austria, Malta and Luxembourg combined, as well as in Germany, France and Ireland (see **Chart 1.18**). In these economies, the largest exposures are concentrated mainly in domestic investment fund shares, which represent about one-third of the total exposure. OFIs in these economies are also exposed to long-term debt and investment fund shares issued by other euro area countries. Compared with 2014, a change in the composition of the instruments held by Austria, Luxembourg and Malta combined can be noticed (foreign listed shares held almost doubled, while foreign and domestic investment fund shares increased by 21% and 12%, respectively). In Germany, an increase in holdings of both foreign (23%) and domestic (10%) investment fund shares can mainly be observed.

Chart 1.18

Holdings of instruments by OFIs

(EUR billions; fourth quarter of 2014 and 2015)



Source: ECB (SHSS) and ECB calculations.
Notes: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. The data also include intra-group positions.

2 The euro area banking system

This chapter provides an overview of the structure of bank intermediation in the euro area. Section 2.1 reviews overall banking sector capacity by country, highlighting the main trends in the eight years to the end of 2015 and developments since the publication of the last ECB Report on financial structures.

In 2015 the euro area banking sector continued its rationalisation process, driven by continued pressure to achieve cost containment, deleveraging and restructuring. While a decrease in the total number of credit institutions was recorded in the euro area, the share of foreign branches increased. The ratio of banking sector assets to GDP has been on a decreasing path since 2008, mainly due to financial sector shrinkage. The number of bank units recorded a continuous decline for the period from 2008 to 2015. In 2015 the upward path of market concentration recorded in the past years slightly reversed. M&A activity has followed a declining trend in recent years, both in terms of the number of transactions and in terms of the total value.

Section 2.2 reviews structural changes in the balance sheet, financial performance, capital position and leverage of the euro area banking sector during the period 2008-15, with a focus on developments during the last year. In contrast to the first part of Chapter 2, which mainly discusses unconsolidated banking data, the analysis here is based on consolidated, domestic banking sector data.[17]

In 2015 the euro area banking system as a whole continued to shift from wholesale market to deposit funding and to reduce its reliance on central bank funding. At the same time, capital increases resulted in higher solvency and lower leverage ratios. Altogether, these developments indicate a continuation of the recent trend towards a more traditional banking business model for the euro area. The median level of non-performing loans (NPLs) declined in 2015 reflecting higher economic growth in some countries, as well as progress in restructuring and selling legacy bad loans from the crisis. However, the persistently high or even rising level of NPLs in a number of countries highlights the need to take additional steps to tackle this problem. Overall, banking system profitability increased in 2015 due to a reduction in loan loss provisions in many countries with high levels of impairments and provisions and higher net interest and non-interest income.

[17] The domestic banking sector comprises the consolidated accounts of banks that have their headquarters in a given country or economic area, including their foreign branches and subsidiaries abroad. Foreign branches and subsidiaries in a given country are included in the analysis or commented on in the text where relevant, in particular in relation to markets where there is a substantial foreign presence, or where this is unavoidable owing to limited data availability.

2.1 The market structure of the euro area banking system

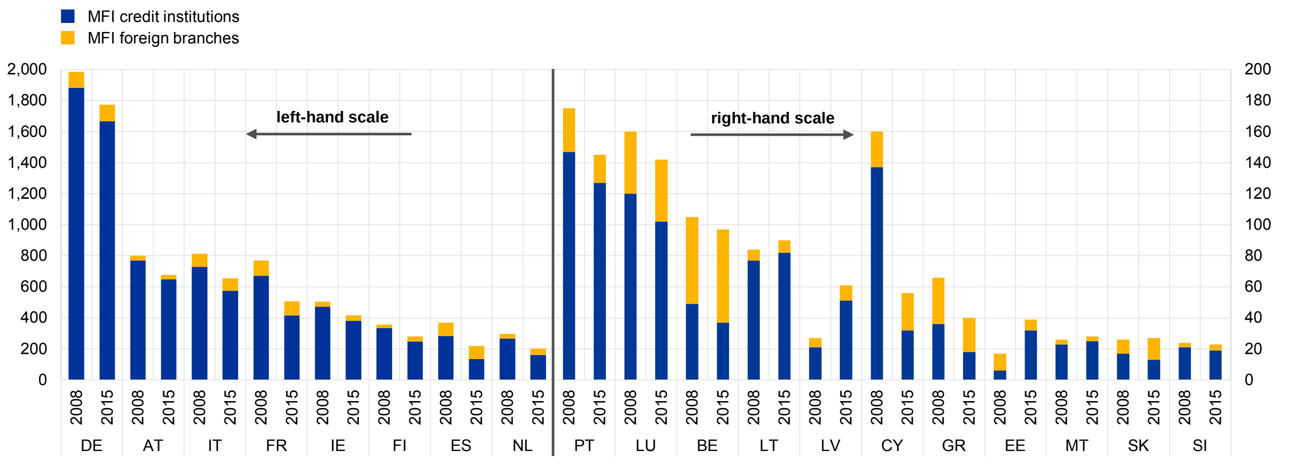
2.1.1 Banking sector capacity

Since the start of the financial crisis in 2008, there has been a rationalisation process of the euro area banking sector which has resulted in a downward adjustment of the overall number of credit institutions. This consolidation is largely due to cost pressure, in particular in a context of enhanced financial integration. The financial crisis put additional pressure on banks to deleverage and consolidate, particularly in those countries that were more severely affected.

On an unconsolidated basis, the number of credit institutions in the euro area declined to 5,475 at the end of 2015, from 5,614 at the end of 2014 and 6,767 at the end of 2008 (see **Chart 2.1**).[18] This amounts to a 19.1% decrease over the period from 2008 to 2015.[19]

Chart 2.1

Number of credit institutions and foreign branches in 2008 and 2015



Source: ECB (MFI statistics).
Note: Figures for Latvia include credit unions starting from 2013.

Looking at recent dynamics in individual countries, most euro area countries experienced a decrease in the number of credit institutions between 2014 and 2015. The exceptions were Estonia, France, Lithuania, Latvia and Malta. In Cyprus, the number of credit institutions remained unchanged. The countries that experienced the strongest absolute declines (of around 30) were Ireland, Germany and Austria. Taking a longer-term perspective, Greece, Cyprus and Spain have recorded the largest relative decreases in the number of credit institutions since 2008, but

[18] The figures reported in **Chart 2.1** include all countries that had adopted the euro by 1 January 2016.

[19] MFI statistics are residence-based and compiled on an individual (as opposed to a consolidated) basis. **Chart 2.1** thus refers to all credit institutions legally incorporated in euro area countries, which includes foreign subsidiaries and branches. Credit institutions account for the bulk of MFIs as defined in Regulation ECB/2013/33 of 24 September 2013 concerning the balance sheet of the monetary financial institutions sector (recast).

declines over that period were also noticeable in Finland, France, Italy, Portugal, Ireland and the Netherlands.

Reflecting both the size and structural features of their countries, Austrian, French, German and Italian credit institutions accounted for around 66% of euro area credit institutions at the end of 2015, compared with 67% in 2008 and 70% in 2014. By comparison, the share of Spanish credit institutions in the euro area is relatively small.

The share of foreign branches in the total number of euro area credit institutions increased from about 10% in 2008 to about 13% in 2015, mainly due to the decline in the number of credit institutions incorporated in the euro area. On a consolidated basis, the total number of credit institutions in the euro area amounted to 2,380 (domestic banks and banking groups) at the end of 2015, down from 2,925 in 2008 and 2,491 at the end of 2014.[20] The number of foreign branches remained broadly stable throughout this period at just above 700.

Total assets of the euro area banking sector, including foreign subsidiaries and branches, stood at €27.7 trillion on a consolidated basis at the end of 2015, a decline of 1.3% compared with 2014 and 17% compared with 2008. The largest reductions in the value of assets since 2014 were observed in Malta (9.2%), followed by Greece, Finland, Portugal and Ireland (all 4-5% reductions). The value of assets increased since 2014 in Slovakia (7.8%), Estonia (5.6%), Latvia (4%) and Spain (2.5%). The largest relative reductions in the value of total assets since 2008 were recorded in Ireland, Cyprus and Estonia (70.3%, 41.7% and 37.3% respectively), whereas in particular Finland but also Slovakia and Malta recorded an increase in the total value of banking assets.[21]

At the end of 2015, France and Germany still had the largest banking sectors in the euro area, with total asset values of about €6.9 trillion in both cases. The banking sectors in Spain and Italy are much smaller (€3.7 trillion and €2.7 trillion respectively). By contrast, the assets of the Estonian and Lithuanian banking sectors amounted to €23.3 billion and €23.4 billion, respectively.

Looking at banking sectors in relation to GDP (see **Chart 2.2**), Luxembourg stands out with assets representing 1,557% of GDP, followed by Malta, Cyprus and the Netherlands (535%, 420% and 374% of GDP respectively). These ratios have been on a decreasing path since 2008 in the vast majority of euro area countries mainly as a result of financial sector shrinkage. This process continued in 2014. In Luxembourg, Malta, Finland, Slovakia and the Baltic countries, the vast majority of banking assets are held by foreign-controlled subsidiaries and branches, whose share of GDP has overall tended to decrease between 2014 and 2015. In Ireland, the presence of foreign-controlled subsidiaries and branches decreased considerably since 2008, due to the massive restructuring of the banking sector.

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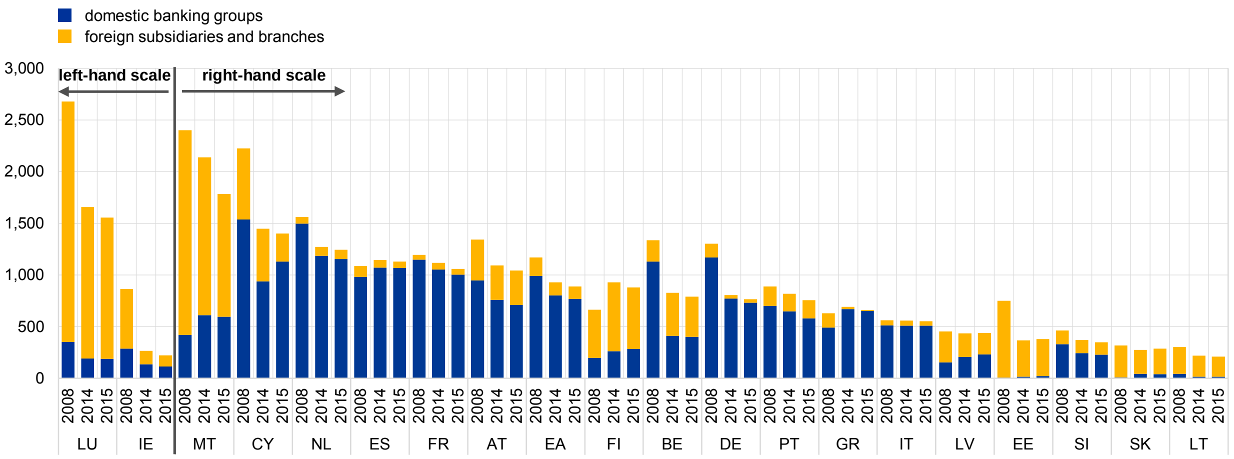
20 This figure refers to the number of credit institutions covered by ECB consolidated banking data.

21 The large reduction in the relative value of assets in Estonia was mainly driven by the restructuring of the ownership of a foreign banking group in 2011.

Chart 2.2

Total assets of domestic banking groups and foreign-controlled subsidiaries and branches in relation to GDP in euro area countries in 2008, 2014 and 2015

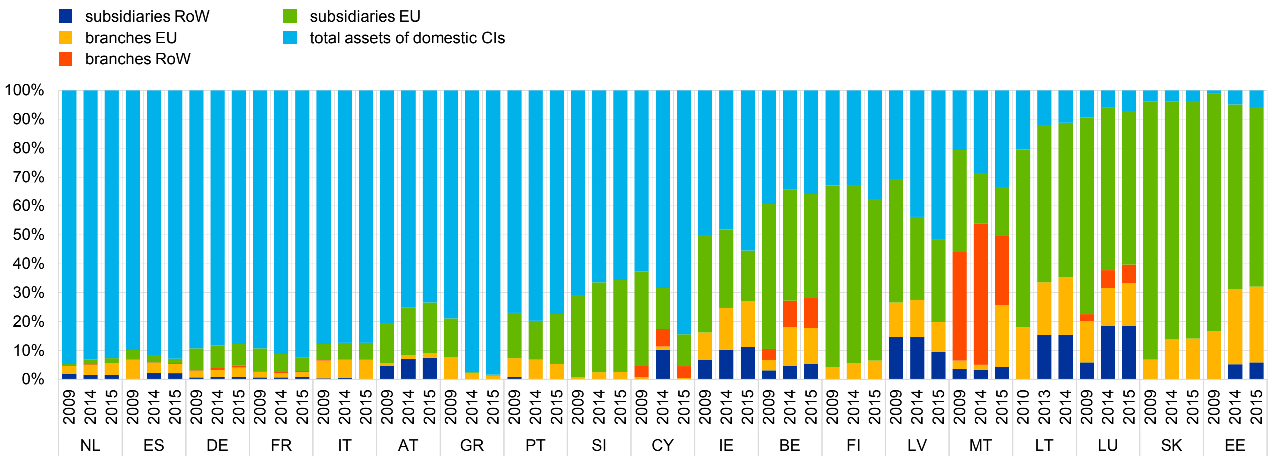


Source: ECB (CBD) and ECB calculations.
Notes: Data for domestic banking groups and foreign subsidiaries and branches are consolidated, and hence include branches and subsidiaries of banks that can be classified as other financial institutions, except insurance companies. For readability, figures for LU are not fully shown in the chart.

Banking sectors across euro area countries differ substantially when it comes to the relative weight of foreign bank branches or subsidiaries (see **Chart 2.3**). Whereas the domestic banking sector plays a dominant role in the largest economies in the euro area as well as in Greece and Cyprus, foreign-owned credit institutions have a significant share of the market in smaller and some intermediate economies. Looking at medium-term dynamics over the period from 2008 to 2015, the relative weight of domestic banking assets increased mainly in countries that were or still are subject to EU/IMF financial assistance programmes, such as Cyprus, Latvia and Greece, as well as in Malta and Estonia.

Chart 2.3

The composition of banking sector assets in euro area countries by type of credit institution in 2009, 2014 and 2015



Sources: ECB (MFI and SSI statistics), Latvijas Banka, Eesti Pank and ECB calculations.
Notes: Data for 2009 are not available for Lithuania. Due to confidentiality reasons, data for Malta combine branches of credit institutions from EU countries and branches and subsidiaries of credit institutions from the rest of the world. Data for Malta are consolidated.

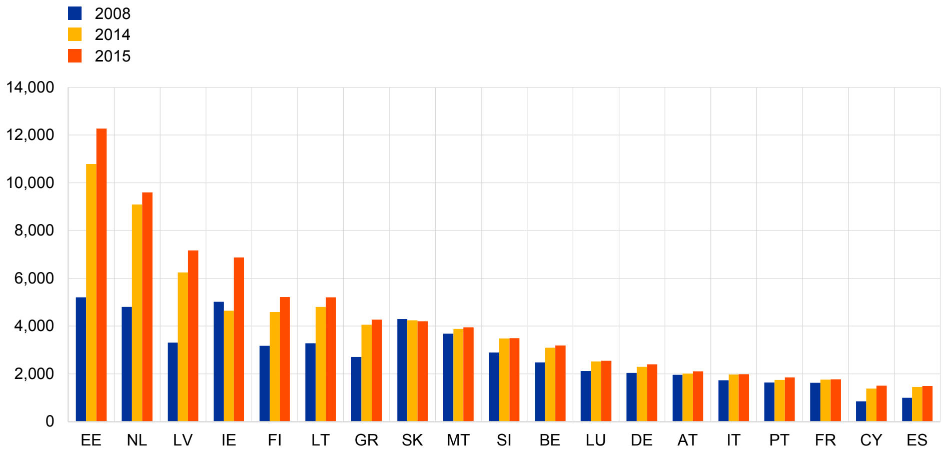
In terms of the composition of foreign banks, subsidiaries tended to prevail over branches in most countries with a relatively large presence of foreign banks. By contrast, the presence of foreign branches was important in larger economies such as the Netherlands, Spain and Italy, but also in Malta.

The rationalisation and resizing in the euro area banking system suggest that the overall efficiency of the system was enhanced over the period from 2008 to 2015. During this period, the number of local bank units (i.e. branches) in the euro area declined by 17.6% or 33,274 branches, 3,884 of which between 2014 and 2015. Almost half of the decrease since 2008 is accounted for by Spain, but other big economies, such as Germany, Italy, the Netherlands and France, also contributed significantly to the decrease. As regards the smaller countries, there was a strong decline in the number of local units in Greece.

The decline in the number of bank units in the euro area was reflected in the increase in two key banking system capacity indicators between 2008 and 2015 in most euro area countries: population per local branch and population per bank employee (see **Chart 2.4** and **Chart 2.5**). Compared with 2014, the increase in population per branch was particularly noticeable in Estonia, Ireland and Latvia. As regards the population per bank employee, the relative increase since 2014 was particularly marked in Lithuania as well as in Ireland and the Netherlands.

Chart 2.4

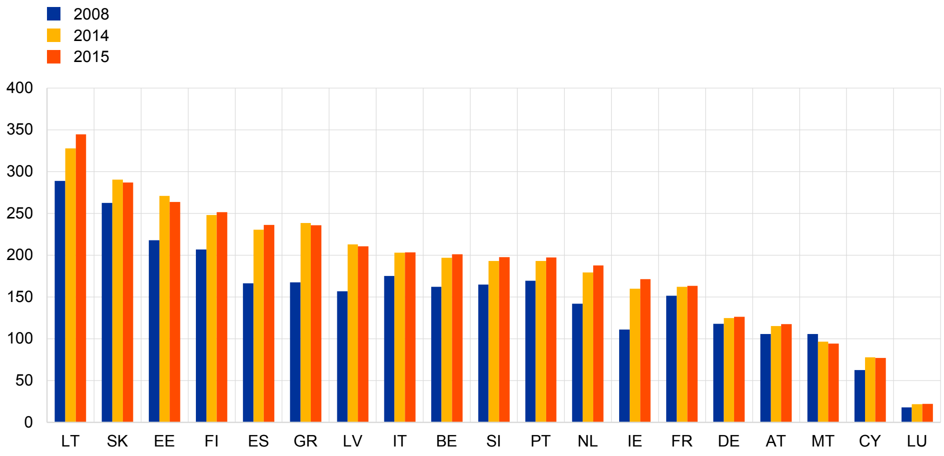
Population per local branch in euro area countries in 2008, 2014 and 2015



Sources: ECB (SSI statistics), Eurostat and ECB calculations.
Note: Branches refer to the local units of credit institutions.

Chart 2.5

Population per bank employee in euro area countries in 2008, 2014 and 2015



Sources: ECB (SSI statistics), Eurostat and ECB calculations.

Table 2.1 displays additional capacity indicators for the euro area and individual countries at the end of 2015, in which structural and cyclical factors play an important role. In particular, the table shows an increasing ratio between population and the number of credit institutions, local branches and bank employees between 2014 and 2015.

Assets per bank employee trended upwards in the euro area between 2008 and 2014, mainly due to the consolidation process mentioned before and the resulting substantial fall in the number of bank employees. However, in 2015 the ratio between assets and bank employees decreased slightly, driven by a stronger fall in assets than in bank employees. This effect had already been visible before in some countries, such as Austria, Cyprus and Ireland.

For the period between 2008 and 2015, these indicators suggest an increasingly efficient use of resources in the euro area banking sectors, which is in line with trends in more conventional efficiency indicators (such as cost-to-income ratios) relating to the financial performance of banks, as discussed in the next section.

Table 2.1

Euro area banking sector capacity indicators in 2015

	Population per credit institution	Population per branch	Population per ATM	Population per bank employee	Assets per bank employee	Population density
Belgium	113,253	3,192	747	201	19,244	367
Germany	45,992	2,397	991	126	11,858	228
Estonia	33,674	12,274	1,712	264	4,668	29
Ireland	11,159	6,877	1,498	171	40,118	66
Greece	271,450	4,270	1,523	236	8,376	82
Spain	212,963	1,493	892	236	14,390	92
France	142,407	1,770	1,124	163	19,993	105
Italy	92,570	1,993	1,212	203	13,132	201
Cyprus	15,089	1,501	1,298	77	8,287	91
Latvia	32,423	7,166	1,710	210	3,397	31
Lithuania	32,277	5,206	2,346	344	2,938	44
Luxembourg	3,977	2,550	1,185	22	38,597	220
Malta	15,404	3,957	1,956	94	10,332	1,368
Netherlands	81,014	9,599	2,275	188	27,781	408
Austria	12,715	2,106	994	118	11,651	103
Portugal	70,463	1,850	648	197	8,562	112
Slovenia	89,711	3,503	1,160	198	3,983	102
Slovakia	200,828	4,200	2,097	287	3,656	111
Finland	19,499	5,213	2,427	251	25,500	16
Euro area	62,155	2,170	1,078	169	15,330	119
Memo items:						
Euro area 2014	60,046	2,111	1,078	166	15,394	128
Euro area 2008	47,898	1,731	1,035	141	13,952	122

Sources: Calculations are based on figures in the statistical annex, the ECB Blue Book and Eurostat data.
Notes: Assets per employee are measured in EUR thousands. Population density is expressed as inhabitants per square kilometre. Population per ATM refers to 2014.

2.1.2 Consolidation and merger and acquisition activity

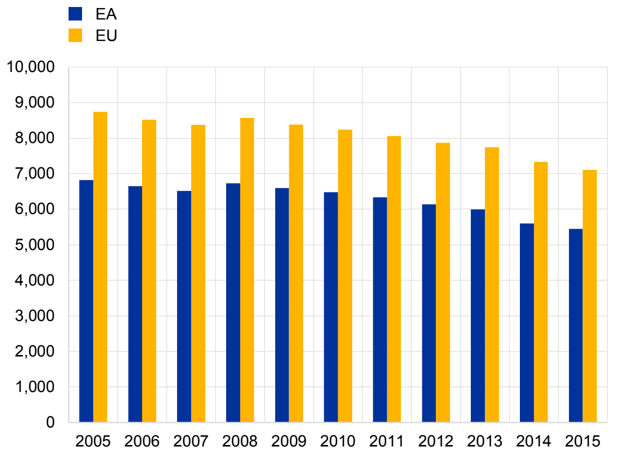
This section includes all EU Member States rather than only euro area countries in order to allow for a distinction between intra- and extra-EU merger and acquisition (M&A) activity.

The consolidation of the euro area banking sector has continued since 2008 in the euro area as well as the EU as a whole (see **Chart 2.6**).

Total M&A activity in the EU banking sector has been on a declining trend since the high values recorded in 2007, especially in terms of the value and the number of transactions. Regarding the former, the decline was observed across the board, with 2015 seeing the lowest value recorded since 2000. More recently, based on the trend observed in the first half of 2016, a substantial decrease in the value of M&A activity could be observed compared with the previous years.

Chart 2.6

Number of credit institutions



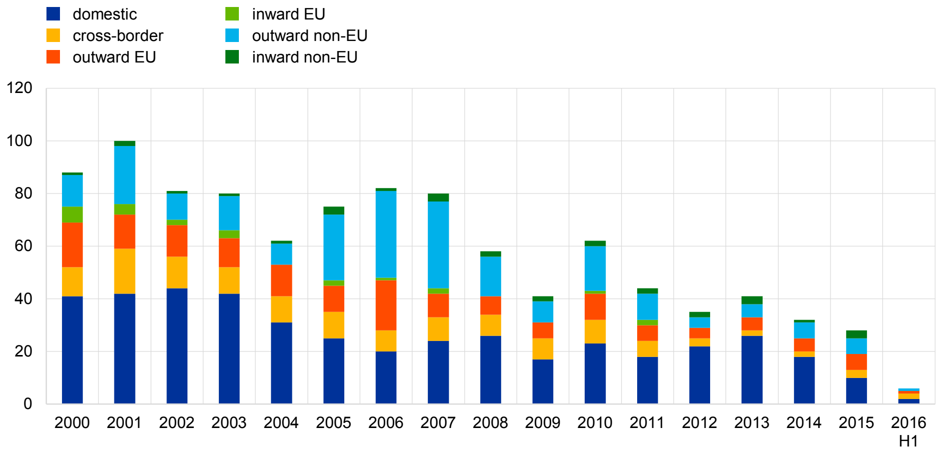
Source: ECB (MFI statistics).

The number of M&A transactions in the euro area banking sector has been falling almost continuously since 2000, amid some volatility in recent years and rebounds in 2010 and 2013.

Following the start of the crisis in 2008, the number of domestic transactions[22] remained broadly unchanged until 2013, reflecting ongoing consolidation in the banking system, including intra-group transactions in Italy and Germany, and the restructuring of the banking sector in EU/IMF programme countries.[23] As a result, the relative share of domestic M&As increased until 2013, but declined somewhat thereafter (see **Chart 2.7**).

Chart 2.7

Bank M&As – number of transactions



Source: Dealogic M&A.
Notes: M&As include both controlling and minority stakes. The value of some of the transactions is not reported. "Cross-border" M&As refer to intra-euro area transactions involving a non-domestic acquirer. "Inward" refers to M&As by non-EU or non-euro area EU banks in the euro area and "outward" indicates M&As carried out by euro area banks outside the euro area.

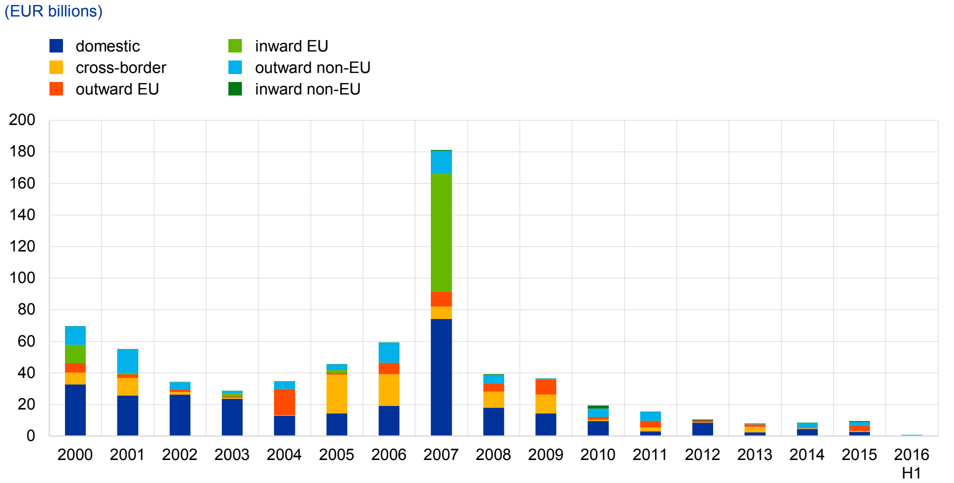
The transaction value of M&A activity has decreased sharply since 2007 across all categories and continued to follow a downward path until 2015. In the first half of 2016, a steep reduction of M&A transactions is noticeable, both in terms of values and numbers. In particular, there were no inward transactions and the value of all M&A transactions for the first half of 2016 represented only 9% of the total amount recorded in 2015 (see **Chart 2.8**).

22 "Domestic transactions" denote transactions that take place within national borders. In this report, transactions within the euro area are referred to as "cross-border M&As".

23 The data assessed in this section do not cover participation by governments or special legal entities in the restructuring or resolution of credit institutions.

Chart 2.8

Bank M&As – value of transactions



Source: Dealogic M&A.

Notes: M&As include both controlling and minority stakes. The value of some of the transactions is not reported. "Cross-border" M&As refer to intra-euro area transactions involving a non-domestic acquirer. "Inward" refers to M&As by non-EU or non-euro area EU banks in the euro area and "outward" indicates M&As carried out by euro area banks outside the euro area.

From 2008 to 2015, the overall value of transactions decreased from about €39 billion to about €9.5 billion. In the first half of 2016, the value of transactions recorded was less than €1 billion.

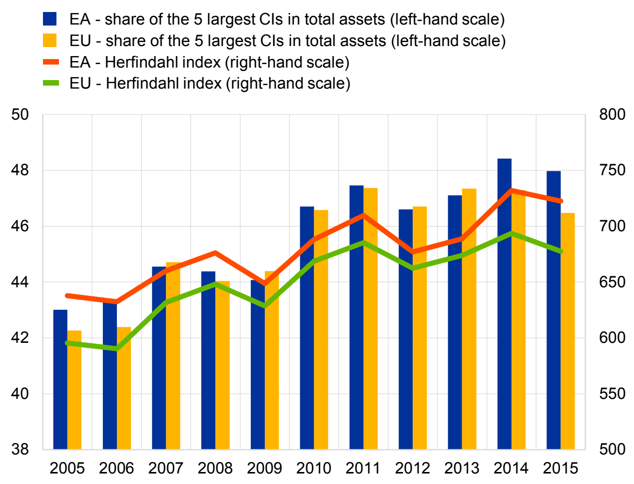
M&A activity in 2015 and in the first half of 2016 appears to be dominated by consolidation of the banking sector within the euro area and by efforts to diversify risks geographically, both in non-euro area EU Member States and outside the EU. Most domestic as well as cross-border transactions recorded in 2015 and in the first half of 2016 were relatively small.

2.1.3 Concentration and competition

Market concentration, as measured by the share of total assets held by the five largest credit institutions or by the Herfindahl index,[24] has been on an increasing path both at the euro area and EU level since the pre-crisis period, although it declined in 2015 (in the euro area the HHI decreased from 732 to 722 between 2014 and 2015, while the share of total assets held by the five largest credit institutions decreased slightly from 48.42% to 47.98%). The long-term increase in market concentration reflects primarily the decline in the number of credit institutions mentioned before (see **Chart 2.9**).

[24] The Herfindahl-Hirschman index (HHI) is defined as the sum of the squares of the market shares of all firms within the industry, where the market shares are expressed as fractions. As a general rule, an HHI below 1,000 signals low concentration, while an index above 1,800 signals high concentration. For values between 1,000 and 1,800, an industry is considered to be moderately concentrated. Note that these indicators are calculated on an unconsolidated basis, meaning that banking subsidiaries and foreign branches are considered to be separate credit institutions.

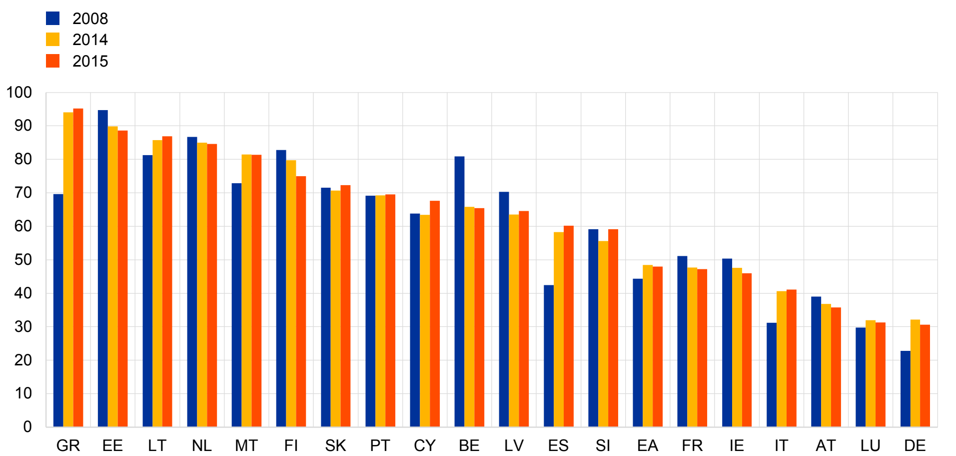
Chart 2.9
Market concentration



Source: ECB (SSI and MFI BSI statistics) and ECB calculations.

At the end of 2015, market concentration (measured by the share of assets held by the five largest banks) ranged from close to 95% in Greece to about 31% in Germany and Luxembourg (see **Chart 2.10**).[25] This reflects a number of structural factors. Banking systems in larger countries, such as France and even more so Germany and Italy, are more fragmented and include strong savings and cooperative banking sectors, which reduces concentration levels. Banking systems in most smaller countries, except Austria and Luxembourg, tend to be less fragmented and more concentrated. In the former, this is due to a banking sector structure similar to that of larger countries, in the latter owing to the presence of a large number of foreign credit institutions.

Chart 2.10
Share of the five largest credit institutions in total assets



Source: ECB (SSI statistics) and ECB calculations.
Note: Figures are reported on an unconsolidated basis.

Developments in the share of assets held by the five largest banks in the period from 2008 to 2015 are diverse. The banking sector tended to become more concentrated in a number of countries, in particular those undergoing deep banking sector restructuring processes, such as Greece and Spain, but also in some smaller economies, such as Malta and Lithuania. Concentration in larger economies, such as Germany and Italy, also increased over this period, though it fell slightly in the former in 2015. Conversely, concentration in Belgium, Finland, Estonia, Latvia, Ireland and France decreased.

25 Market concentration indices, calculated using total bank assets on an individual basis, produce lower results than concentration indices calculated on a consolidated basis.

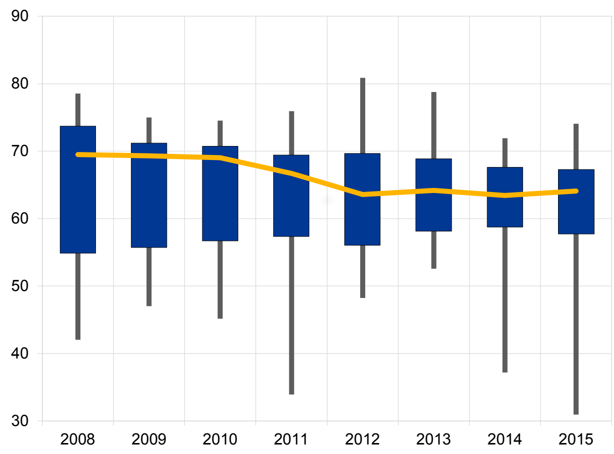
2.2 Structural developments in banking activity

2.2.1 Balance sheet structure

The total assets of the euro area banking sector, including foreign branches and subsidiaries, stood at €27.7 trillion on a consolidated basis at the end of 2015, reflecting a decline of 17% vis-à-vis 2008. Compared with 2014, total assets declined by 1%. The total assets of domestic euro area banks also declined from €24.3 trillion in 2014 to €24.0 trillion in 2015. The decline was broad-based and the main exceptions amongst the larger euro area banking systems were Italian and Spanish banks largely on account of the growth of their assets outside their countries of origin.

Chart 2.11
Share of total loans in total assets of euro area banking sectors

(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.
Note: Total loans include both interbank loans and loans to non-banks.

Total lending by euro area banks grew at a moderate pace of 1% in 2015 and the share of loans in total assets remained broadly stable. The median share of loans in total assets (64%) was broadly stable in 2015 compared with the previous year, with a high degree of heterogeneity among the largest banking systems (see **Chart 2.11**). Banks from Germany and the Netherlands witnessed a modest decline, whereas those of France, Spain and Italy expanded the size of their loan portfolios in absolute terms.[26] Banks from Cyprus and Estonia saw lending increase by more than 20% in annual terms, although in the case of Cyprus this growth has to be seen in the context of a decline in outstanding loans of more than 44% over the previous four years.[27]

The share of debt securities in total banking sector assets experienced a moderate decline for the second year in a row in 2015, but it remains well above the level in 2008 (see **Chart 2.12**). This share is highest in Latvia and Malta (more than 30% of assets). In Slovenia, Slovakia, Italy and Spain, the big increase relative to 2008 largely reflects higher holdings of domestic government bonds after the crisis. In most cases, the decline took place in countries where the share of debt securities was already relatively low.

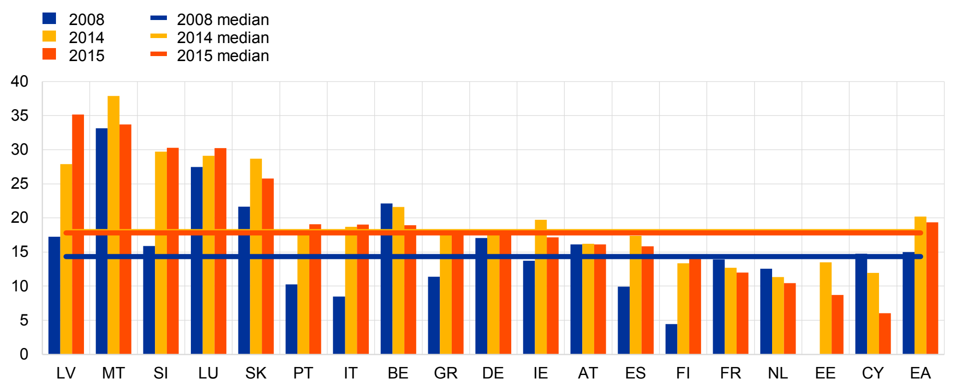
[26] It should be emphasised that these figures reflect credit developments of national banking groups on a consolidated basis and across national borders, so they may not always be aligned with credit developments within the country of origin of a particular national banking system.

[27] In the case of Estonia, it is important to note that lending by domestic banks only accounts for 5% of total lending due to the very high share of foreign subsidiaries and branches. If one includes the latter, lending growth was 5.4% in 2015.

Chart 2.12

Share of debt securities in total assets of euro area banking sectors

(all domestic banks; percentage of total assets)



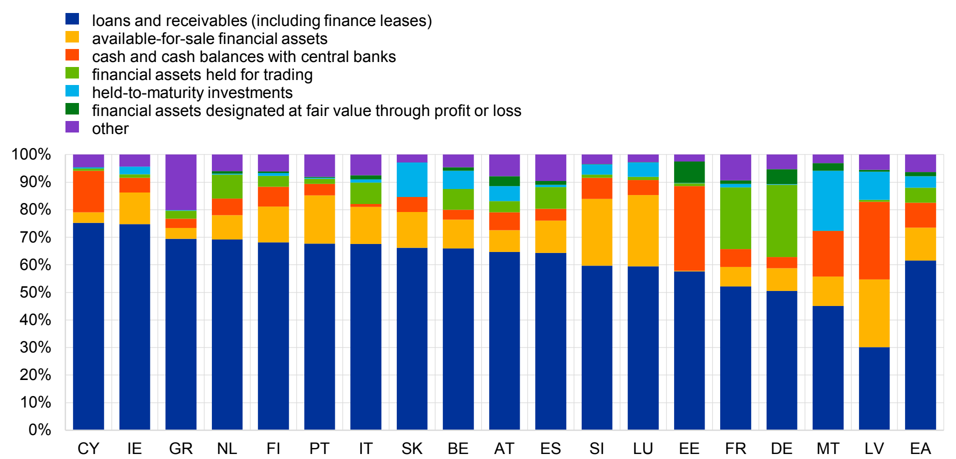
Source: ECB (CBD) and ECB calculations.
Note: EA refers to euro area average.

Loans account for over 50% of banks' balance sheets in most countries (see **Chart 2.13**). However, there are very large cross-country differences in the composition of the non-loan portion. In Germany and France, for example, the non-loan portion is dominated by financial assets held for trading (22-26% of total assets), reflecting the presence of large banks with sizeable investment banking activities. Countries like Cyprus, Estonia, Malta and Latvia have a relatively high portion of cash balances with the central bank. This could partly be related to the need of the banking systems in some of these countries to cover their high reliance on short-term funding with liquid assets, particularly in the absence of a sufficiently large liquid domestic bond market.

Chart 2.13

Asset breakdown for euro area banking sectors

(2015; all domestic banks; percentage of total assets)



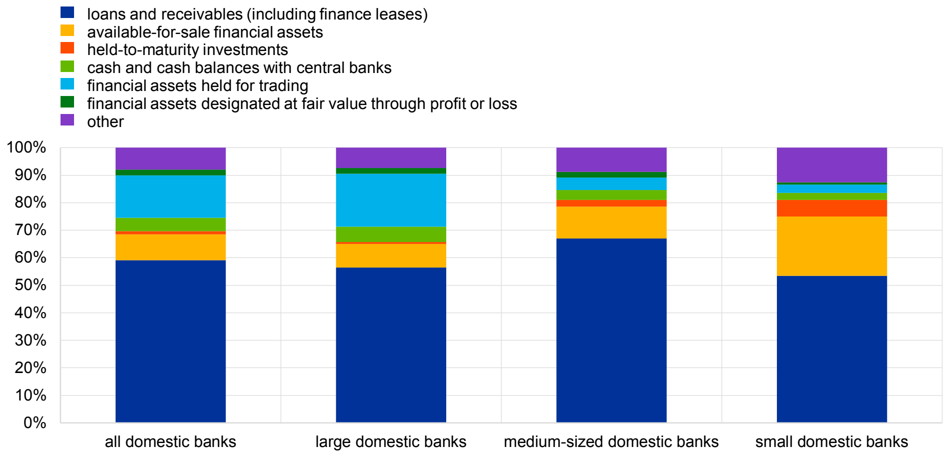
Source: ECB (CBD) and ECB calculations.
Notes: IFRS reporting banks only. Other assets include, for instance, derivatives used for hedging purposes, tangible assets (e.g. property), intangibles and investments. EA refers to euro area average.

The asset structure also differs by bank size. Trading assets feature most prominently in large banks (19% of total assets; see **Chart 2.14**). Medium-sized banks display a higher share of loans in total assets (67%), indicating that banks in this group tend to follow business models which are more geared towards traditional banking activities. The share of available-for-sale and held-to-maturity assets is highest in small banks (22% and 6% respectively). In 2015 the proportion of loans in the balance sheets of small banks decreased in annual terms (from 59% to 53%) mainly in favour of these two other asset types.

Chart 2.14

Asset breakdown for euro area banks in different size groups

(2015; all domestic banks; percentage of total assets)

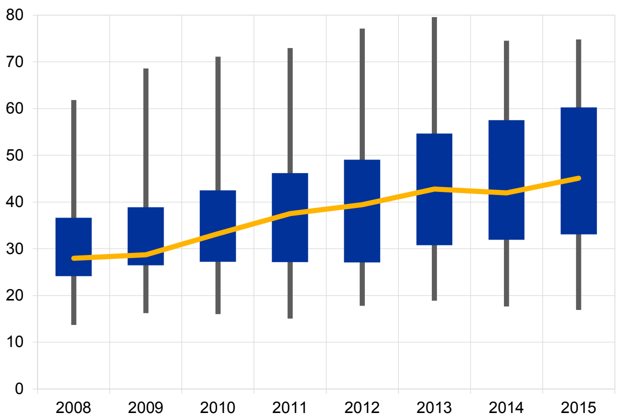


Source: ECB (CBD) and ECB calculations.
Notes: IFRS reporting banks only. Other assets include, for instance, derivatives used for hedging purposes, tangible assets (e.g. property), intangibles and investments.

Chart 2.15

Share of customer deposits in total liabilities of euro area banking sectors

(all banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)

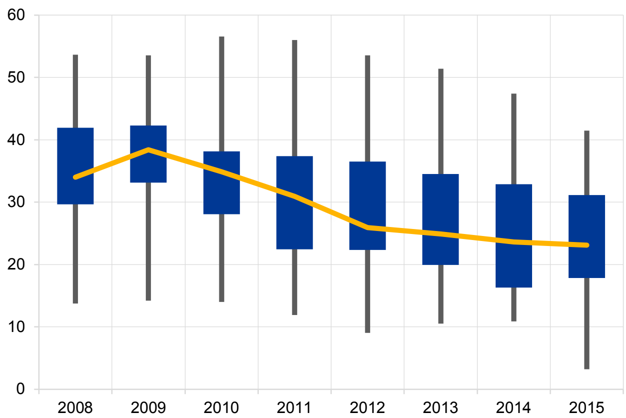


Source: ECB (BSI statistics).

Chart 2.16

Share of market funding in total liabilities of euro area banking sectors

(all banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.
Note: Wholesale funding includes interbank liabilities and debt securities.

As regards banks' liabilities, the median share of deposits in total liabilities increased by 3 percentage points to 45% in 2015 (see **Chart 2.15**). By contrast, the use of wholesale funding continued to drop, falling to 23% in 2015 (see **Chart 2.16**). The cross-country dispersion remained high, with wholesale market funding accounting for more than 41% of bank liabilities in Malta, but less than 10% for Estonian and Greek banks.

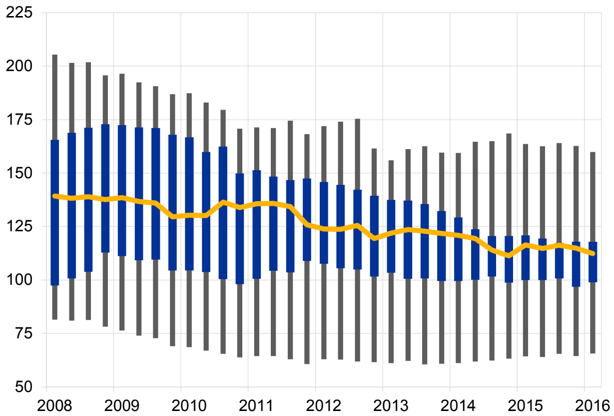
The increased reliance on retail deposit funding, coupled with the moderate growth of credit to the economy, led to a decline in the median euro area loan-to-deposit ratio to around 112% in the first quarter of 2016, down from 116% a year before and 138% in 2008 (see **Chart 2.17**).

Most banks continued to reduce their reliance on central bank funding in 2015, but the reliance of Greek banks increased significantly (see **Chart 2.18**). More generally, the Eurosystem's asset purchase programmes tended to reduce banks' reliance on central bank refinancing operations to obtain liquidity as these purchases increase the current account balances of the banking system with the Eurosystem.

Chart 2.17

Loan-to-deposit ratios of euro area banking sectors

(all banks; percentages; maximum, minimum, interquartile range and median across national banking sectors; quarterly data)

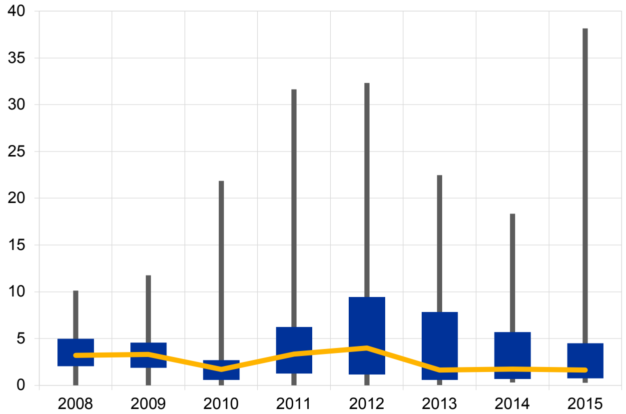


Source: ECB (MFI statistics) and ECB calculations.

Chart 2.18

Share of central bank funding in total liabilities of euro area banking sectors

(all banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



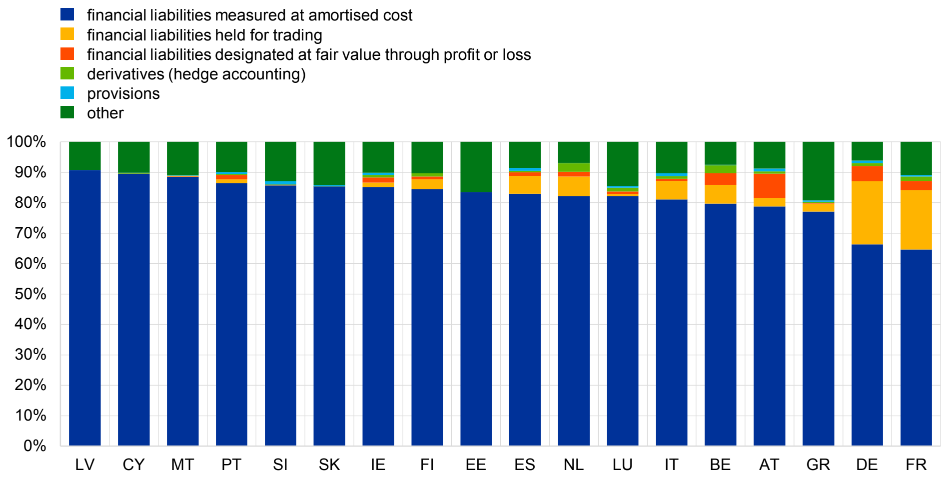
Sources: ECB (BSI statistics), IMF (IFS) and ECB calculations.

Looking at cross-country differences in the structure of banks' liabilities, the cross-country dispersion in the share of financial liabilities measured at amortised cost – a category largely consisting of deposits – has fallen significantly since 2008 (see **Chart 2.19**). In 2015 it ranged from 91% in Latvia to 65% in France. Mirroring differences in business models on the assets side, the share of trading liabilities is largest for banks in Germany and France (around 20%). The reduction in the share of deposit funding for Greek banks (from 85% in 2014 to 77% in 2015) and the parallel increase in the "other" category reflects the shift from deposit to central bank funding for Greek banks in the first half of last year.

Chart 2.19

Liability breakdown for euro area banking sectors

(2015; all domestic banks; percentage of total liabilities)



Source: ECB (CBD) and ECB calculations.
Notes: IFRS reporting banks only. Other liabilities include, for instance, deposits from central banks, financial liabilities associated with transferred financial assets, and tax liabilities.

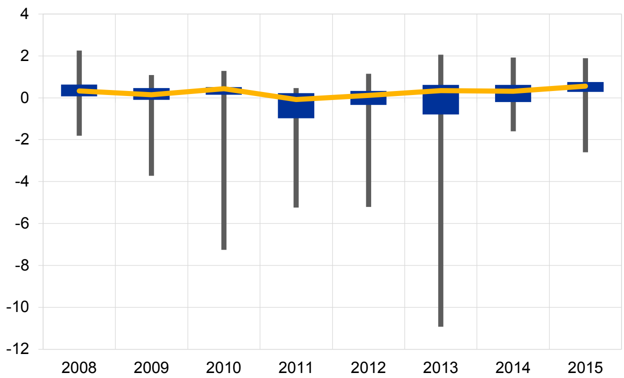
2.2.2 Financial performance and cost structure

The profitability of the euro area banking sector, as measured by the median ROA and ROE, increased in 2015 compared with the previous year (see **Chart 2.20** and **Chart 2.21**). This improvement was, however, characterised by a relatively high degree of cross-country heterogeneity. The biggest increases in profit ratios took place in comparatively small banking systems (Portugal, Slovenia, Austria and Malta). By contrast, the German banking system actually experienced a decline in its ROA and ROE ratios. More generally, in a low growth and low interest rate environment banks face significant challenges to sustain or improve current levels of profitability.

Chart 2.20

Return on assets of euro area banking sectors

(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)

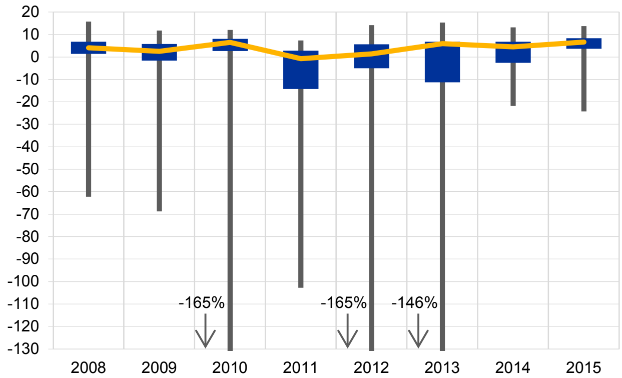


Source: ECB (CBD) and ECB calculations.

Chart 2.21

Return on equity of euro area banking sectors

(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.

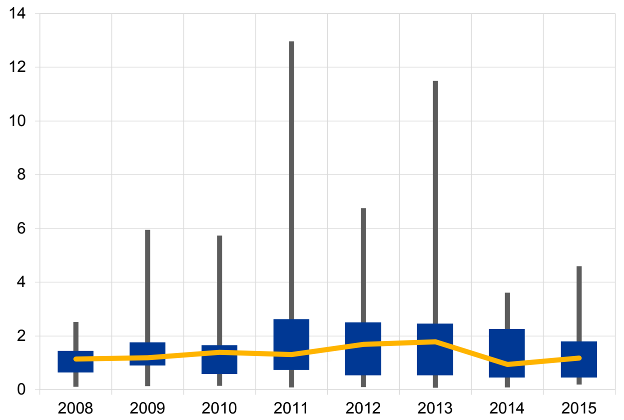
A decrease in provisions and impairments in countries around the middle of the cross-country distribution (see **Chart 2.20**) was the main contributor to the positive profitability development. The overall downward trend in provisions and impairments stands out in particular compared with the very high levels seen in 2013. Increases in net interest income and gains on financial assets also supported overall profitability. Negative contributions to profitability mainly originated from higher restructuring costs and litigation charges.

Although **Chart 2.22** shows that the median level of impairments and provisions as a percentage of total assets increased slightly in 2015, this was mainly due to banking sectors at the top end of the distribution (Greece and Cyprus), which also recorded aggregate losses. By contrast, some of the banking systems that experienced the biggest improvements in profitability such as those of Slovenia, Austria, Italy and Malta (see **Chart 2.23**) saw sharp declines in impairment charges and provisions during 2015.

Chart 2.22

Impairments and provisions of euro area banking sectors

(all domestic banks; percentage of total assets; maximum, minimum, interquartile range and median across national banking sectors)

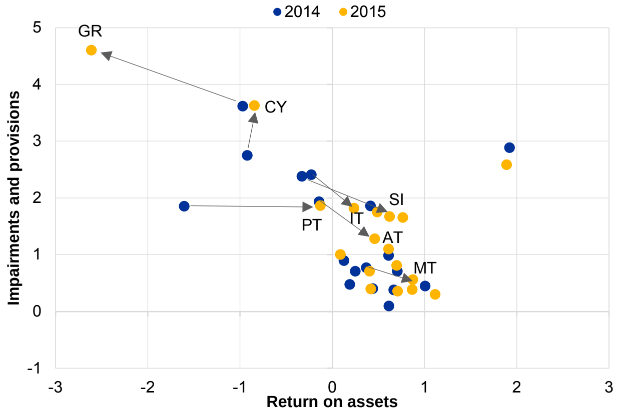


Source: ECB (CBD) and ECB calculations.

Chart 2.23

Net income and impairments and provisions of euro area banking sectors

(all domestic banks; percentage of total assets)



Source: ECB (CBD) and ECB calculations.

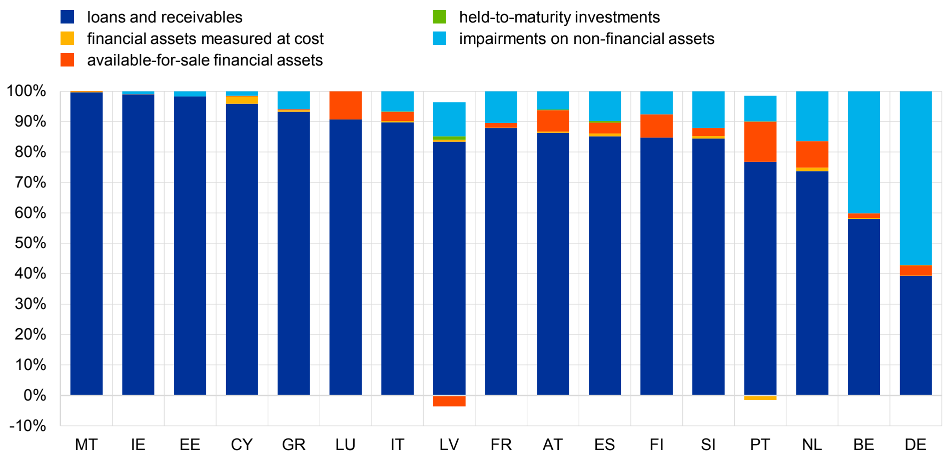
For most banking systems, most of the impairment charges (as reported under IFRS) during 2015 were attributable to losses on loans and receivables (see **Chart 2.24**). In some countries, sizeable impairments were also incurred on available-for-sale financial assets and non-financial assets. In Germany, the Netherlands and Belgium, the very large contributions of non-financial asset impairments were related mainly to goodwill write-downs associated with divestments, restructurings and resolutions.[28] Portuguese banks reported the largest relative share of impairments related to available-for-sale financial assets in 2015, although in absolute terms these specific impairments declined compared with the previous year.

28 The data for this analysis only cover IFRS reporting banks because these are the only standards that provide the specific impairment breakdown shown in Chart 2.24. The conclusions may not be representative of banking systems where national GAAP is the main accounting standard.

Chart 2.24

Impairment charge breakdown for euro area banking sectors

(2015; all domestic banks; percentage of total impairments)

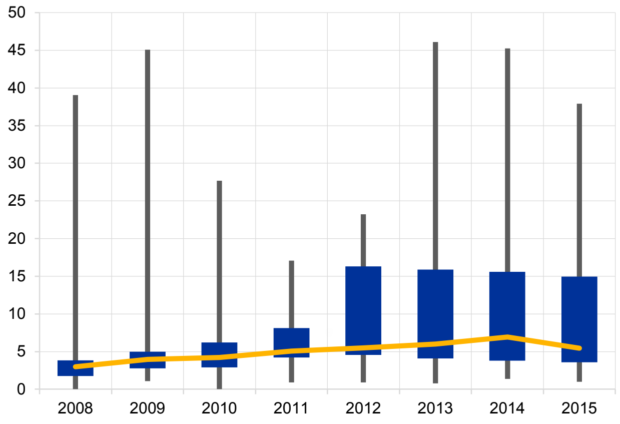


Source: ECB (CBD) and ECB calculations.
Notes: IFRS reporting banks only. Data are not available for Slovakia.

Chart 2.25

Gross total doubtful and non-performing loans of euro area banking sectors

(all domestic banks; percentage of debt instruments and total loans and advances; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.
Notes: Data are available from 2012 onwards for Ireland and from 2014 onwards for Luxembourg and Slovenia. Data are not fully comparable across countries owing to different definitions of non-performing loans across countries and over time.

In many countries, the quality of loans deteriorated significantly since the start of the financial crisis. However, in 2015 the median NPL ratio of banks declined for the first time since 2008 mainly on the back of developments in countries at the higher end of the distribution like Ireland and Slovenia (see **Chart 2.25**). In countries like Greece, Portugal and Italy, NPLs continued to increase up until 2015. The persistence of high NPL ratios in several euro area countries underlines the need to continue the ongoing initiatives by the European Commission, the ESRB and the SSM, as well as by individual countries, to tackle this problem in order to free up bank capital and facilitate the growth of bank credit.

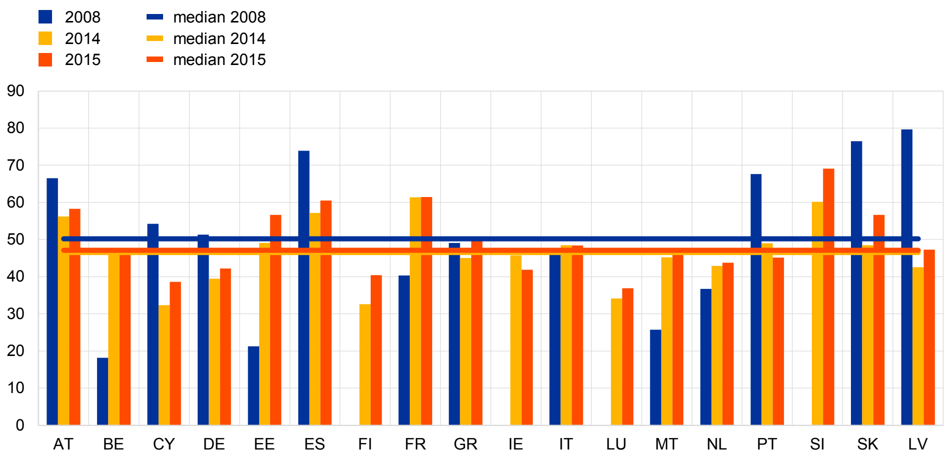
Despite the decline in the median NPL ratio, the median euro area coverage ratio remained broadly unchanged in 2015 at 47% (see **Chart 2.26**). The most significant declines in coverage ratios took place in Ireland and Portugal, although the NPL ratio declined in the former but increased in the latter. While low coverage ratios may partly reflect the higher collateralisation of loans and NPLs, weak debt enforcement frameworks raise the cost of recovery and lengthen the time needed to repossess collateral. Furthermore, low coverage ratios can be an impediment to more effective NPL resolution as they can contribute to wide pricing gaps between potential buyers and sellers of NPLs.[29] In 2015 the biggest increases in coverage ratios (increases of between 5 and 9

[29] For a detailed analysis and cross-country comparison of euro area bank asset quality, see Box 5 in *Financial Stability Review*, ECB, May 2016.

percentage points) took place in Slovenia, Slovakia, Finland, Estonia, Cyprus and Greece.

Chart 2.26
Coverage ratios of euro area banking sectors

(all domestic banks; total loan loss reserves as a percentage of total gross doubtful and non-performing loans)

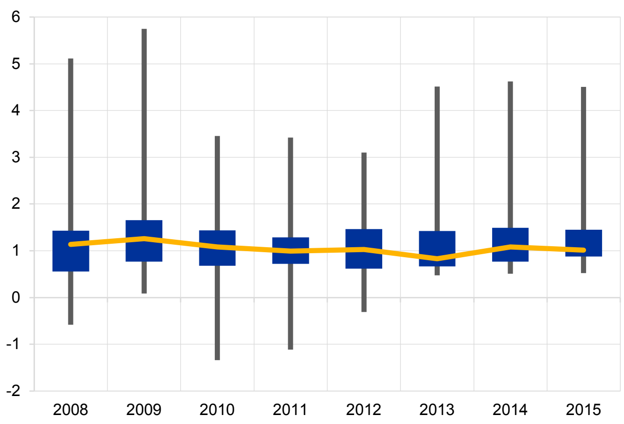


Source: ECB (CBD) and ECB calculations.
Notes: Data for 2008 and 2013 are not available for Portugal, Slovenia, Slovakia and Latvia. Data are not fully comparable across countries owing to different definitions of non-performing loans across countries.

Operating profits declined somewhat across euro area banking sectors in 2015 (see **Chart 2.27**). Ten countries reported small falls in operating profits, whereas Portugal and Malta reported a significant increase.

Chart 2.27
Operating profits of euro area banking sectors

(all domestic banks; percentage of total assets; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.

Despite the low interest rate environment, operating income increased in 2015, supported by lower funding costs and higher net interest income. Income from fees and commissions made a particularly strong positive contribution in Belgium, France, Slovakia and Italy. Gains on financial assets made a strong positive contribution in France, Portugal, Germany, Malta and Latvia (see **Chart 2.28**).[30]

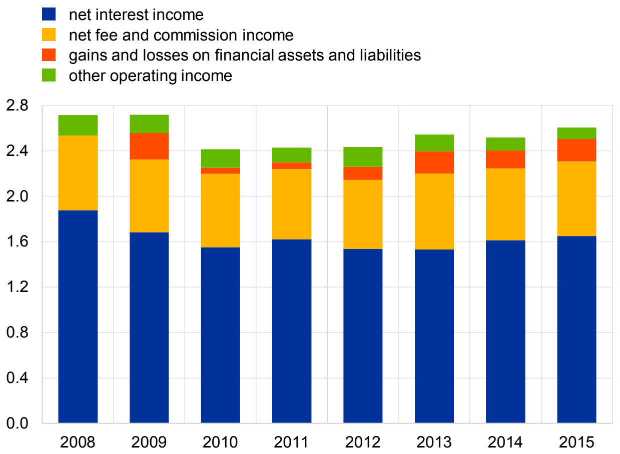
The structure of operating income differs considerably across countries (see **Chart 2.29**). These cross-country differences can be explained by, among other things, the relative importance of non-bank financial intermediation and the business models of the domestic banks, including their cross-border outreach.

[30] For an analysis on the interest spread and its drivers, see e.g. *Financial Stability Review*, ECB, May 2015.

Chart 2.28

Operating income structure of the euro area banking sector

(all domestic banks; percentage of total assets)

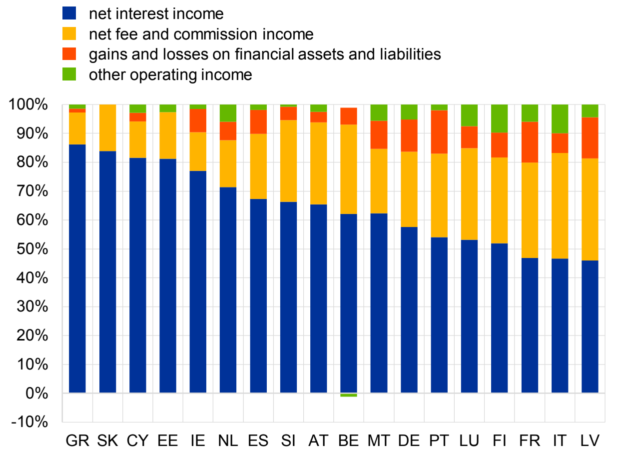


Source: ECB (CBD) and ECB calculations.

Chart 2.29

Operating income structure of euro area banking sectors

(2015; all domestic banks; percentage of total operating income)

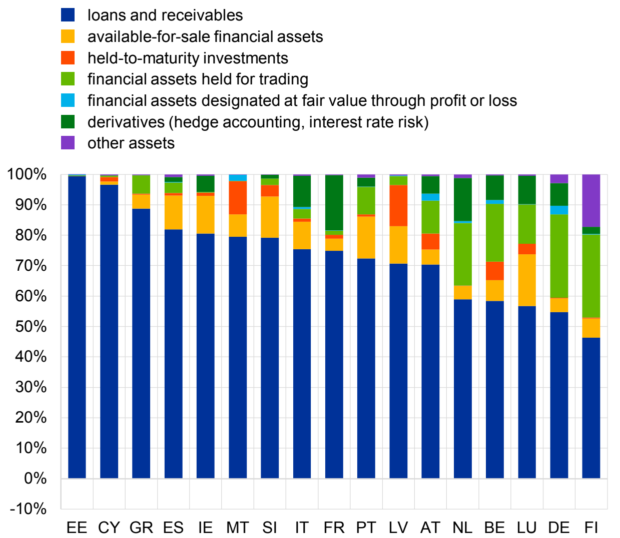


Source: ECB (CBD) and ECB calculations.

Chart 2.30

Interest income structure of euro area banking sectors

(2015; all domestic banks; percentage of total interest income)



Source: ECB (CBD) and ECB calculations.
Note: Data are not available for Slovakia.

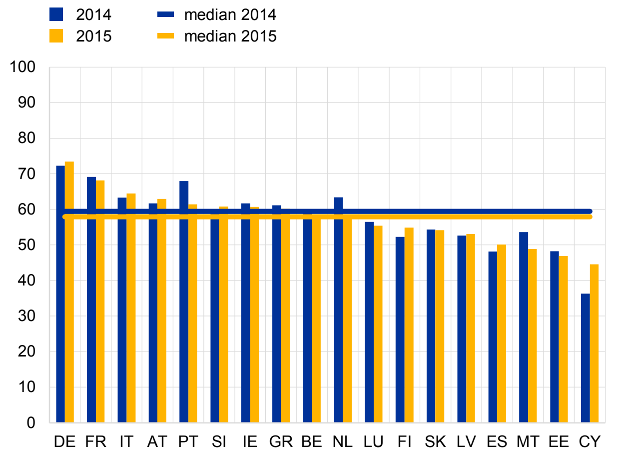
Interest income from loans and receivables accounted for more than half of total interest income in all countries except Finland in 2015 (see **Chart 2.30**). The second main source of interest income typically came from financial assets reported as held for trading and, to a lesser extent, available-for-sale financial assets. France, the Netherlands and Italy also generate a high portion of interest income from derivatives.

The median euro area bank cost-to-income ratio – a widely used measure of cost efficiency – fell from 67% in 2008, to 60% in 2014 and 58% in 2015 (see **Chart 2.31**). This ratio is particularly high in Germany, France and Italy. The biggest efficiency improvements took place in Portugal, the Netherlands and Malta. Overall, in 2015 operating costs continued to decline relative to total assets mainly owing to a reduction in staff costs (see **Chart 2.32**). Cost-cutting was more pronounced in large banks, where the ratio of staff costs to total operating income fell from 35% in 2014 to 34% in 2015. By contrast, the ratio of staff expenses to total operating income increased somewhat amongst medium-sized and small banks and remains by far the lowest for small banks (3.3%).

Chart 2.31

Cost-to-income ratio of euro area banking sectors

(all domestic banks; percentages)

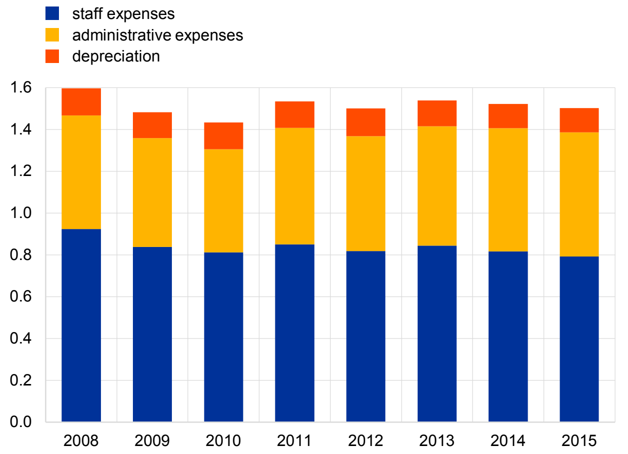


Source: ECB (CBD) and ECB calculations.

Chart 2.32

Composition of operating expenses of the euro area banking sector

(all domestic banks; percentage of total assets)



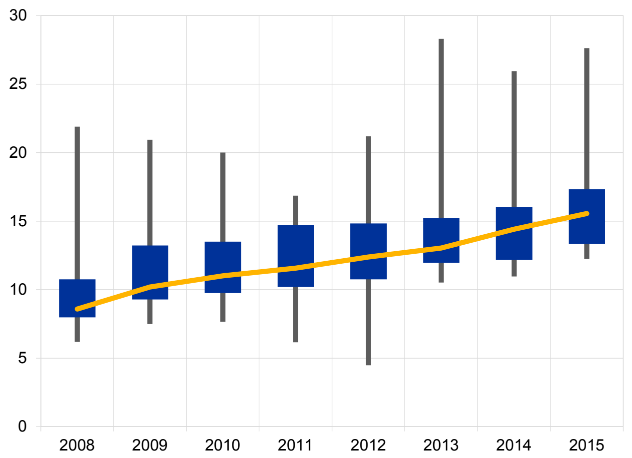
Source: ECB (CBD) and ECB calculations.

2.2.3 Capital and leverage

Chart 2.33

Dispersion of Tier 1 ratios across national banking sectors in the euro area

(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.

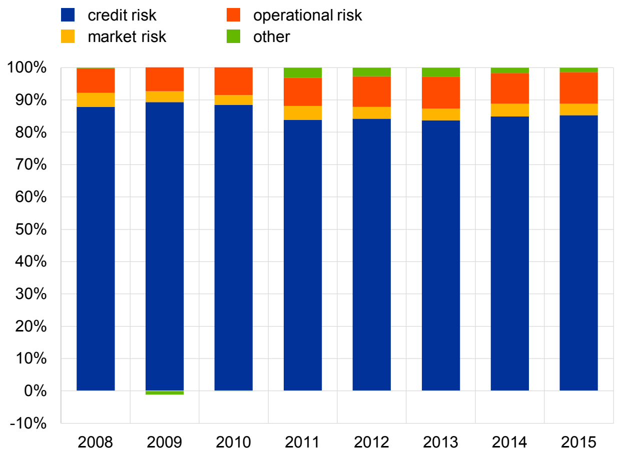
The regulatory capital ratios of euro area banks continued to improve in 2015, with the median Tier 1 ratio increasing to 15.6% from 14.4% in 2014 (see **Chart 2.33**). Likewise, in 2015 the median phased-in common equity Tier 1 (CET1) ratio, for which only two years of data are available, increased to 14.6% from 14.0% in 2014. The improved capital ratio resulted from capital increases, as the median risk-weighted assets (RWAs) of banks increased by 1.2% over the year. The biggest increases in Tier 1 and CET1 ratios took place mostly in relatively smaller banking systems such as those of Finland, Malta, Luxembourg, Greece, Cyprus and Portugal. In the last three countries, they were also linked to either recapitalisations or resolution and restructuring processes of specific financial institutions.

Amongst the factors that contributed to greater capital-raising efforts, the phasing-in of systemic buffers led to an average 20 basis point increase in overall capital requirements.[31] In addition, in 2015 the Supervisory Review and Evaluation Process (SREP) led to an increase in the average Pillar 2 requirements for significant institutions by 30 basis points from 2015 to 2016.

[31] For more details, see the analysis in *Financial Stability Review*, ECB, May 2016.

Chart 2.34
Breakdown of risk-weighted assets of euro area banks

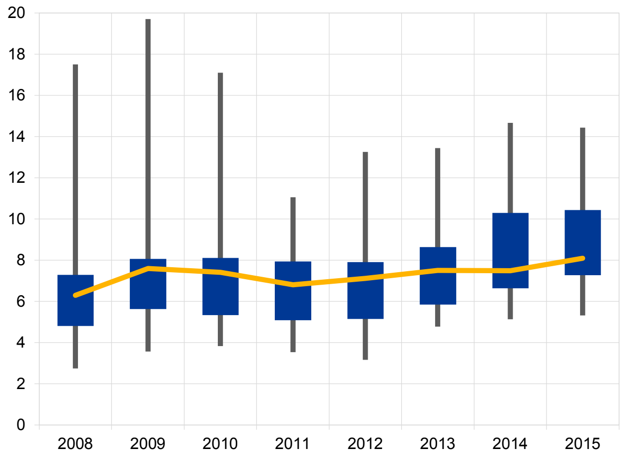
(all domestic banks; percentage of total risk-weighted assets)



Source: ECB (CBD) and ECB calculations.

Chart 2.35
Equity-to-total assets ratios of euro area banking sectors

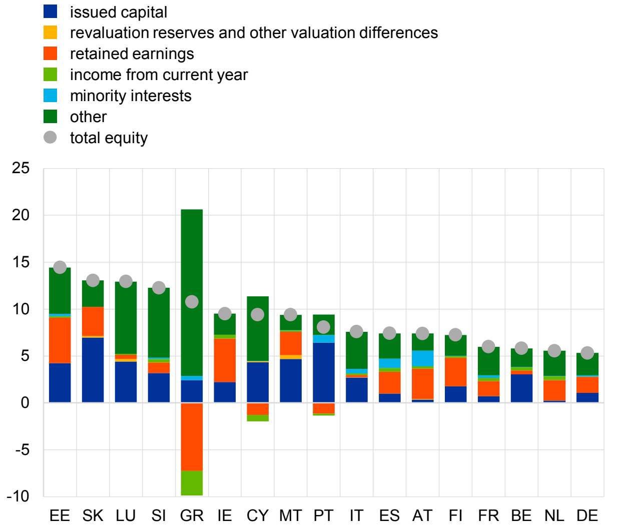
(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Source: ECB (CBD) and ECB calculations.

Chart 2.36
Main components of total equity of euro area banks by country

(2015; all domestic banks; percentage of total assets)



Source: ECB (CBD) and ECB calculations.
Notes: The category "other" includes, among other things, share premia, equity instruments issued other than capital, and accumulated other comprehensive income. Latvia has been omitted due to a lack of data for several variables.

A breakdown of banks' risk exposures by source shows that credit risk, followed at a far distance by operational risk, accounts for the bulk of RWAs in all euro area banking systems (see **Chart 2.34**). These two types of risk further increased their weight in 2015.

Since 2011 the banking systems of the euro area have seen a steady improvement in their leverage ratios (see **Chart 2.35**). The median equity-to-assets ratio for euro area domestic banks increased to 8.1% in 2015, from 7.5% in the previous year. This was the result of both a reduction in total assets and an increase in total equity. Almost all euro area banking systems except those of Cyprus and Estonia saw an improvement in leverage ratios. The dispersion across countries narrowed, but still remains significant.

A decomposition of total equity at country level shows significant cross-country heterogeneity (see **Chart 2.36**). In addition to external capital-raising initiatives, the improvement in equity resulted mostly from improved profitability in 2015. However, in some countries, like Greece, Cyprus and Portugal, banking sector losses offset some of the improvements in banks' equity base.

3 Insurance corporations and pension funds

This chapter discusses recent structural developments in the euro area insurance and pension fund sectors, using publicly available data from the balance sheets of insurance corporations and pension funds (ICPFs) and data from the European Insurance and Occupational Pensions Authority (EIOPA).[32] *The chapter discusses the general market structure, developments in key sector-wide balance sheet items as well as changes in profitability and solvency.*

In 2015 the financial assets of euro area ICPFs continued to grow and the sector remained strongly concentrated in a relatively small number of countries. Despite increases in the overall size of the insurance sector, the number of firms continued to shrink. In the current low-yield environment, ICPFs have partially reversed the long-term trend of de-risking their portfolios and life insurers have recently increased sales of unit-linked products, which make them less vulnerable to a prolonged low-yield period. Still, non-unit-linked and defined-contribution pension products constitute the bulk of the policies on the balance sheets of life insurers and pension funds. The profitability of the insurance sector, and in particular the life insurance sector, has been constrained in recent years by the low-yield environment and weak macroeconomic conditions. The solvency positions of the life and non-life insurance sectors were, however, well above the solvency requirements under the Solvency I regime, which was in place until end-2015. Thereafter, the Solvency II regime, which is a harmonised, more fair value-based and more risk-sensitive supervisory regime for EU insurance companies, came into force.[33]

3.1 Market structure

The financial assets of euro area ICPFs have grown steadily in recent years. According to the ECB's ICPF statistics, total financial assets of the sector stood at €9.1 trillion at the end of 2015, compared with €8.9 trillion at the end of 2014 and €6.0 trillion at the end of 2008 (see **Chart 3.1**).[34]

32 In general, publicly available data are more limited for the insurance sector than for the banking sector. The reporting under the Solvency II regime, which started this year, is expected to improve the situation markedly.

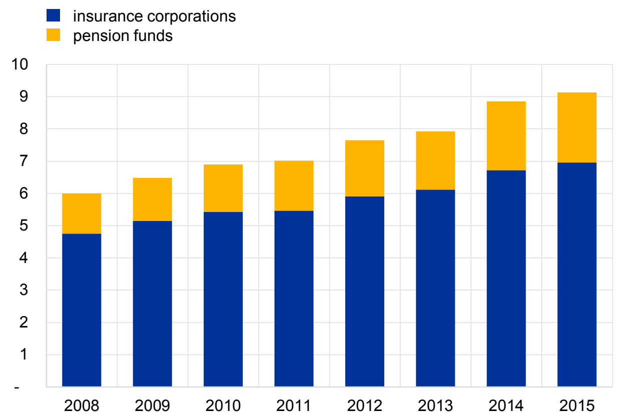
33 The first annual financial statements under the Solvency II regime will be published in early 2017 (concerning the 2016 financial year). However, a number of insurers have already published Solvency II figures on a voluntary basis. According to market reports, provisional data (still subject to potential adjustments by the companies) show that the solvency position of insurers has been (on average) above prudential requirements.

34 The figures based on ICPF statistics should be interpreted with caution as the underlying data are collected taking a short-term approach and are not fully harmonised across euro area countries. In particular, since ICPF statistics do not contain data on transactions, these developments may to some extent also reflect other factors, such as valuation effects arising from changes in prices or exchange rates, reclassifications, other changes in the volume of assets and/or improvements in data quality (e.g. better coverage) rather than actual flows of financing (sales and purchases of items).

Chart 3.1

Total financial assets of euro area ICPFs

(2008-2015; EUR trillions)



Source: ECB (ICPF balance sheet data).

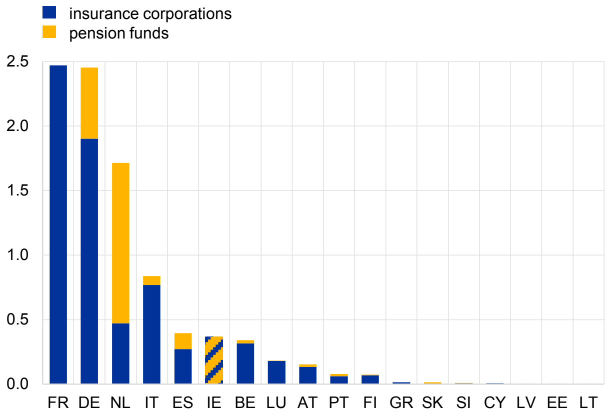
Insurance corporations accounted for more than 76% of euro area ICPF financial assets in 2015. However, the share of pension funds in the ICPF sector has increased from around 21% at the end of 2008 to around 24% at the end of 2015.[35]

The insurance sector remains strongly concentrated in a small number of countries (see **Chart 3.2**). Specifically, over 70% of insurance assets at the end of 2015 were concentrated in three countries, namely France (36%), Germany (27%) and Italy (11%). In relative terms (i.e. relative to GDP), the largest insurance sector is found in Luxembourg, followed by France (see **Chart 3.3**). The large size of the sector in Luxembourg is mainly attributable to the presence of a significant number of captive reinsurers, which make this country one of the main European hubs for this activity.[36]

Chart 3.2

Financial assets of ICPFs in euro area countries

(2015; EUR trillions)

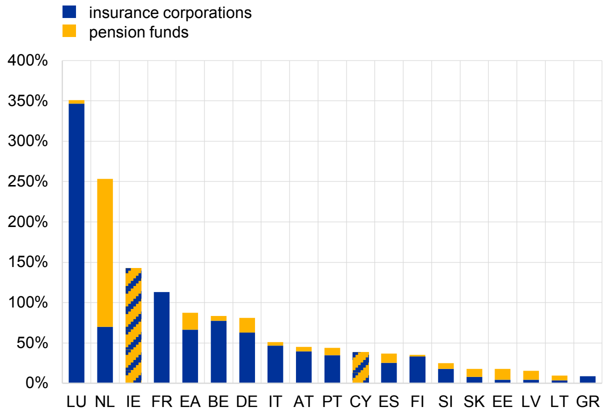


Source: ECB (ICPF balance sheet data).
Note: Data for Cyprus and Ireland are available only for the aggregate assets of insurance corporations and pension funds.

Chart 3.3

ICPF financial assets in relation to GDP

(2015; percentages)



Source: ECB (ICPF balance sheet data).
Note: Data for Cyprus and Ireland are available only for the aggregate assets of insurance corporations and pension funds.

The importance of occupational pension funds displays significant heterogeneity across countries in both absolute and relative terms. The occupational pension fund sector is large in the Netherlands, whereas in other countries – for which data are available – it is relatively limited (below 20% of GDP). This reflects, to a large extent, institutional differences among the pension systems across euro area countries.

[35] It is important to highlight that ICPF statistics do not include any public pension funds, although pension systems in most euro area countries rely on public rather than occupational pension schemes.

[36] A captive insurer is a company that is established by its parents to cover specific risks that the parents are exposed to. In the EU, insurance captives are supervised in the same way as any other insurance companies and considered from a consolidated perspective in terms of group supervision.

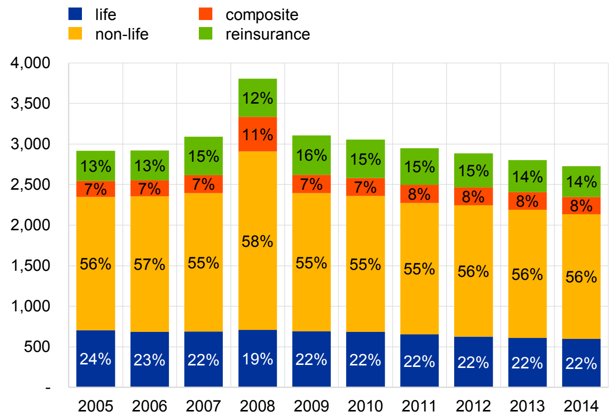
Chart 3.4 and **Chart 3.5** present publicly available data from EIOPA, which shed light on the insurance market structure in the euro area.[37] Since the peak of the financial crisis in 2008, the number of insurance firms has steadily declined and stood at around 2,700 in 2014, compared with around 3,800 in 2008 (see **Chart 3.4**). This trend reflects a surge in consolidation, which has gone hand in hand with the search for new investment and business opportunities in the current low-yield environment. Overall, the market structure has, however, remained broadly unchanged since 2011. Most insurance firms are active in the non-life sector (56%), followed by the life and reinsurance sectors (22% and 14% respectively). Composite insurers, i.e. companies that offer both life and non-life insurance, represent only 8% of insurance firms in the euro area.

Overall, the life sector is somewhat more concentrated than the non-life sector, whereas the reinsurance sector stands out for its high concentration ratio (see **Chart 3.5**). This reflects the fact that the global reinsurance market is dominated by a small number of large, mostly European, players. The data suggest that the composite sector is also highly concentrated; however, these figures are based only on a very small number of euro area countries, in which composite insurers are present and for which data are available.[38]

Chart 3.4

Number of insurance firms in the euro area by type

(2005-2014; number of firms and percentages of the number of firms)

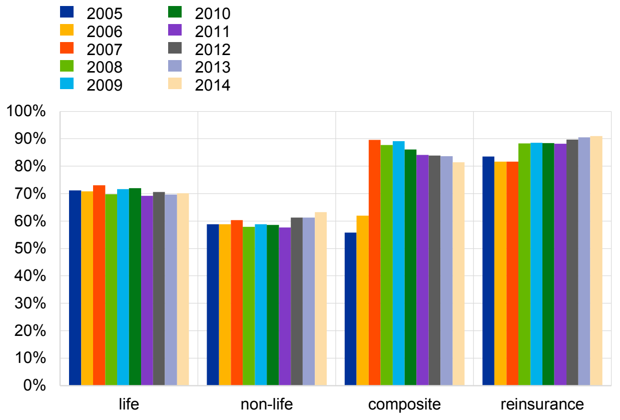


Source: EIOPA EU/EEA insurance and reinsurance statistics.
Notes: The number of firms includes firms with head offices in the euro area and foreign branches of firms from other EU/EEA and third countries. Data for Cyprus in 2014 are proxied by data for 2013.

Chart 3.5

Concentration ratio in euro area insurance markets

(2014; percentages of gross written premiums)



Source: EIOPA EU/EEA insurance and reinsurance statistics.
Notes: Simple average for euro area countries, for which data are available and relevant. Based on gross written premiums of the five largest companies as a percentage of total gross written premiums in the domestic sector of each country. Data for Cyprus and the composite sector in France in 2014 were supplemented by data referring to 2013.

The recent surge in consolidation activity is also reflected in the concentration ratios. In the non-life sector, the concentration ratio increased from 58% in 2011 to 63% in 2014, while growth was particularly pronounced during 2014, when the ratio rose by 2 percentage points. The concentration ratio in the reinsurance sector increased steadily over the same period, from 88% to 91%, with an increase of 0.5 percentage

37 The reporting population of the ECB's ICPF statistics and that of the data from EIOPA differ.

38 Specifically, the number of euro area countries varies between two and four over the period observed.

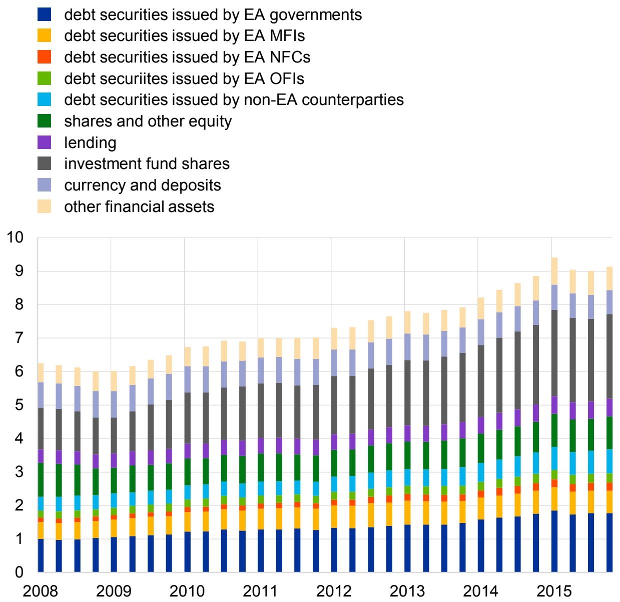
point in 2014. In addition, the concentration ratio of the life sector remained broadly unchanged between 2011 and 2014, staying at levels close to 70%. Finally, although the data suggest that the concentration of the composite sector decreased during these years, the scarcity of the data for this sector means that it is not possible to draw firm conclusions.

3.2 Asset and liability structure

Euro area ICPFs are large investors in government bonds and mutual fund shares. The share of financial assets invested in these asset classes has grown steadily since 2008 (from 16% and 20% to 19% and 28% at the end of 2015, respectively) (see **Chart 3.6**). By contrast, the share of currency and deposits and that of investments in shares and other equity decreased to around 8% and 11% respectively at the end of 2015.[39] Holdings of corporate bonds, which represent another important part of the portfolio (around 23%), have remained broadly unchanged since 2008.

Chart 3.6
Breakdown of financial assets – euro area ICPFs

(2008-2015; EUR trillions)



Source: ECB (ICPF balance sheet data).
Note: Investment fund shares exclude MMF shares.

The long-term trend of reducing holdings of shares and other equity since 2008 is partly attributable to a change in investment strategies with the aim of de-risking investment exposures. Facing the introduction of Solvency II rules in 2016, insurers were likely to have undertaken capital optimisation, thereby reallocating investments from equities to very long-term fixed income assets, typically government bonds. Such a portfolio shift helps to reduce asset-liability mismatches, which require more capital under Solvency II rules.

However, the trend of portfolio de-risking has come to a halt in recent years as a result of the significant challenges faced by the ICPF sector in the protracted low-yield environment. Although this trend is not homogeneous across all euro area countries, firms tend to be reallocating their portfolios in order to boost yields on investments. In particular, investments in equity increased in most euro area countries between 2014 and 2015 (see **Chart 3.7**). In addition, insurers have recently been tending to increase exposures to higher-yielding but lower-quality fixed income securities.[40] The recent re-risking of investment portfolios is also

[39] These developments may to some extent also reflect other factors, such as valuation effects, reclassifications and/or improvements in data quality rather than actual flows of financing. See footnote 34 for more details.

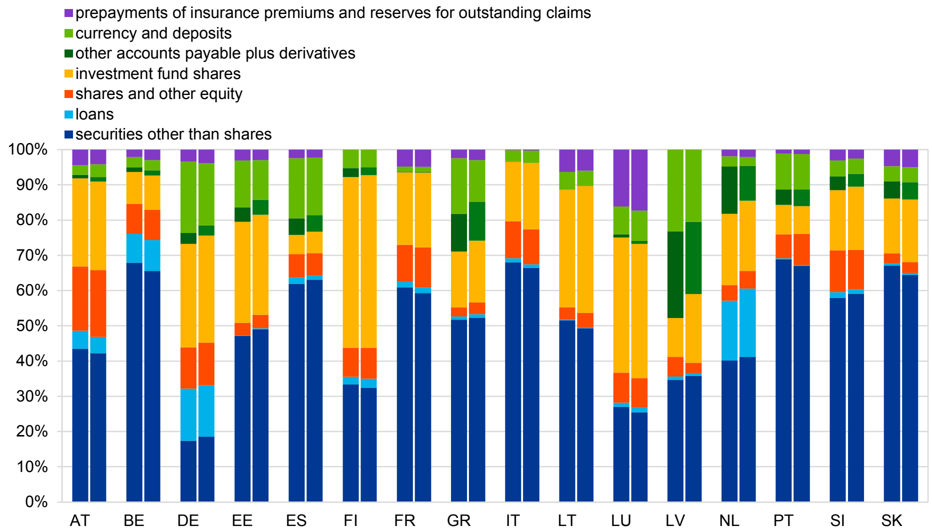
[40] See the box entitled “Debt securities holdings of the financial sector in the current low-yield environment”, *Financial Stability Review*, ECB, November 2015, pp. 93-95.

confirmed by data and reports from individual ICPFs, which point out portfolio shifts towards infrastructure financing in addition to shifts towards equity and lower-quality bonds.[41]

Chart 3.7

Financial asset breakdown for insurance corporations in euro area countries

(2014 and 2015; percentages of financial assets)

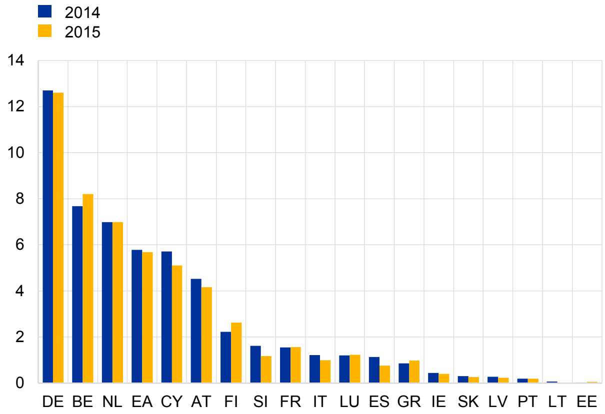


Source: ECB (ICPF balance sheet data).
Note: Investment fund shares exclude MMF shares.

Chart 3.8

Lending by euro area ICPFs

(2014 and 2015; percentages of financial assets)



Source: ECB (ICPF balance sheet data).

This recent trend has also been accompanied by an increase in direct lending by ICPFs in some countries (see **Chart 3.8**).[42] Although starting from low levels, loans granted by ICPFs relative to total financial assets increased in 2015 by more than 5% in four euro area countries (Belgium, Finland, Greece and Estonia). Of the euro area countries in which this type of activity is above the euro area average, the Belgian ICPFs increased their lending activity the most (by 7%). In general, lending by ICPFs remains concentrated on households (in those jurisdictions where direct lending is allowed) and on governments.

Regarding the liabilities side of ICPFs, technical reserves constitute the most significant part of liabilities (see **Chart 3.9**). They represent the obligations to the policyholders, i.e. the amounts that ICPFs need to have at their disposal to cover claims. The average maturity of ICPF liabilities is typically

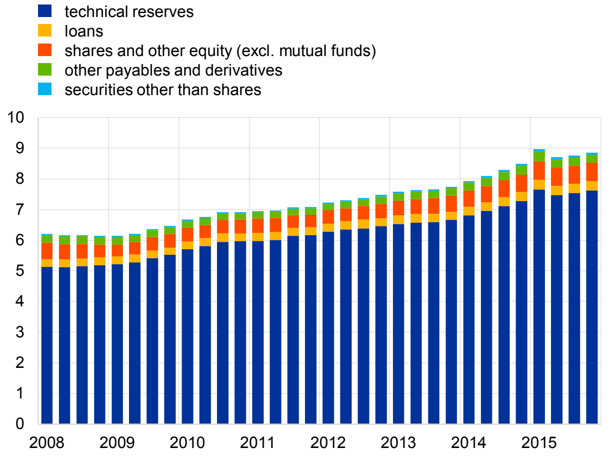
[41] See also Section 3.1.2 entitled “Euro area insurance sector: an evolving business mix and investment allocation amid challenges from a low-yield environment”, *Financial Stability Review*, ECB, May 2016, pp. 77-86.

[42] Direct lending by insurers is not allowed in all euro area jurisdictions. See also the box entitled “Lending by insurers”, *Financial Stability Review*, ECB, June 2011, pp. 115-116.

longer than that of the corresponding assets. As a result, the high exposure of ICPFs to fixed income assets on the assets side, combined with the long-term nature of liabilities, make ICPFs vulnerable to the protracted low-yield environment and, in the long term, weigh on the profitability and solvency of the sector.

Chart 3.9
Liabilities of euro area ICPFs

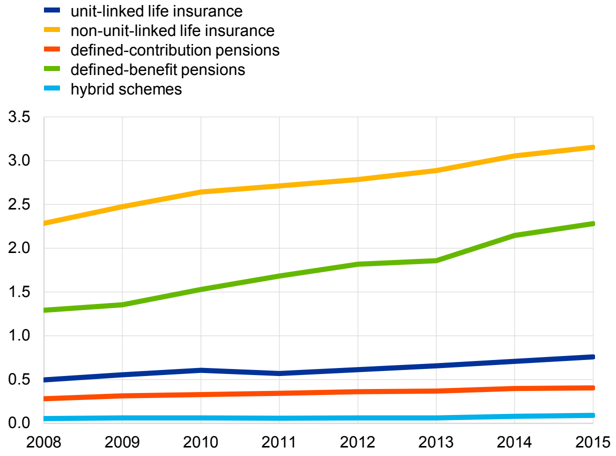
(2008-2015; EUR trillions)



Source: ECB (ICPF balance sheet data).

Chart 3.10
Net equity of households in life insurance and pension plans

(2008-2015; EUR trillions)



Source: ECB (ICPF balance sheet data).

The degree of vulnerability to low interest rates, however, depends on the business model of individual firms and their balance sheet structure. Recent ECB findings[43] suggest that the impact of a prolonged low-yield period on insurers is expected to be highest for small and medium-sized life insurers with large government bond portfolios and high guarantees to policyholders. In the case of pension funds, the impact is likely to be large for defined-benefit schemes, whereas policyholders tend to take the hit in the case of defined-contribution schemes.

Against this background, ICPFs are incentivised to move towards policies where the policyholders (rather than the ICPF sector itself) bear the investment risk, such as unit-linked life insurance policies and defined-contribution pensions.[44] Indeed, life insurers have been gradually switching towards unit-linked policies since 2011 and the share of unit-linked policies stood at 19% in 2015, compared with 17% in 2011. This trend accelerated in 2015 as the share of unit-linked policies in this year increased by 0.6 percentage point, compared with growth of 0.3 and 0.4 percentage point in 2014 and 2013 respectively. However, non-unit-linked insurance still

[43] See Special Feature B by Berdin, E., Kok, C., Mikkonen, K., Pancaro, C. and Vendrell Simon, J. M. entitled “Euro area insurers and the low interest rate environment”, *Financial Stability Review*, ECB, November 2015, pp. 134-146.

[44] In the case of a unit-linked life insurance policy, the capital market risk is borne by the policyholder, not the insurance company. In a defined-contribution plan, the participant’s contributions are determined in advance, but the level of pension payments is not. The contributions are invested in a portfolio and the participant bears all the investment risk. In a defined-benefit plan, future pension payments are determined in advance, based on the wage history and years of service of a participant. The level of contributions may vary significantly over time, depending on the reserves or funding shortfall of the fund.

constitutes the bulk of the policies on the balance sheets of life insurers (see **Chart 3.10**). Regarding pension fund schemes, the share of defined-benefit pensions has remained broadly unchanged, having stayed close to 80% since 2011.

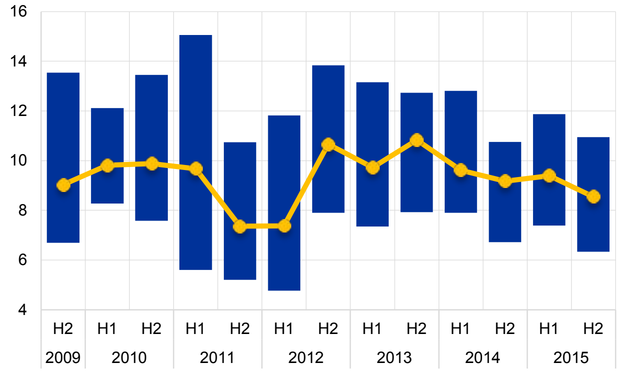
The ICPFs' search for new investment and business opportunities is also reflected in a recent surge in mergers and acquisitions, as firms are tending to diversify their business models.[45] New strategies may involve diversification into less traditional activities such as variable annuities, certain types of guarantees or derivative transactions. However, such activities are currently difficult to monitor as data on the size and composition of these activities are rather limited. The reporting under Solvency II, which started this year, is expected to shed more light on these activities.[46]

3.2.1 Profitability and solvency of insurers

This section focuses on structural changes in the activity of insurance companies and the broad implications for their profitability performance and solvency position.[47]

Chart 3.11
Return on equity

(EU; percentages; interquartile range and median; last observation: H2 2015)



Source: EIOPA.
Note: The return on equity is defined as the cumulated profit (loss) after tax and before dividends over the last four quarters, divided by the average solvency capital over the last four quarters.

In recent years, the profitability of the insurance sector, despite having been more solid than that of the banking sector, has been constrained by the low interest rate environment and subdued macroeconomic conditions. The median return on equity (ROE) for the total insurance business, including both the life and non-life sectors, thus declined from 10.8% in the second half of 2013 to 8.5% at the end of 2015 (see **Chart 3.11**). However, it is worth noting that it was only slightly lower than the median ROE recorded in the second half of 2009 when it stood at about 9%.

On the liabilities side, as mentioned in Section 3.2, the insurance industry continued to shift towards products featuring a more flexible yield structure and for which the policyholders bear the investment risks such as unit-linked life insurance policies. On the assets side, portfolio de-risking undertaken to optimise the capital allocation in view of the introduction on 1 January 2016 of the Solvency II regime came to a halt and tended to reverse. Solvency II is a harmonised, more fair value-based and more risk-sensitive supervisory regime for EU insurance companies.

45 See the Thematic Article entitled "Impact of Mergers and Acquisitions on European Insurers: Evidence from Equity Markets", *Financial Stability Report*, EIOPA, June 2016.

46 See "Report on systemic risk in the EU insurance sector", ESRB, December 2015.

47 The section relies on data provided by EIOPA which focus on a sample of large European insurance groups. These data cover at a maximum a sample of 29 EU-headquartered insurance groups. More specifically, the insurance groups in the sample are headquartered in Austria, Belgium, France, Germany, Italy, the Netherlands, Spain, Sweden and the United Kingdom. The data used in this section began to be collected in the second half of 2009 and are publicly available only for the aggregate sample.

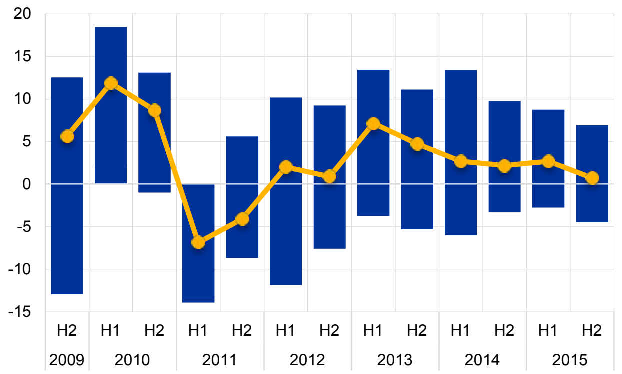
Growth in the life insurance sector in 2015 remained subdued. The growth of life premiums in the second half of 2015 appears particularly modest. Since the second half of 2009, the sector recorded lower growth in premiums only in 2011. The life business recorded a median annual growth of life premiums of about 2.7% in the first half of 2015 and 0.7% in the second half of 2015 (see **Chart 3.12**).[48] Developments in the life sector also exhibited a certain degree of heterogeneity across euro area countries, reflecting diverse social and economic conditions. However, in 2015, there was a reduction in the degree of heterogeneity with respect to the previous years.

In many euro area countries, sales of products with guaranteed returns still represent the major source of income for life insurance firms. The sale of products with a more pronounced financial content, in particular unit-linked products, did not exhibit a uniform trend across large European insurers (see **Chart 3.10**).

Chart 3.12

Gross premiums written – life insurance

(EU; annual growth rates; interquartile range and median; last observation: H2 2015)

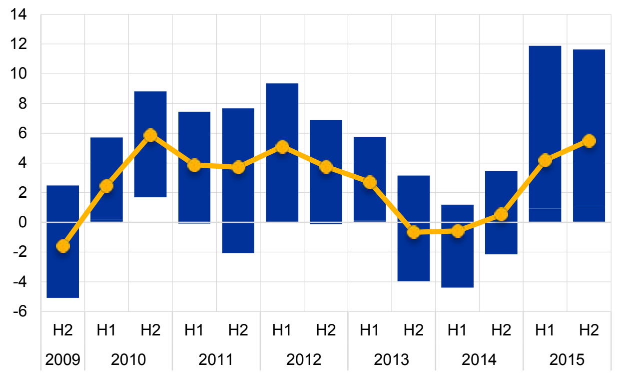


Source: EIOPA.

Chart 3.13

Gross premiums written – non-life insurance

(EU; annual growth rates; interquartile range and median; last observation: H2 2015)



Source: EIOPA.

The median return on assets (ROA) of the life industry has been hovering below 0.5% in the recent half-year periods. The ROA for the large life insurers in the sample remained stable at relatively low levels in 2015.

The non-life insurance sector continued to perform better than the life sector (see **Chart 3.13**) in 2015.[49] It recorded the highest median annual growth in the last five years. The annual growth of the sector premiums increased in the second half of 2015 for the third consecutive half year and recorded a median annual growth of about 5.5%. Moreover, most insurers in the sample exhibited positive growth in non-life premiums in 2015. A portion of this growth is due to the development of mandatory, but often very competitive business lines such as automobile third-party liability business.

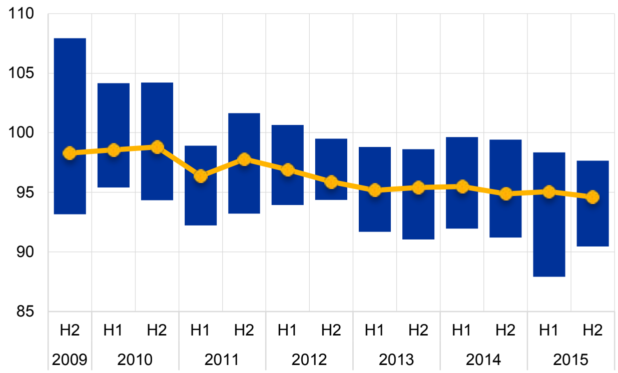
48 According to Insurance Europe, total gross written premiums subscribed in Europe in 2014 were about €1,167 billion and life premiums accounted for about 61% of all premiums written in Europe. In the life sector, the three largest markets in the euro area were France, Italy and Germany.

49 According to Insurance Europe, non-life premiums accounted for about 39% of all premiums written in Europe at the end of 2014. In the non-life sector, the three largest markets in the euro area were Germany, France and the Netherlands.

As mentioned in Section 3.2, non-life insurance companies are less affected by the current low interest rate environment than life insurance companies due to the short-term nature of their business. However, they can also be exposed to the low interest rate environment as well as to the stock market and real estate developments via (re)investment risk.

Chart 3.14
Combined ratio – non-life insurance

(EU; percentages; interquartile range and median; last observation: H2 2015)



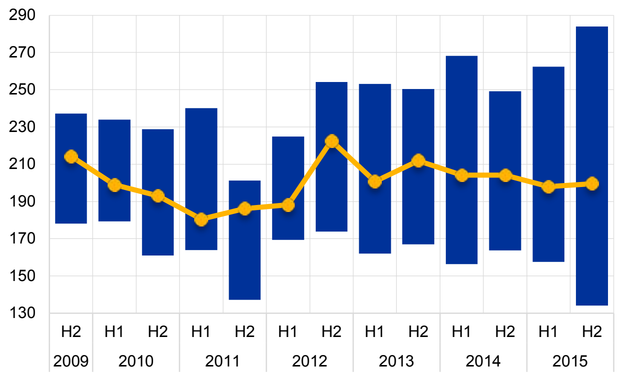
Source: EIOPA.
Note: The combined ratio is defined as net claims incurred and net operating expenses divided by net premiums earned.

Chart 3.14 shows that the combined ratio has been rather stable since 2013, but it has improved compared with the level of around 99% recorded in 2010. The median value in 2015 was about 95%. This result is partly due to the absence of "extreme" claims in connection with natural disasters.

The solvency ratio for the life sector (see **Chart 3.15**) decreased slightly in 2015, due to the increasing weight of existing commitments to policyholders. In 2015 the median European company had a solvency ratio of about 200%. This level was closely in line with the Solvency I requirements which were in place until end-2015 and also well above the lowest median solvency ratios recorded by the sector since the second half of 2009. Indeed, in the first half of 2009, the median solvency ratio stood at about 180%. At the same time, in 2015, there was a significant increase in the dispersion of the solvency positions of the large insurers in the sample. The value for the 90th percentile was about 283%, while the value for the 10th percentile was about 134%.

Chart 3.15
Solvency ratio – life insurance

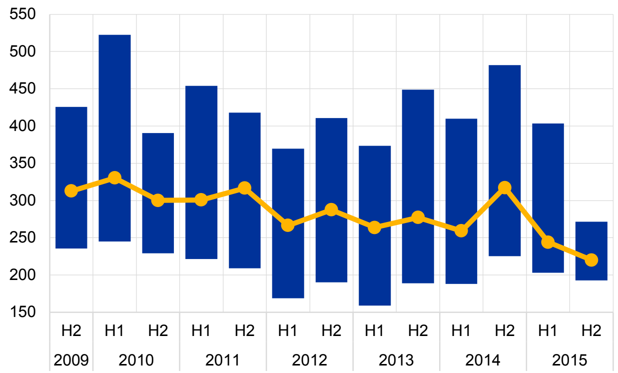
(EU; percentages; interquartile range and median; last observation: H2 2015)



Source: EIOPA.
Note: The solvency ratio is defined as the available solvency capital divided by the required solvency capital.

Chart 3.16
Solvency ratio – non-life insurance

(EU; percentages; interquartile range and median; last observation: H2 2015)



Source: EIOPA.
Note: The solvency ratio is defined as the available solvency capital divided by the required solvency capital.

The solvency ratio of the non-life sector (see **Chart 3.16**) displayed a declining trend in the last years. In particular, it markedly decreased at the end of 2015, exhibiting a median value of about 220%, which is the lowest value recorded since end-2009. However, it is worth mentioning that solvency developments in the non-life sector exhibited a certain degree of heterogeneity across the insurance groups included in the sample.

4 Other euro area non-bank financial entities

This chapter reviews the structural features of the euro area non-bank financial sector, including all OFIs except ICPFs. Structural features of non-bank sub-sectors for which balance sheet data are available are outlined in more detail, namely for non-MMF investment funds, MMFs and FVCs. Both a broad and a narrow measure of the non-bank financial sector are examined. The broad measure includes all financial intermediaries except banks and ICPFs, whereas the narrowly defined measure includes investment funds, MMFs and FVCs only.

Growth of the non-bank financial sector, which was previously helped in the euro area as well as globally by credit disintermediation, the low interest rate environment and enhanced banking sector regulation in the aftermath of the global financial crisis, has stalled over the past year. Notably the investment fund (non-MMF) sector, which had previously grown strongly, has not expanded further. A slowdown in net inflows and declining valuations, including through exchange rate effects, contributed to this slowdown in growth. The share of assets invested outside the euro area remained high but declined somewhat, also due to a weakening of the euro vis-à-vis other currencies. Expansion of euro area MMFs also stalled, following a short period of growth since 2014. Growth in euro area FVCs has continued to slightly decline over the past year owing to continued weak securitisation activity by euro area credit institutions. Since 2009 total assets of FVCs have fallen by over 20% mainly due to weak demand for securitised products and the collapse of mortgage activity in certain euro area countries.

4.1 Developments in main aggregates

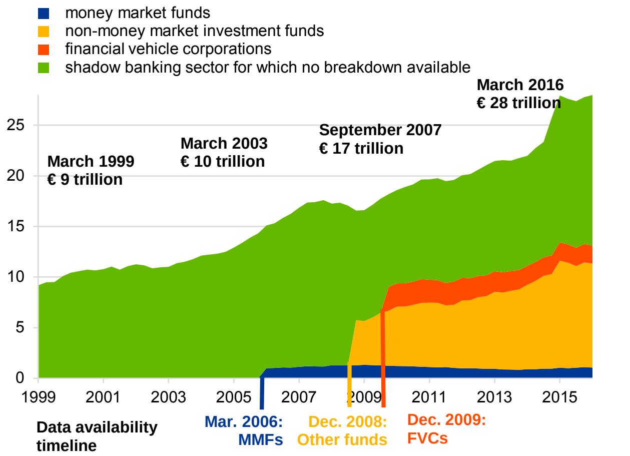
Total assets held by the broadly defined non-bank financial sector, comprising MMFs, non-MMF investment funds and FVCs, remained nearly unchanged since March 2015 (see **Chart 4.1**). Growth in the investment fund sector underpinning much of the expansion of the non-bank financial sector over the last years stalled during 2015, amid a decline in asset prices and a partial reversal of net flows. Other non-bank financial sectors, including FVCs, stabilised over the past year owing to somewhat stronger loan origination and securitisation activity by euro area credit institutions.[50] The much smaller MMF sector continued to grow in 2015, although there was a contraction in the second quarter. For more than 50% of the sector's total assets, a breakdown is not readily available at the euro area level. At the national level, more detailed information is available for at least some countries (see **Box 1**).

[50] For a risk perspective on the non-bank financial sector, in particular investment funds, see Section 3.1.3 of *Financial Stability Review*, ECB, May 2016, pp. 86-91.

Chart 4.1

Total assets of the non-bank financial sector by the broad measure

(Mar. 1999 – Mar. 2016; EUR trillions)



Source: ECB (EAA, MFI BSI statistics, investment fund balance sheet statistics, FVC asset and liability statistics) and ECB calculations.
Notes: Broad measure includes all non-monetary financial institutions except insurance corporations and pension funds. A breakdown of statistical data for MMFs, other funds and FVCs is available only from the indicated dates onwards.

Two-thirds of the assets of the remaining other financial institutions are held in the Netherlands and Luxembourg. De Nederlandsche Bank estimates that special financial institutions (SFIs) account for two-thirds of the broadly defined non-bank financial sector in the Netherlands. In Luxembourg, the residual includes a significant proportion of holding companies and other entities with limited financial links to the banking sector. Data coverage for non-securitisation special-purpose entities (SPEs) and holding companies is generally less granular than for FVCs and varies across jurisdictions, but some progress has been made recently in collecting such data at the national level.

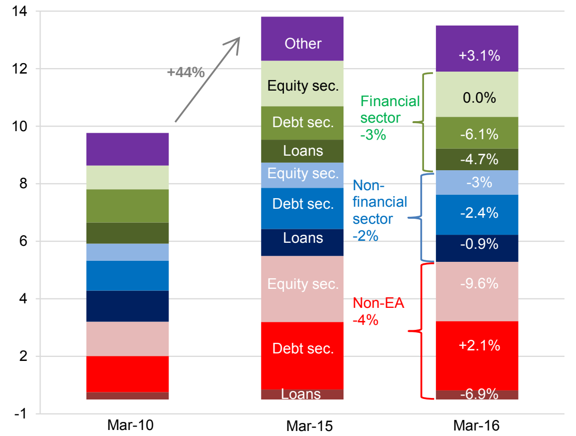
Financial assets of the narrowly defined non-bank financial sector have slightly declined over the past year, from €13.4 trillion in March 2015 to €13.0 trillion in March 2016 following a significant expansion over the past few years (see **Chart 4.2**). This narrowly defined measure includes MMFs (8%), investment funds (79%) and FVCs (14%), while other entities for which no breakdown is available are excluded. The decline in total assets over the past four quarters is attributable to a reduction of non-euro area exposures to equity, securities and loans in particular, whereas exposures to non-euro area debt securities increased marginally by 2.1%. Exposures to the euro area financial and non-financial sector have also declined on average, i.e. by 3% and 2% respectively. Exposures to the remaining other assets – including real estate and other non-financial assets – increased by 3.1%.

Despite the moderate decline in total assets, the narrowly defined non-bank financial sector remains an increasingly important source of funding for the euro area non-financial sector. In the third quarter of 2016 these entities were providing nearly €3.2 trillion of funds to the euro area non-financial sector in the form of loans, debt securities and equity financing. In addition, €3.4 trillion were provided to other parts of the euro area financial sector in the form of loans, debt securities and equity financing. The large share of non-euro area assets is due to investment funds channelling portfolio investments abroad. Nearly €4.8 trillion are invested outside the euro area, representing 36% of the assets of the narrowly defined non-bank financial sector.

Chart 4.2

Total assets of the non-bank financial sector by the narrow measure

(Mar. 2010; Mar. 2015; Mar. 2016; EUR trillions)

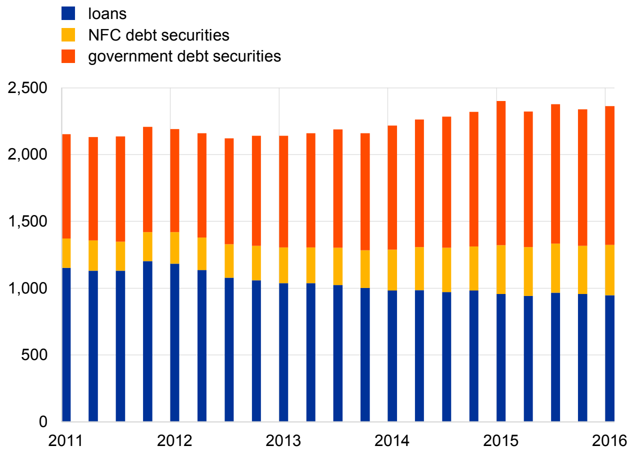


Source: ECB (MFI BSI statistics, investment fund balance sheet statistics, FVC asset and liability statistics) and ECB calculations.
Notes: This narrow measure includes MMFs, investment funds and FVCs. Other shadow banking entities for which no breakdown is available are excluded.

Chart 4.3

Credit provision to the euro area non-financial private and public sector by the narrow measure

(Mar. 2011 – Mar. 2016; EUR billions)



Source: ECB (MFI BSI statistics, investment fund balance sheet statistics, FVC asset and liability statistics) and ECB calculations.
Notes: This narrow measure includes MMFs, investment funds and FVCs. Loans include direct loans to NFCs and households, as well as loans that have been issued by other sectors but transferred to securitisation vehicles. Debt securities refer to direct holdings.

While the provision of credit to the euro area non-financial sector has recently stalled, a further shift in the composition of credit could be observed in line with previous trends, although at a slower pace (see **Chart 4.3**). This shift has been driven primarily by a decline in securitisation activity and an increase in the issuance of non-financial corporate debt securities since the global financial crisis. Compared with the amounts held in the first quarter of 2011, securitised loans have declined by 18% and the holdings of debt securities issued by the non-financial corporate sector have increased by 82%. Government debt securities held increased by 33% over the same period. These debt securities issued by private and public sector counterparts are primarily held by euro area investment funds, whereas loans are provided by FVCs. Investment funds have only a marginal role in providing direct loans, also because they are still prohibited from originating loans in many jurisdictions. The increasing amounts of corporate debt securities may partly be explained by rising market valuations of these instruments.

Box 1
Statistical challenges for the measurement of the non-bank financial sector

Statistical data from non-bank financial entities in the euro area are increasingly used to support the work on the non-bank financial sector by the ECB and the European Systemic Risk Board. Using the Financial Stability Board (FSB)'s broad definition of the non-bank financial sector, or so-called "shadow banking" sector, an initial measure has been constructed using the European System of Accounts (ESA) sector classifications of non-bank financial intermediaries. This measure comprises

OFIs, MMFs and non-MMF investment funds.[51] Several data gaps still prevent a comprehensive monitoring of the non-bank financial sector in the euro area and the risks associated with its activities.

From a statistical perspective, some challenges remain. First, the underlying institutional sectors in the System of National Accounts have been developed to support macroeconomic analysis and not necessarily a risk-focused assessment of non-bank financial entities.[52] For instance, the statistics do not capture the fact that similar entities or activities can be regulated and supervised differently in various jurisdictions. This applies to financial corporations engaged in lending (FCLs) and securities and derivatives dealers (SDDs) in particular. Second, national accounts are based on residency, which implies that some cross-border activities may not be captured. For example, the statistics do not allow the identification of intra-group cross-border lending. They also do not capture off-shore investment funds which are managed by euro area companies. Finally, there are limitations to the available dimensions in which some financial instruments are reported, preventing a thorough analysis of liquidity and maturity transformation at the sector level. For instance, metrics on maturity transformation can be constructed, although on the basis of original rather than residual maturity and with a lack of granularity for shorter maturities.

While improvements in data collection are in progress, the mapping of all entities and activities to associated risks will remain a challenge for some time. In its 2014 shadow banking monitoring report, the FSB made an attempt to narrow the broad shadow banking measure by filtering out "non-bank financial activities that have no direct relation to credit intermediation (e.g. equity investment funds) or that are already prudentially consolidated into banking groups". In particular, the FSB excluded OFIs that are consolidated into a (domestic) banking group.[53] This approach is also followed by the European Banking Authority[54]. However, the relevant information is not systematically collected and stored at the European level. In its 2015 monitoring exercise, the FSB introduced an economic function-based approach to better account for: (1) institutions within a defined sub-sector that may have different risk profiles; or (2) institutions with similar risk profiles from different sub-sectors. This new approach has led to a much narrower shadow banking measure than in previous years.[55] Some structural features remain, such as the dominance of investment funds in the FSB shadow banking measure, representing 60% of its global assets. The lack of granular data at entity level in the national accounts statistics also means that the FSB's narrower shadow banking measure cannot easily be reproduced at the euro area level.

For the European data collections at sectoral level, the statistical coverage and breakdown of other non-bank financial entities still need to be improved in terms of granularity. In the past few years, the ECB has started to collect detailed balance sheet data on investment funds (since 2008) and FVCs (since 2009), which has shed some light on the composition of and notable shifts within the

51 See Doyle, N., Hermans, L., Molitor, P. and Weistroffer, C., "Shadow banking in the euro area: risks and vulnerabilities in the investment fund sector", *Occasional Paper Series*, No 174, ECB, June 2016. See also Grillet-Aubert, L., Haquin, J.-B., Jackson, C., Killeen, N. and Weistroffer, C., "Assessing shadow banking – non-bank financial intermediation in Europe", *Occasional Paper Series*, No 10, ESRB, July 2016.

52 See the System of National Accounts (SNA) 2008 and European System of Accounts (ESA) 2010 classifications.

53 See Financial Stability Board, "Global shadow banking monitoring report 2014", 30 October 2014.

54 See European Banking Authority, "Guidelines on limits on exposures to shadow banking", 14 December 2015.

55 See Financial Stability Board, "Global shadow banking monitoring report 2015", 12 November 2015.

non-bank financial sector. Yet more than 50% of the broad non-bank financial sector measure still cannot be classified according to the type of entity, i.e. the so-called OFI residual. Significant progress has been made recently in reducing this OFI residual at national level. For instance, the Central Bank of Ireland has introduced a non-securitisation SPV data collection.[56] In order to address data gaps and to improve oversight of the SPV sector, new quarterly reporting requirements for SPVs were announced in July.[57] This data collection is based on the application of the FVC granular reporting form to SPVs which are not principally engaged in securitisation. De Nederlandsche Bank has, for some years now, been collecting monthly survey data on so-called special financial institutions (SFIs) in the Netherlands, which include information on individual sub-sector components, such as holding companies. Further data collections are undertaken also by the ECB within the sectoral accounts statistics which might help to produce additional data breakdowns for the OFI sub-sectors and further reduce the OFI residual.

4.2 Asset and liability structure of other non-bank financial entities

4.2.1 The investment fund sector

Growth in the investment fund sector, which underpinned much of the expansion of the non-bank financial sector since the global financial crisis, has stalled since last year. While net inflows were still positive over the course of the year for the sector as a whole, a reversal in the trend could be observed, with net inflows starting to fall from their peak values in the first quarter of 2015 (see **Chart 4.4**). This slowdown in net inflows was particularly pronounced for bond funds and mixed funds, representing the largest share of the sector with 59% of the total assets held (see **Chart 4.5**).

Equity funds experienced more sudden drops in net flows during the third quarter of 2015 and the first quarter of 2016, following intermittent market volatility in some emerging markets. By contrast, real estate funds (5%), which are mainly invested within the euro area, received comparably stable inflows over the entire year. The slowdown of net inflows was more pronounced for non-euro area investors, while flows from euro area investors declined at a slower pace. 26% of the shares issued by euro area funds are held by investors outside the euro area (see **Chart 4.7**), a slight decrease from 27% in the first quarter of 2015.

As regards investment fund domiciles in the euro area, concentration remains high, with more than 90% of assets under management domiciled in Luxembourg, Germany, Ireland, France and the Netherlands (see **Chart 4.5**). The geographical concentration remained largely stable in 2015, with a slight expansion of the German

56 See Godfrey, B., Killeen, N. and Moloney, K., "Data Gaps and Shadow Banking: Profiling Special Purpose Vehicles' Activities in Ireland", Central Bank Quarterly Bulletin, 15 July 2015, pp. 48-60.

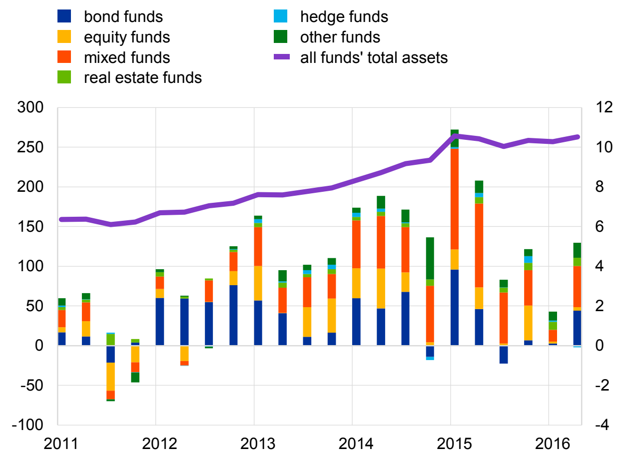
57 http://www.centralbank.ie/polstats/stats/reporting/Pages/spv.aspx

funds, mainly at the expense of the French sector by one percentage point. The fund sectors domiciled in Ireland and Luxembourg, which have been growing more rapidly over the past years, did not expand further in 2015.

Chart 4.4

Euro area investment funds – quarterly net flows and total assets

(Q1 2011 – Q2 2016; EUR billions (left-hand scale); annual percentage change (right-hand scale))

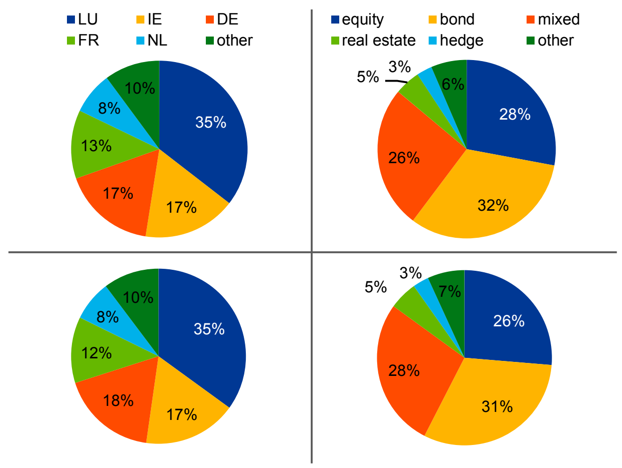


Source: ECB (investment fund balance sheet statistics) and ECB calculations.
Note: Net flows reflect shares issued.

Chart 4.5

Euro area investment funds – assets by location and fund type

(Q1 2015 (top row); Q1 2016 (bottom row); percentage of total assets)



Source: ECB (investment fund balance sheet statistics) and ECB calculations.
Notes: Credit includes loans and debt securities; non-financial assets include real estate and other non-financial assets.

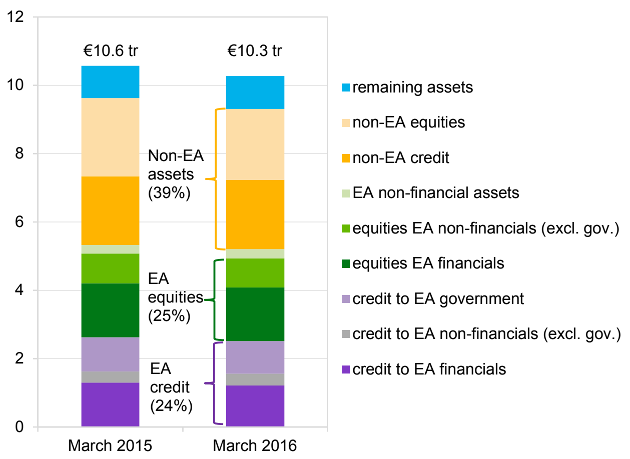
Despite the positive net inflow into euro area investment funds, the sector's total assets did not further expand due to offsetting asset valuation effects (including those resulting from changes in global asset prices). The stabilisation of the nominal effective exchange rate of the euro vis-à-vis other main currencies further dampened the rise in valuations of assets denominated in non-euro currencies. About 39% of euro area investment fund assets are invested in non-euro area countries, with nearly equal shares for equities and credit (see **Chart 4.6**). Non-euro area assets have slightly decreased over the past year, from 40% in March 2015 to 39% in March 2016.

In the first quarter of 2016, investment funds domiciled in the euro area held €10.3 trillion in total assets, 3% less than in the previous year (see **Chart 4.6**). About one-quarter of these assets is invested in euro area credit (24%) and euro area equities (25%). Investment funds are providing about €2.5 trillion in credit to euro area counterparts, of which €1.2 trillion is credit to euro area financials, €953 billion to euro area governments, and €344 billion to other euro area non-financials. Reflecting a general expansion of market-based funding relative to bank-based funding, euro area investment funds have increased their exposures to the non-financial corporate sector in recent years. Credit exposures to the non-financial sector expanded further over the past year by 4.6%, whereas credit to euro area financials and sovereigns contracted by 6.6% and 4.9%, respectively. Exposures to non-financial assets, including real estate, increased by 7.5% and amounted to €270 billion in the first quarter of 2016.

Chart 4.6

Euro area investment funds – assets by type

(Q1 2015; Q1 2016; EUR trillions)

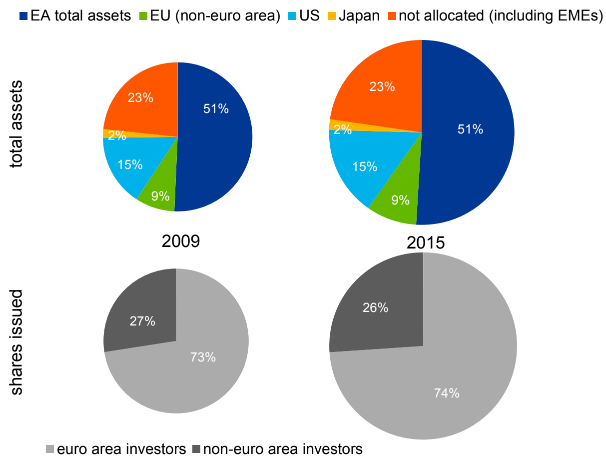


Source: ECB (investment fund balance sheet statistics) and ECB calculations.
Note: Credit includes loans and debt securities; non-financial assets include real estate and other non-financial assets.

Chart 4.7

Assets and liabilities of euro area investment funds by regional counterpart

(Q4 2009; Q4 2015; percentages)



Source: ECB (investment fund balance sheet statistics) and ECB calculations.
Note: "Not allocated" includes assets from other countries (including emerging market assets) and non-financial assets for which the statistical breakdown does not allow regional counterparts outside the euro area to be identified.

Some €4.3 trillion of assets are invested in non-euro area countries. Due to limited breakdowns in the statistical classifications, the geographical counterpart cannot be determined for some non-euro area non-financial assets. The available breakdowns do allow the identification of debt and equity securities (including fund shares) held in the US (15%), the non-euro area EU countries (9%) and Japan (2%). This geographical composition of investment in non-euro area assets has been stable since last year.

4.2.2 Money market funds

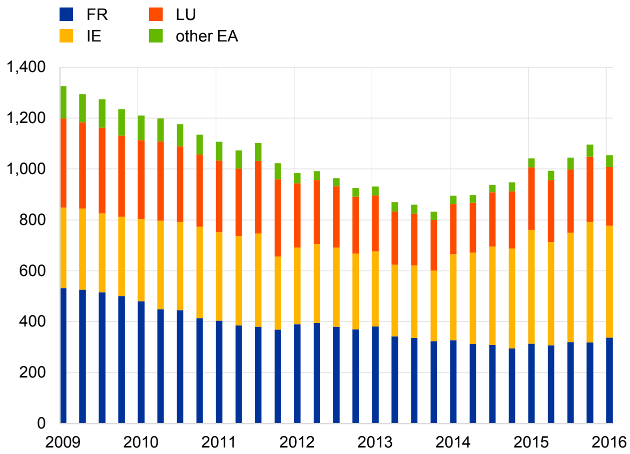
Following a prolonged period of contraction after the global financial crisis, the euro area MMF sector has expanded again since end-2013 (see **Chart 4.8**). Growth has slowed over the last year following some outflows, mainly from non-euro area investors and in periods of higher volatility of short-term bank or sovereign debt instruments. Growth of euro area-domiciled MMFs has nearly stalled, with total assets now amounting to more than €1,054 billion in the first quarter of 2016.

MMFs domiciled in Luxembourg and Ireland experienced a reduction in total assets (-6% and -2% respectively), whereas French MMFs expanded further (+8%). This has been partly due to the fact that large corporates found MMF returns more attractive than negative-yielding overnight deposits. The geographical concentration of the domiciles of the euro area MMF sector is traditionally high, with Ireland accounting for 42%, France for 32% and Luxembourg for 22% of total assets held by euro area MMFs in 2015.

Chart 4.8

Euro area money market funds – total assets by country of fund domicile

(Q1 2009 – Q1 2016; EUR billions)

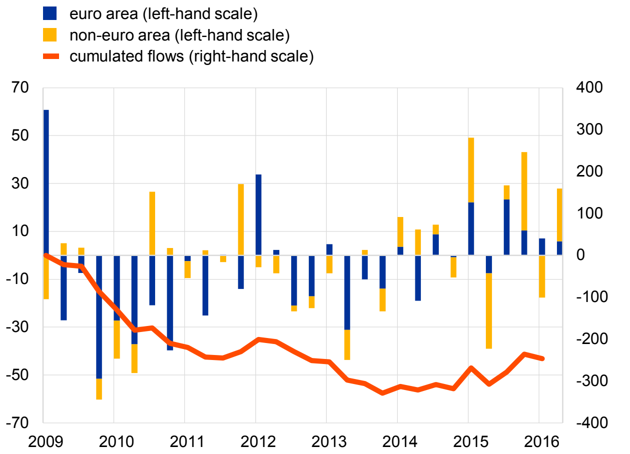


Source: ECB (MFI BSI statistics) and ECB calculations.

Chart 4.9

Euro area money market funds – quarterly and cumulated net flows

(Q1 2009 – Q1 2016; net flows in EUR billions)



Source: ECB (MFI BSI statistics) and ECB calculations.

Irish MMFs traditionally have strong links to UK banks, thus investing in British bank debt securities and loans. The investor base reflects this, with Irish MMFs having a large share of non-euro area investors (see **Chart 4.10**). Luxembourg is also used as a domicile for MMFs serving non-euro area markets, although to a lesser extent. By contrast, the French-domiciled funds invest predominantly in the euro area, although their share in non-euro area assets has increased since the first quarter of 2015, from 17% to 23%.

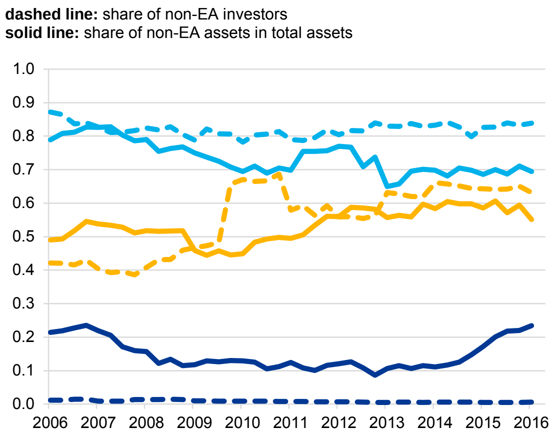
More than half of MMF assets are in non-euro currencies; about 25% of the assets held are denominated in US dollars and 21% in pounds sterling, the latter mainly held by Irish funds. MMFs in the euro area are also a key source of US dollar funding for euro area banks. The US dollar-denominated exposures have increased since last year, rising by 5% in US dollar terms.

Bank debt securities and loans to banks remain by far the most important asset class for MMFs, accounting for more than 65% of the MMF balance sheet in the first quarter of 2016 (see **Chart 4.11**). While exposures to euro area banks have decreased by 4.5% since the first quarter of 2015, exposures to non-banks have increased by 18%. In the first quarter of 2016 euro area money market funds held €323 billion in bank debt securities and loans and €104 billion in other debt.

Chart 4.10

Euro area money market funds – share of non-euro area assets and investors by country of domicile

(Q1 2006 – Q1 2016; ratio)

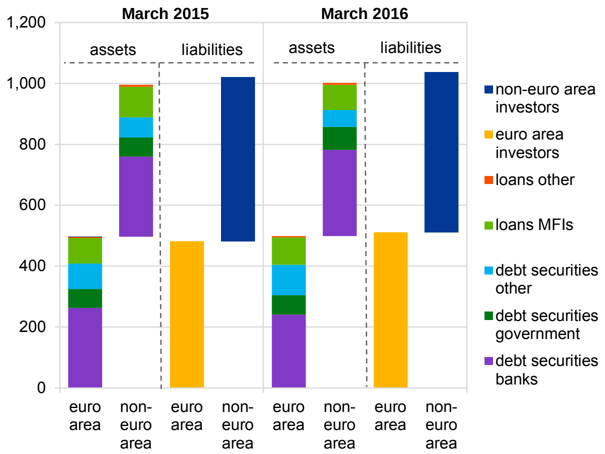


Source: ECB (MFI BSI statistics) and ECB calculations.
Note: Calculation of the share in non-EA assets excludes assets for which no geographical information is available.

Chart 4.11

Euro area money market funds – composition of assets and investor base

(Q1 2015; Q1 2016; EUR billions)



Source: ECB (MFI BSI statistics) and ECB calculations.
Note: Calculation of the share in non-EA assets excludes assets for which no geographical information is available.

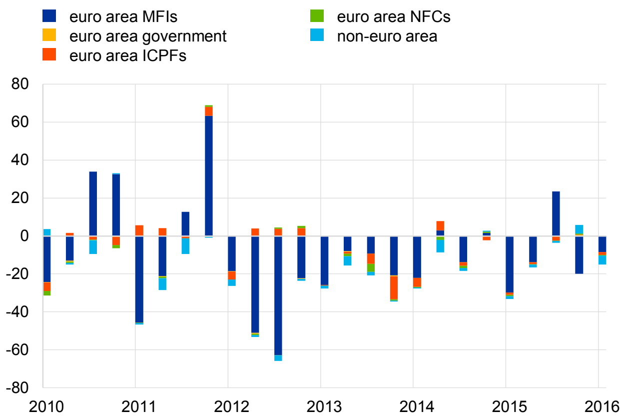
4.2.3 Financial vehicle corporations

Euro area FVCs have continued to shrink over the past year, albeit at a slower pace. Measured by total assets, FVCs have shrunk by 1.5% since the first quarter of 2015 to below €1.8 trillion in total assets. Securitisation activity by euro area credit institutions was subdued throughout the year, except for the third quarter of 2015. Other sectors, including ICPFs, were also not able to contribute positively to securitisation activity (see **Chart 4.12**).

Chart 4.12

Financial vehicle corporations – quarterly transaction volume by originated loan sector

(Q1 2010 - Q1 2016; EUR billions)



Source: ECB (FVC asset and liability statistics) and ECB calculations.

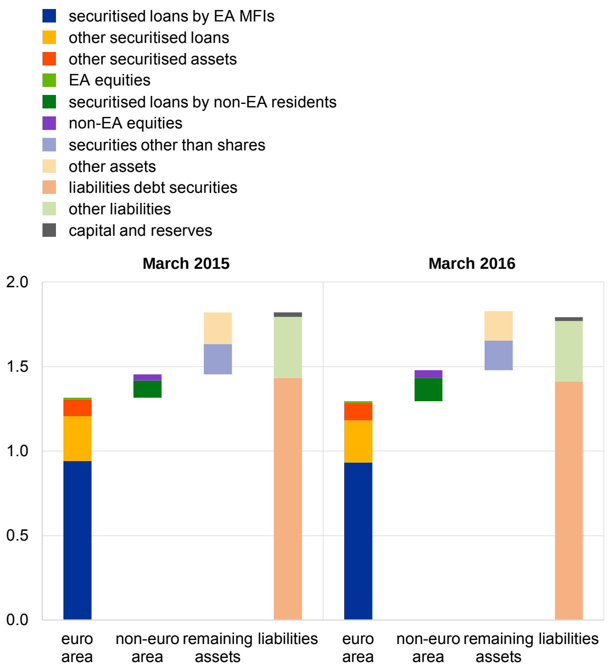
Much of the securitisation activity following the crisis has been in retained deals, i.e. deals that are not placed on the market but are used for collateral purposes, for example in central bank refinancing operations. Approximately 45% of securitised loans originated by MFIs are still on their balance sheets, i.e. the loans have not been derecognised. This share rose after the global financial crisis, but has been gradually falling since mid-2012. A renewed small increase in the share of retained deals can be observed since mid-2014.

FVCs facilitate credit and liquidity risk transfer by transforming illiquid assets, usually loans, into marketable securities. Last year, loans securitised by euro area FVCs declined slightly in absolute terms by €25 billion. Securitised loans amounted to €1,180 billion and 65% of total FVC assets in the first quarter of 2016 (see **Chart 4.13**).

Chart 4.13

Financial vehicle corporations – assets and liabilities

(Q1 2015; Q1 2016; EUR trillions)



Source: ECB (FVC asset and liability statistics) and ECB calculations.
Notes: Excludes other liabilities, i.e. (i) any differences between the nominal amount of principal outstanding of securitised loans and the transaction value paid by the FVC in purchasing such loans; (ii) financial derivative liabilities subject to on-balance-sheet recording according to national rules; and (iii) accrued interest payable on loans and deposits and other amounts payable not related to the FVC's main business.

Banks are still the main actor in securitisation activity, with loans originated by euro area credit institutions accounting for 52% (€930 billion) of the FVC balance sheet and euro area non-MFIs for 14% (€250 billion). While securitised loans originated in the euro area have slightly fallen, loans originated by non-euro area institutions have slightly increased, amounting to 6% (€102 billion) of total FVC assets by the first quarter of 2016.

FVC balance sheets are largely financed through the issuance of longer-term debt securities. On the liabilities side, capital and reserves represent less than 2% of the FVC balance sheet; 8% of funding comes from loans, and the remainder from the issuance of debt securities, mostly with an original maturity in excess of one year. A large share of euro area FVCs thus tends to match the maturity of their assets and liabilities, only 4% of total liabilities having an original maturity below one year. This share has slightly increased in the last year, while the share of liquid assets has decreased from 8% to 7%.

5 Statistical annex

Table 1.1

Ratio of assets of MFIs (excl. ESCB) to GDP

(ratio)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	3.6	3.3	3.1	3.1	2.8	2.6	2.8	2.6
Germany	3.9	3.6	3.3	3.2	3.1	2.8	2.8	2.6
Estonia	-	-	1.4	1.2	1.1	1.1	1.1	1.1
Ireland	-	-	-	-	6.6	5.6	5.4	4.1
Greece	-	-	-	-	2.1	2.1	2.0	2.2
Spain	2.9	3.1	3.1	3.1	3.3	2.9	2.8	2.5
France	3.7	3.7	3.7	4.0	3.8	3.7	3.8	3.8
Italy	-	-	-	-	2.5	2.4	2.4	2.3
Cyprus	-	-	-	-	6.2	4.9	5.1	5.0
Latvia	1.3	1.6	1.7	1.4	1.3	1.3	1.3	1.3
Lithuania	0.8	1.0	0.9	0.8	0.7	0.7	0.7	0.7
Luxembourg	34.2	31.1	26.9	26.2	22.1	19.7	19.7	19.4
Malta	7.0	6.9	7.7	7.4	7.4	6.6	6.6	5.4
Netherlands	-	-	3.3	3.4	3.4	3.1	3.2	3.3
Austria	3.6	3.5	3.3	3.2	3.0	2.8	2.6	2.5
Portugal	2.6	2.8	3.0	3.1	3.3	3.0	2.7	2.5
Slovenia	1.3	1.5	1.4	1.4	1.4	1.2	1.1	1.0
Slovakia	-	-	-	-	0.8	0.8	0.8	0.9
Finland	2.1	2.2	2.7	3.3	3.0	2.6	2.8	2.7
Euro area	3.4	3.4	3.4	3.5	3.5	3.2	3.1	3.1

Table 1.2

Ratio of assets of other financial institutions to GDP

(ratio)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	2.0	2.4	2.2	2.3	2.2	2.3	2.2	2.1
Germany	0.6	0.7	0.7	0.7	0.8	0.7	0.8	0.8
Estonia	-	-	0.3	0.2	0.3	0.3	0.3	0.4
Ireland	-	-	-	-	11.8	11.6	13.4	11.8
Greece	-	-	-	-	0.1	0.1	0.1	0.1
Spain	0.9	1.0	1.0	0.9	0.9	0.8	0.9	0.8
France	0.8	0.9	0.9	0.8	0.8	0.9	0.9	0.9
Italy	-	-	-	-	0.7	0.7	0.8	0.8
Cyprus	-	-	-	-	8.0	8.3	8.9	9.7
Latvia	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Lithuania	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Luxembourg	81.4	98.6	107.5	109.1	128.9	133.9	165.7	177.0
Malta	18.5	19.5	19.6	20.9	21.3	21.0	20.9	20.0
Netherlands	-	-	7.0	7.4	7.9	7.9	8.4	8.4
Austria	1.2	1.3	1.2	1.1	1.2	1.2	1.2	1.2
Portugal	1.3	1.5	1.5	1.2	1.2	1.2	1.0	1.0
Slovenia	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Slovakia	-	-	-	-	0.1	0.1	0.1	0.1
Finland	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7
Euro area	1.6	1.8	1.9	1.9	2.0	2.1	2.5	2.6

Source: ECB (EAA, MFI BSI statistics), Eurostat and ECB calculations.
Notes: Differences from Table 7 are primarily due to differences between locational (EAA) data and consolidated banking data. Data reported in the EAA refer to financial assets. ESCB assets are subtracted using BSI data.

Table 1.3

Ratio of assets of pension funds to GDP

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	2.9	3.6	3.9	3.8	4.1	5.0	5.5	6.0
Germany	11.5	13.4	13.7	13.8	15.6	14.8	16.3	16.8
Estonia	-	-	7.9	7.3	8.7	9.9	11.6	13.4
Ireland	-	-	-	-	45.7	49.2	51.5	43.1
Greece	-	-	-	-	-	0.1	0.2	0.2
Spain	8.7	9.6	9.8	9.7	10.4	11.0	11.8	11.5
France	-	-	-	-	-	-	-	-
Italy	-	-	-	-	3.8	4.1	4.9	5.3
Cyprus	-	-	-	-	22.9	17.2	17.8	15.4
Latvia	3.2	6.1	7.6	7.1	7.6	8.4	9.8	10.9
Lithuania	2.0	3.6	4.1	3.9	4.3	4.6	5.3	5.9
Luxembourg	0.7	2.4	2.3	2.3	2.5	2.6	3.7	4.6
Malta	-	-	-	-	0.0	-	0.0	-
Netherlands	-	-	125.2	133.4	153.7	154.4	184.8	183.3
Austria	4.0	4.8	5.1	4.8	5.2	5.5	5.8	5.9
Portugal	11.0	11.9	10.0	8.2	7.7	8.0	9.3	9.2
Slovenia	3.6	4.7	5.4	5.5	5.8	6.0	6.3	6.5
Slovakia	-	-	-	-	5.0	10.4	10.0	9.9
Finland	1.8	2.0	2.3	2.0	1.8	1.5	1.4	1.4
Euro area	-	-	-	-	16.8	17.2	19.7	20.0

Table 1.4

Ratio of assets of insurance corporations to GDP

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	60.9	67.7	68.1	67.4	73.3	72.5	79.1	77.5
Germany	54.3	57.5	57.8	56.5	59.5	61.1	64.0	62.9
Estonia	-	-	6.8	5.6	5.6	5.2	4.7	5.3
Ireland	-	-	-	-	123.1	122.4	126.7	102.5
Greece	-	-	-	-	7.7	8.5	8.6	8.8
Spain	21.0	22.8	22.6	23.7	25.2	26.4	26.3	25.5
France	79.2	90.7	94.8	91.3	99.7	103.3	112.2	113.4
Italy	-	-	-	-	32.6	36.0	41.0	45.9
Cyprus	-	-	-	-	17.4	15.7	19.6	18.4
Latvia	2.6	3.8	4.4	5.6	5.0	3.1	3.3	3.7
Lithuania	2.9	3.7	3.1	2.8	3.2	2.7	2.7	2.9
Luxembourg	196.3	270.3	302.4	284.6	305.9	306.0	333.6	347.5
Malta	39.0	53.3	69.6	132.5	130.9	130.6	148.2	140.5
Netherlands	-	-	64.5	67.3	70.3	66.6	73.4	69.9
Austria	31.8	35.2	35.4	33.7	35.7	35.3	36.5	35.4
Portugal	32.6	36.5	37.5	33.3	36.4	36.4	37.2	34.8
Slovenia	12.0	13.9	14.9	14.9	17.2	18.0	18.8	18.2
Slovakia	-	-	-	-	11.2	8.1	9.1	8.6
Finland	22.1	26.5	28.4	26.7	29.2	30.1	33.2	34.3
Euro area	-	-	-	-	61.9	64.0	68.6	68.4

Sources: ECB (EAA), Eurostat and ECB calculations.
Notes: Data reported in the EAA refer to financial assets.

Table 2.1

Ratio of assets of MFIs to total assets of the financial sector

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	57.6	51.7	51.3	50.6	48.4	45.6	48.1	47.7
Germany	75.5	71.8	69.5	69.5	67.1	65.0	63.7	62.1
Estonia	-	-	76.3	76.2	73.8	70.2	69.7	66.6
Ireland	-	-	-	-	33.0	29.5	26.4	23.8
Greece	-	-	-	-	91.4	91.3	91.0	91.9
Spain	70.2	69.5	69.3	71.1	72.6	71.0	69.2	68.2
France	70.0	67.4	66.6	69.5	67.6	66.1	65.7	65.3
Italy	-	-	-	-	70.6	68.3	65.9	64.1
Cyprus	-	-	-	-	42.6	35.9	35.3	33.4
Latvia	83.1	82.3	83.8	82.7	80.8	80.2	80.2	77.3
Lithuania	79.5	81.5	81.9	79.5	79.4	78.8	75.1	73.7
Luxembourg	29.1	23.5	19.6	18.9	14.3	12.6	10.4	9.7
Malta	27.1	25.6	27.4	25.1	24.7	22.8	22.8	20.1
Netherlands	-	-	27.3	26.8	25.1	23.5	22.7	23.1
Austria	70.2	67.9	66.8	68.2	64.9	63.5	61.3	60.1
Portugal	59.9	59.5	60.0	65.2	67.2	65.1	64.4	63.2
Slovenia	75.7	76.4	76.4	77.3	76.5	74.6	70.9	69.9
Slovakia	-	-	-	-	74.6	72.5	71.3	71.9
Finland	80.6	77.9	78.2	83.5	79.2	74.9	74.2	70.9
Euro area	-	-	-	-	55.2	52.1	48.4	47.6

Table 2.2

Ratio of assets of other financial institutions to total assets of the financial sector

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	32.1	37.1	36.9	37.8	38.1	40.7	37.2	37.2
Germany	11.7	13.9	15.3	15.3	16.7	17.3	18.0	19.2
Estonia	-	-	15.7	15.5	16.9	20.0	20.0	22.5
Ireland	-	-	-	-	58.6	61.4	64.9	67.8
Greece	-	-	-	-	5.2	4.9	5.0	4.4
Spain	22.7	23.2	23.4	21.3	19.5	19.9	21.3	21.7
France	15.0	16.0	16.3	14.5	14.8	15.6	15.2	15.4
Italy	-	-	-	-	19.1	20.1	21.3	21.5
Cyprus	-	-	-	-	54.7	61.6	62.1	64.3
Latvia	13.3	12.6	10.3	10.0	11.1	12.5	11.6	13.9
Lithuania	15.6	12.3	11.6	13.7	12.5	12.8	16.2	16.7
Luxembourg	69.2	74.5	78.2	79.0	83.7	85.4	87.8	88.6
Malta	71.4	72.4	70.1	70.4	70.9	72.6	72.1	74.6
Netherlands	-	-	57.2	57.5	58.4	59.8	59.1	59.0
Austria	22.8	24.4	24.9	23.6	26.2	27.2	28.7	29.9
Portugal	30.0	30.4	30.5	26.1	23.9	25.4	24.6	25.7
Slovenia	15.1	13.9	12.9	11.4	10.7	11.0	13.4	13.6
Slovakia	-	-	-	-	10.6	11.1	12.0	12.6
Finland	10.1	12.1	12.8	9.3	12.8	16.0	16.7	19.5
Euro area	-	-	-	35.2	32.4	34.6	38.0	39.0

Source: ECB (EAA, MFI BSI statistics) and ECB calculations.
Note: Data reported in the EAA refer to financial assets.

Table 2.3
Ratio of assets of pension funds to total assets of the financial sector

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	0.5	0.6	0.6	0.6	0.7	0.9	1.0	1.1
Germany	2.3	2.7	2.9	3.0	3.4	3.5	3.7	4.0
Estonia	-	-	4.3	4.7	5.7	6.4	7.3	7.8
Ireland	-	-	-	-	2.3	2.6	2.5	2.5
Greece	-	-	-	-	-	0.1	0.1	0.1
Spain	2.1	2.2	2.2	2.2	2.3	2.7	3.0	3.2
France	-	-	-	-	-	-	-	-
Italy	-	-	-	-	1.1	1.2	1.4	1.5
Cyprus	-	-	-	-	1.6	1.3	1.2	1.0
Latvia	2.0	3.1	3.7	4.1	4.8	5.3	6.1	6.5
Lithuania	2.0	3.1	3.7	3.9	4.6	5.3	5.7	6.5
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malta	-	-	-	-	0.0	-	0.0	-
Netherlands	-	-	10.2	10.4	11.4	11.7	13.0	12.9
Austria	0.8	0.9	1.0	1.0	1.1	1.3	1.4	1.4
Portugal	2.5	2.5	2.0	1.7	1.6	1.7	2.2	2.3
Slovenia	2.1	2.4	2.8	3.1	3.2	3.6	3.9	4.3
Slovakia	-	-	-	-	4.5	9.2	8.7	8.3
Finland	0.7	0.7	0.7	0.5	0.5	0.4	0.4	0.4
Euro area	-	-	-	-	2.7	2.8	3.0	3.0

Table 2.4
Ratio of assets of insurance corporations to total assets of the financial sector

(percentages)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	9.8	10.6	11.2	11.0	12.8	12.8	13.7	14.0
Germany	10.6	11.6	12.3	12.3	12.8	14.3	14.6	14.8
Estonia	-	-	3.7	3.6	3.6	3.4	3.0	3.1
Ireland	-	-	-	-	6.1	6.5	6.1	5.9
Greece	-	-	-	-	3.3	3.8	3.9	3.6
Spain	5.0	5.1	5.1	5.4	5.6	6.4	6.6	7.0
France	15.0	16.6	17.1	16.0	17.5	18.3	19.1	19.4
Italy	-	-	-	-	9.2	10.3	11.4	13.0
Cyprus	-	-	-	-	1.2	1.2	1.4	1.2
Latvia	1.7	2.0	2.2	3.2	3.2	2.0	2.0	2.2
Lithuania	2.9	3.1	2.8	2.9	3.4	3.2	2.9	3.2
Luxembourg	1.7	2.0	2.2	2.1	2.0	2.0	1.8	1.7
Malta	1.5	2.0	2.5	4.5	4.4	4.5	5.1	5.2
Netherlands	-	-	5.3	5.3	5.2	5.0	5.2	4.9
Austria	6.3	6.8	7.3	7.2	7.8	8.1	8.6	8.6
Portugal	7.5	7.6	7.5	7.0	7.4	7.8	8.8	8.8
Slovenia	7.1	7.2	7.9	8.2	9.6	10.8	11.8	12.1
Slovakia	-	-	-	-	10.3	7.2	8.0	7.2
Finland	8.7	9.3	8.3	6.8	7.6	8.6	8.7	9.2
Euro area	-	-	-	-	9.8	10.5	10.6	10.4

Source: ECB (EAA, MFI BSI statistics) and ECB calculations.
Note: Data reported in the EAA refer to financial assets.

Table 3.1

Composition of financing provided to non-financial corporations by euro area financial institutions, by sector and by instrument

(percentages based on stocks at the end of the period)

Sector / instrument	Loans			Debt securities			Quoted shares		
	2013	2014	2015	2013	2014	2015	2013	2014	2015
MFIs	75.4	73.6	73.0	23.4	19.6	19.9	12.5	10.9	8.6
OFIs excl. non-MMF IFs	23.4	25.0	25.6	3.9	6.4	6.0	9.2	21.0	21.9
ICPFs	0.9	0.9	1.1	42.3	41.7	41.5	13.0	11.6	12.3
IFs	0.3	0.4	0.4	30.5	32.2	32.6	65.3	56.5	57.2

Table 3.2

Financing provided to non-financial corporations by the euro area financial sector in relation to nominal GDP and to total financing received, by instrument

(percentages)

	% of nominal GDP			% share of total financing received by NFCs		
	2013	2014	2015	2013	2014	2015
Loans	52.8	52.9	51.9	58.7	58.3	56.0
Debt securities	7.6	8.3	8.4	69.1	69.7	69.9
Quoted shares	9.9	11.8	13.0	24.2	27.3	27.3

Source: ECB (EAA) and ECB calculations.
Note: In Table 3.2, total financing received by NFCs includes inter-company loans and holdings of securities and quoted shares.

Table 4.1

Financing provided by the domestic financial sector to domestic NFCs

(EUR billions)

	ICPFs		MFIs		OFIs	
	2014	2015	2014	2015	2014	2015
Belgium	15.1	15.6	98.5	103.1	78.0	86.8
Germany	39.5	42.1	789.8	801.2	158.8	175.1
Estonia	0.1	0.1	6.5	6.9	2.3	2.0
Ireland	1.0	2.1	60.6	47.5	77.8	98.7
Greece	0.1	0.1	96.3	90.2	6.3	6.9
Spain	8.6	6.6	558.9	524.9	130.1	125.7
France	197.8	205.1	921.1	960.8	205.6	224.8
Italy	13.0	21.1	874.0	861.1	139.8	151.4
Cyprus	0.1	0.1	22.2	22.2	0.8	1.6
Latvia	0.1	0.1	6.2	6.2	1.4	1.6
Lithuania	0.0	0.0	7.4	7.6	1.5	1.5
Luxembourg	0.4	0.9	16.5	19.5	72.9	76.0
Malta	0.1	0.1	3.9	3.8	0.2	0.3
Netherlands	15.5	16.3	342.6	306.1	60.7	75.4
Austria	4.1	4.2	154.7	154.8	14.6	14.3
Portugal	3.7	3.3	96.5	93.9	25.9	26.1
Slovenia	0.5	0.5	11.6	10.4	2.3	1.9
Slovakia	0.2	0.2	14.8	16.1	3.0	3.3
Finland	7.0	0.5	60.6	59.9	13.4	14.3
Euro area	307.0	319.1	4,142.6	4,096.3	995.4	1,087.6

Table 4.2

Financing provided by the domestic financial sector to other euro area NFCs

(EUR billions)

	ICPFs		MFIs		OFIs	
	2014	2015	2014	2014	2015	2014
Belgium	19.2	20.4	16.2	19.1	132.9	113.2
Germany	19.5	19.9	126.6	133.1	316.5	350.5
Estonia	0.1	0.1	0.1	0.1	0.2	0.3
Ireland	-	-	-	-	-	-
Greece	0.0	0.2	1.2	1.4	0.1	0.2
Spain	13.5	14.4	27.0	30.5	13.5	15.6
France	75.2	81.1	78.6	76.5	102.9	119.6
Italy	28.7	37.5	7.8	11.7	18.8	18.6
Cyprus	0.2	0.0	1.3	2.4	1.0	0.9
Latvia	0.1	0.1	0.6	0.7	0.0	0.1
Lithuania	0.0	0.0	0.1	0.1	0.2	0.1
Luxembourg	5.7	6.1	45.5	50.9	722.0	835.9
Malta	0.7	0.8	1.5	1.0	0.7	0.8
Netherlands	34.7	37.6	129.0	151.3	468.9	458.1
Austria	1.9	1.9	38.7	36.2	18.6	20.0
Portugal	17.1	16.5	12.7	15.3	12.1	10.2
Slovenia	0.5	0.6	0.2	0.3	0.3	0.4
Slovakia	0.5	0.5	1.4	1.0	0.2	0.1
Finland	2.8	2.8	2.0	2.1	6.7	7.6
Euro area	220.3	240.6	490.4	533.7	1,815.6	1,951.9

Source: ECB (EAA) and ECB calculations.
Notes: Financing is computed for three instruments combined: loans, securities and shares. Data for foreign exposures in Ireland are not reported due to confidentiality reasons.

Table 5
Number of credit institutions and foreign branches

Number of credit institutions

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	49	48	48	47	44	39	43	37
Germany	1,882	1,840	1,819	1,789	1,762	1,734	1,698	1,666
Estonia	6	7	7	7	8	24	30	32
Ireland	472	468	461	448	442	431	414	382
Greece	36	36	36	34	30	21	21	18
Spain	282	271	255	249	230	204	144	134
France	672	660	635	611	596	579	413	416
Italy	729	717	697	672	635	611	592	575
Cyprus	137	130	127	116	110	74	32	32
Latvia	21	21	21	22	20	54	49	51
Lithuania	77	78	77	83	86	84	82	82
Luxembourg	120	118	118	114	112	121	110	102
Malta	23	23	26	26	28	27	24	25
Netherlands	266	262	254	250	224	204	177	161
Austria	771	760	750	736	721	701	677	648
Portugal	147	139	133	131	129	127	130	127
Slovenia	21	22	22	22	20	20	20	19
Slovakia	17	15	15	14	14	13	13	13
Finland	334	328	318	305	290	279	262	248
euro area	6,062	5,943	5,819	5,676	5,501	5,347	4,931	4,769
EU	8,570	8,383	8,237	8,062	7,868	7,747	7,352	7,110

Number of foreign branches

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	56	55	58	61	59	64	65	60
Germany	103	104	108	110	108	109	105	108
Estonia	11	10	11	10	8	7	7	7
Ireland	32	33	34	38	36	34	33	34
Greece	30	30	26	23	22	20	20	22
Spain	87	89	88	87	85	85	84	84
France	99	98	95	92	87	91	90	91
Italy	84	82	77	79	78	81	79	80
Cyprus	23	25	25	25	27	27	24	24
Latvia	6	8	10	9	9	9	10	10
Lithuania	7	7	9	9	8	7	7	8
Luxembourg	40	37	37	35	36	37	40	40
Malta	3	3	3	3	3	3	3	3
Netherlands	32	33	33	35	36	39	39	42
Austria	30	29	30	30	29	30	30	30
Portugal	28	27	26	24	23	24	22	18
Slovenia	3	3	3	3	3	3	4	4
Slovakia	9	11	14	17	14	15	15	14
Finland	22	22	24	24	22	22	30	32
euro area	705	706	711	714	693	707	707	706
EU	982	976	983	990	967	978	986	982

Sources: ECB (SSI statistics), ECB list of financial institutions and Latvijas Banka.
Note: Figures for Latvia include credit unions starting from 2013.

Table 6

Total assets of domestic banking groups and foreign-controlled subsidiaries and branches

(EUR billions)

Domestic banking groups

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	1,201	590	590	556	520	469	495	493
Germany	9,005	7,767	7,517	7,577	7,257	6,457	6,750	6,649
Estonia	0	0	0	1	1	1	1	1
Ireland	538	517	448	381	352	275	260	249
Greece	358	386	395	343	346	356	358	344
Spain	3,287	3,404	3,498	3,604	3,595	3,271	3,345	3,471
France	6,874	6,101	6,173	6,451	6,583	6,154	6,760	6,563
Italy	2,522	2,475	2,536	2,547	2,603	2,405	2,476	2,511
Cyprus	87	96	111	98	87	51	49	59
Latvia	11	10	10	10	11	12	15	17
Lithuania	4	5	6	2	1	2	2	2
Luxembourg	133	91	62	98	90	90	94	98
Malta	8	9	10	10	12	13	15	16
Netherlands	2,874	2,530	2,364	2,514	2,415	2,252	2,359	2,346
Austria	830	868	857	874	848	788	751	720
Portugal	376	401	414	399	385	368	338	313
Slovenia	38	41	41	38	35	30	27	27
Slovakia	2	3	4	6	6	7	10	10
Finland	116	118	126	140	149	150	163	178
Euro area	28,247	25,397	25,144	25,639	25,283	23,136	24,265	24,067

Foreign subsidiaries and branches

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	219	600	561	591	528	491	501	477
Germany	1,005	861	379	419	309	278	312	306
Estonia	37	33	30	19	20	20	21	22
Ireland	1,083	822	732	812	647	514	243	233
Greece	100	104	98	82	63	13	11	6
Spain	350	328	309	309	289	217	231	193
France	276	215	212	223	227	189	427	377
Italy	236	236	229	247	252	227	225	213
Cyprus	39	48	44	40	38	26	27	14
Latvia	22	19	19	16	17	17	16	15
Lithuania	25	23	20	21	21	20	22	22
Luxembourg	875	783	704	697	650	628	717	713
Malta	36	34	41	41	42	38	37	31
Netherlands	121	118	349	318	273	181	169	182
Austria	345	272	274	293	316	301	328	337
Portugal	101	109	118	114	112	94	88	95
Slovenia	15	15	15	15	14	13	14	14
Slovakia	60	49	50	49	49	50	53	57
Finland	270	264	337	494	450	372	410	369
Euro area	5,071	4,860	4,454	4,761	4,280	3,653	3,831	3,677

Source: ECB (CBD).

Table 7

Total assets of domestic banking groups and foreign-controlled subsidiaries and branches in relation to GDP

(ratio)

Domestic banking groups

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	3.4	1.7	1.6	1.5	1.3	1.2	1.2	1.2
Germany	3.5	3.2	2.9	2.8	2.6	2.3	2.3	2.2
Estonia	0.02	0.0	0.0	0.1	0.0	0.0	0.1	0.1
Ireland	2.9	3.1	2.7	2.2	2.0	1.5	1.4	1.2
Greece	1.5	1.6	1.7	1.7	1.8	2.0	2.0	2.0
Spain	2.9	3.2	3.2	3.4	3.4	3.2	3.2	3.2
France	3.4	3.1	3.1	3.1	3.2	2.9	3.2	3.0
Italy	1.5	1.6	1.6	1.6	1.6	1.5	1.5	1.5
Cyprus	4.6	5.2	5.8	5.0	4.5	2.8	2.8	3.4
Latvia	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.7
Lithuania	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.1
Luxembourg	3.5	2.5	1.6	2.3	2.1	1.9	1.9	1.9
Malta	1.3	1.4	1.5	1.5	1.6	1.6	1.8	1.8
Netherlands	4.5	4.1	3.7	3.9	3.7	3.4	3.6	3.5
Austria	2.8	3.0	2.9	2.8	2.7	2.4	2.3	2.1
Portugal	2.1	2.3	2.3	2.3	2.3	2.2	1.9	1.7
Slovenia	1.0	1.1	1.1	1.0	1.0	0.8	0.7	0.7
Slovakia	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Finland	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.9
Euro area	3.0	2.8	2.7	2.6	2.6	2.3	2.4	2.3

Foreign subsidiaries and branches

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	0.6	1.7	1.5	1.6	1.4	1.3	1.3	1.2
Germany	0.4	0.3	0.1	0.2	0.1	0.1	0.1	0.1
Estonia	2.2	2.3	2.1	1.1	1.1	1.1	1.1	1.1
Ireland	5.8	4.9	4.4	4.7	3.7	2.9	1.3	1.1
Greece	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.0
Spain	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
France	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Italy	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1
Cyprus	2.1	2.6	2.3	2.0	1.9	1.5	1.5	0.8
Latvia	0.9	1.0	1.1	0.8	0.8	0.7	0.7	0.6
Lithuania	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6
Luxembourg	23.2	21.6	17.8	16.5	14.9	13.5	14.7	13.7
Malta	5.9	5.5	6.2	6.0	5.8	4.9	4.6	3.6
Netherlands	0.2	0.2	0.6	0.5	0.4	0.3	0.3	0.3
Austria	1.2	1.0	0.9	0.9	1.0	0.9	1.0	1.0
Portugal	0.6	0.6	0.7	0.6	0.7	0.6	0.5	0.5
Slovenia	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Slovakia	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7
Finland	1.4	1.5	1.8	2.5	2.3	1.8	2.0	1.8
Euro area	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4

Source: ECB (CBD) and ECB calculations.
Note: Differences from Table 1 are mainly due to differences between locational (QSA) data and consolidated banking data.

Table 8.1

Composition of banking sector assets by type of credit institution

(percentages)

Domestic credit institutions

	2009	2010	2011	2012	2013	2014	2015
Belgium	39	40	35	36	35	34	36
Germany	89	89	88	88	89	88	88
Estonia	1	6	11	4	4	5	6
Ireland	50	56	52	52	51	48	55
Greece	79	80	81	84	97	98	98
Spain	90	90	91	91	92	92	93
France	89	90	90	89	91	91	92
Italy	88	87	86	87	88	87	87
Cyprus	63	69	64	64	69	68	84
Latvia	31	31	35	33	40	44	44
Lithuania	17	20	12	13	12	11	43
Luxembourg	9	6	6	7	8	6	7
Malta[1]	21	19	20	22	25	29	33
Netherlands	95	85	87	89	92	93	93
Austria	80	80	79	78	77	75	73
Portugal	77	78	79	79	81	80	77
Slovenia	71	72	72	71	69	66	66
Slovakia	4	4	4	4	4	4	4
Finland	33	29	28	33	35	33	38

Sources: ECB (MFI BSI statistics, SSI statistics), Latvijas Banka, Eesti Pank and ECB calculations.
1) Data for Malta are consolidated.

Table 8.2

Composition of banking sector assets by type of credit institution (cont'd)

(percentages)

Subsidiaries of credit institutions from EU countries

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	18.0	50.0	47.8	47.1	42.3	40.2	38.4	35.9
Germany	7.9	7.6	7.6	8.1	7.7	7.3	7.7	7.5
Estonia	-	82.1	65.1	61.6	63.7	63.9	63.9	62.1
Ireland	37.9	33.6	27.0	25.8	23.4	24.5	27.2	17.5
Greece	13.6	13.3	12.8	8.1	7.5	0.2	0.2	0.2
Spain	3.3	3.3	3.3	3.4	3.3	3.3	2.5	1.6
France	8.9	8.0	7.7	7.4	8.1	6.2	6.1	4.8
Italy	5.6	5.6	6.0	5.9	6.1	5.8	5.8	5.6
Cyprus	30.4	32.7	25.2	20.6	16.0	13.3	14.2	11.0
Latvia	-	42.7	40.4	36.7	34.8	33.3	28.8	28.4
Lithuania	67.2	65.8	61.5	54.5	52.4	54.5	53.5	56.9
Luxembourg	68.8	68.1	71.0	68.0	66.8	63.1	56.3	53.0
Malta	-	35.2	36.5	34.8	31.9	24.7	17.4	17.0
Netherlands	0.7	0.6	10.3	7.3	3.8	2.6	1.7	1.5
Austria	17.9	13.8	13.6	14.3	14.8	15.3	16.2	17.4
Portugal	15.8	15.8	14.4	13.4	12.1	12.7	13.5	17.3
Slovenia	29.8	28.2	27.2	27.1	27.8	28.7	31.1	31.9
Slovakia	88.5	89.2	89.2	88.6	88.3	88.9	82.2	82.1
Finland	64.6	62.7	65.6	65.4	60.0	59.4	61.5	55.8

Branches of credit institutions from EU countries

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	3.6	3.6	3.9	6.6	8.3	10.6	13.4	12.4
Germany	2.0	2.1	2.0	2.3	3.2	2.5	2.5	3.3
Estonia	-	16.8	27.2	27.6	28.6	27.2	25.9	26.2
Ireland	9.5	9.5	10.3	12.1	14.2	13.2	14.3	15.9
Greece	8.4	7.6	7.0	10.8	8.7	2.5	2.2	1.3
Spain	6.8	6.4	5.9	5.7	5.3	4.2	3.5	3.4
France	1.9	1.8	1.6	1.5	1.6	1.4	1.5	1.6
Italy	7.3	6.2	6.6	7.0	6.7	6.0	6.2	6.5
Cyprus	3.5	0.8	1.1	1.5	1.8	1.4	1.0	0.6
Latvia	-	12.0	12.1	12.3	13.4	11.8	12.8	10.5
Lithuania	17.6	17.6	18.1	18.9	19.7	18.2	19.8	0.0
Luxembourg	13.8	14.3	12.7	11.3	11.6	11.1	13.3	14.9
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0	49.6
Netherlands	2.9	2.9	3.2	4.2	5.4	3.8	3.4	4.0
Austria	1.1	1.1	1.1	1.1	1.2	1.4	1.6	1.7
Portugal	5.8	6.4	6.8	7.5	8.1	6.5	6.6	5.4
Slovenia	1.0	0.9	1.0	1.3	1.5	2.0	2.5	2.6
Slovakia	6.6	6.9	6.6	7.0	7.7	7.2	13.9	14.2
Finland	4.9	4.4	5.0	6.1	7.0	5.4	5.7	6.5

Sources: ECB (MFI BSI statistics, SSI statistics), Latvijas Banka, Eesti Pank and ECB calculations.
1) Due to confidentiality reasons, data for Malta combine branches of credit institutions from EU countries and branches and subsidiaries of credit institutions from the rest of the world.

Table 8.3

Composition of banking sector assets by type of credit institution (cont'd)

(percentages)

Subsidiaries of credit institutions from the rest of the world

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	0.4	3.1	3.5	4.6	6.3	6.4	4.7	5.4
Germany	1.1	0.7	0.8	0.6	0.7	0.8	0.8	0.8
Estonia	-	0.0	1.7	0.0	4.1	4.6	5.2	5.9
Ireland	8.3	6.8	6.9	10.0	10.3	11.2	10.4	11.2
Greece	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spain	0.3	0.3	0.2	0.2	0.3	0.4	2.3	2.1
France	0.9	0.8	0.7	0.7	0.8	0.8	0.8	0.8
Italy	0.2	0.4	0.5	0.5	0.4	0.4	0.4	0.3
Cyprus	0.0	0.0	0.0	9.2	11.9	10.5	10.4	0.0
Latvia	-	14.7	16.5	16.1	18.4	15.3	14.7	9.4
Lithuania	0.0	0.0	0.0	14.3	14.7	15.3	15.5	0.0
Luxembourg	8.5	5.9	8.2	10.1	11.1	13.0	18.4	18.5
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0	49.6
Netherlands	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6
Austria	4.7	4.7	4.8	5.5	6.2	6.4	7.0	7.5
Portugal	1.0	0.9	0.9	0.5	0.4	0.3	0.3	0.0
Slovenia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Branches of credit institutions from the rest of the world

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	4.9	4.0	4.4	6.2	7.2	8.2	9.1	10.5
Germany	0.5	0.4	0.5	0.6	0.6	0.6	0.7	0.7
Estonia	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ireland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greece	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2
Spain	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
France	0.3	0.2	0.2	0.3	0.4	0.3	0.4	0.5
Italy	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3
Cyprus	4.7	3.8	4.7	4.9	5.7	5.8	6.1	4.0
Latvia	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Luxembourg	4.5	2.4	2.1	4.5	3.6	4.6	6.0	6.4
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0	49.6
Netherlands	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1
Austria	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Portugal	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovenia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Slovakia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: ECB (MFI BSI statistics, SSI statistics), Latvijas Banka, Eesti Pank and ECB calculations.
1) Due to confidentiality reasons, data for Malta combine branches of credit institutions from EU countries and branches and subsidiaries of credit institutions from the rest of the world.

Table 9.1
Population per credit institution

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	101,971	103,750	102,670	101,648	107,320	107,816	108,320	113,253
Germany	40,605	41,316	41,619	42,295	43,032	43,782	44,791	45,992
Estonia	78,729	74,206	74,072	78,218	82,825	42,587	35,562	33,674
Ireland	8,974	9,115	9,325	9,536	9,725	10,048	10,347	11,159
Greece	167,846	168,288	179,377	191,465	212,405	274,131	272,310	271,450
Spain	127,025	131,726	138,168	139,511	148,938	160,666	205,593	212,963
France	88,357	90,808	94,714	98,930	102,684	105,822	133,522	142,407
Italy	72,423	74,380	76,902	79,655	84,509	87,387	90,730	92,570
Cyprus	4,826	5,213	5,457	6,035	6,306	8,534	14,956	15,089
Latvia	64,051	57,892	53,777	66,414	70,126	31,949	33,809	32,423
Lithuania	38,074	37,211	35,601	32,914	31,785	32,502	32,948	32,277
Luxembourg	3,197	3,389	3,476	3,684	3,770	3,710	3,772	3,977
Malta	17,799	17,933	15,941	16,010	14,980	15,680	15,831	15,404
Netherlands	54,437	56,020	57,283	58,164	62,977	66,403	77,353	81,014
Austria	10,363	10,559	10,719	10,951	11,220	11,597	12,085	12,715
Portugal	60,333	63,664	66,082	68,114	69,176	69,254	69,341	70,463
Slovenia	80,879	81,666	81,953	82,114	89,425	89,546	85,908	89,711
Slovakia	207,918	208,375	187,240	174,133	193,080	193,322	193,520	200,828
Finland	14,883	15,298	15,868	16,478	17,297	17,950	20,158	19,499
Euro area	47,680	49,640	50,695	52,214	53,989	55,389	59,784	62,155

Sources: ECB (SSI statistics), Eurostat and ECB calculations.

Table 9.2

Population per local branch

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	2,481	2,568	2,739	2,829	2,894	2,971	3,093	3,192
Germany	2,043	2,072	2,104	2,131	2,219	2,231	2,295	2,397
Estonia	5,208	6,271	6,600	7,470	8,130	9,430	10,785	12,274
Ireland	5,024	3,696	3,924	4,165	4,310	4,494	4,643	6,877
Greece	2,704	2,723	2,777	2,887	3,044	3,527	4,052	4,270
Spain	998	1,044	1,079	1,165	1,226	1,382	1,452	1,493
France	1,630	1,688	1,675	1,699	1,711	1,741	1,760	1,770
Italy	1,734	1,751	1,779	1,790	1,836	1,910	1,979	1,993
Cyprus	852	869	910	943	1,016	1,264	1,386	1,501
Latvia	3,310	3,433	3,573	3,750	5,084	5,868	6,253	7,166
Lithuania	3,287	3,254	3,257	4,479	4,336	4,509	4,807	5,206
Luxembourg	2,127	2,204	2,256	2,298	2,383	2,456	2,526	2,550
Malta	3,688	3,618	3,668	3,890	3,920	3,849	3,886	3,957
Netherlands	4,806	5,268	5,800	6,292	6,793	7,760	9,095	9,599
Austria	1,961	2,002	2,005	1,893	1,889	1,948	2,012	2,106
Portugal	1,645	1,618	1,605	1,624	1,680	1,747	1,752	1,850
Slovenia	2,897	2,892	2,952	2,988	2,959	3,269	3,483	3,503
Slovakia	4,297	4,405	4,436	5,221	5,095	4,310	4,243	4,200
Finland	3,178	3,471	3,636	3,726	3,856	4,184	4,598	5,213
Euro area	1,723	1,783	1,813	1,870	1,930	2,024	2,102	2,170

Sources: ECB (SSI statistics), Eurostat and ECB calculations.

Table 10
Population per bank employee and assets per bank employee

Population per bank employee

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	162	169	176	179	184	191	197	201
Germany	118	119	120	121	122	123	125	126
Estonia	218	235	243	241	238	272	271	264
Ireland	111	119	125	129	144	154	160	171
Greece	167	169	175	185	194	214	239	236
Spain	166	173	178	190	200	216	230	236
France	152	155	157	153	156	158	162	163
Italy	175	184	186	190	195	198	203	203
Cyprus	63	65	66	66	67	77	78	77
Latvia	157	173	182	184	192	201	213	210
Lithuania	289	290	310	348	345	352	328	344
Luxembourg	18	19	19	19	20	21	22	22
Malta	106	108	106	103	105	101	97	94
Netherlands	142	150	154	158	162	174	179	188
Austria	106	108	107	107	109	112	115	118
Portugal	169	172	172	176	183	187	193	197
Slovenia	165	168	171	174	179	184	193	198
Slovakia	262	289	298	293	290	292	290	287
Finland	207	215	230	232	241	243	248	251
Euro area	140	147	149	152	156	160	165	169

Assets per bank employee

(EUR thousands)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	19,258	18,133	18,313	19,550	18,052	17,524	19,431	19,024
Germany	11,488	11,023	12,408	12,634	12,470	11,477	11,999	11,852
Estonia	3,598	3,748	3,700	3,448	3,536	4,104	4,415	4,668
Ireland	34,863	34,669	32,055	28,808	27,466	24,826	23,743	22,634
Greece	6,986	7,473	8,103	7,942	7,743	7,937	8,696	8,365
Spain	12,229	12,840	13,248	14,690	15,255	14,555	14,707	14,348
France	17,019	17,169	17,953	18,833	18,302	18,155	19,286	19,211
Italy	10,752	11,412	11,707	12,754	13,607	13,171	13,395	13,111
Cyprus	9,411	11,138	10,675	10,277	9,969	8,103	8,320	8,287
Latvia	2,319	2,420	2,657	2,621	2,683	2,917	3,292	3,397
Lithuania	2,395	2,401	2,569	2,836	2,814	2,864	2,847	2,938
Luxembourg	34,239	30,189	29,299	29,841	27,800	27,291	28,163	28,739
Malta	10,920	10,731	12,749	12,700	13,304	11,940	11,847	10,305
Netherlands	19,216	20,132	20,917	22,678	23,672	22,768	26,062	27,671
Austria	13,414	13,300	12,500	12,919	12,586	12,022	11,819	11,650
Portugal	7,729	8,445	9,086	9,568	9,691	9,185	8,657	8,504
Slovenia	3,988	4,380	4,419	4,436	4,415	4,125	4,076	3,978
Slovakia	3,101	2,905	3,092	3,124	3,193	3,287	3,439	3,653
Finland	14,939	15,581	20,131	27,296	26,524	23,296	26,153	25,341
Euro area	13,419	13,477	14,180	14,956	14,910	14,243	14,920	14,784

Source: ECB (SSI statistics) and ECB calculations.

Table 11

Herfindahl index for credit institutions and share of total assets of the five largest credit institutions

Herfindahl index for credit institutions1

(index ranging from 0 to 10,000)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	1,881	1,622	1,439	1,294	1,061	979	981	998
Germany	191	206	301	317	307	266	300	273
Estonia	3,120	3,090	2,929	2,613	2,493	2,483	2,445	2,409
Ireland	661	714	700	647	632	674	677	679
Greece	1,172	1,183	1,214	1,278	1,487	2,136	2,195	2,254
Spain	497	507	528	596	654	719	839	896
France	681	605	610	600	545	568	584	589
Italy	307	298	410	407	410	406	424	435
Cyprus	1,017	1,085	1,125	1,030	1,007	1,645	1,445	1,443
Latvia	1,205	1,181	1,005	929	1,027	1,037	1,001	1,033
Lithuania	1,714	1,693	1,545	1,871	1,749	1,892	1,818	1,939
Luxembourg	309	310	343	346	345	357	329	321
Malta	1,236	1,250	1,181	1,203	1,313	1,458	1,647	1,621
Netherlands	2,167	2,034	2,049	2,067	2,026	2,105	2,131	2,104
Austria	454	414	383	423	395	405	412	397
Portugal	1,114	1,150	1,207	1,206	1,191	1,197	1,164	1,159
Slovenia	1,268	1,256	1,160	1,142	1,115	1,045	1,026	1,077
Slovakia	1,197	1,273	1,239	1,268	1,221	1,215	1,221	1,250
Finland	3,160	3,120	3,550	3,700	3,010	3,080	3,310	2,730
Euro area	676	649	688	710	677	689	732	722
EU	648	629	669	685	662	674	693	677

Share of total assets of the five largest credit institutions2

(percentage share of the five largest credit institutions)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	81	77	75	71	66	64	66	65
Germany	23	25	33	34	33	31	32	31
Estonia	95	93	92	91	90	90	90	89
Ireland	50	53	50	47	46	48	48	46
Greece	70	69	71	72	79	94	94	95
Spain	42	43	44	48	51	54	58	60
France	51	47	47	48	45	47	48	47
Italy	31	31	40	39	40	40	41	41
Cyprus	64	65	64	61	63	64	63	68
Latvia	70	69	60	60	64	64	64	65
Lithuania	81	80	79	85	84	87	86	87
Luxembourg	30	29	31	31	33	34	32	31
Malta	73	73	71	72	74	76	81	81
Netherlands	87	85	84	84	82	84	85	85
Austria	39	37	36	38	36	37	37	36
Portugal	69	70	71	71	70	70	69	70
Slovenia	59	60	59	59	58	57	56	59
Slovakia	72	72	72	72	71	70	71	72
Finland	83	83	84	81	79	84	80	75
Euro area	44	44	47	47	47	47	48	48
EU	44	44	47	47	47	47	47	46

Source: ECB (SSI statistics) and ECB calculations.
1) The Herfindahl index (HI) refers to the concentration of banking business. The HI is obtained by summing the squares of the market shares of all the credit institutions in the banking sector. The exact formula according to which data must be transmitted to the ECB is given in the ECB Guideline on monetary financial institutions and markets statistics (recast) (ECB/2007/9). 2) Banking sector and individual figures are reported on an unconsolidated basis.

Table 12
Financial assets of euro area insurance corporations and pension funds

(EUR billions)

Financial assets of insurance corporations

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	215.5	236.0	248.6	255.5	283.9	284.7	316.9	317.5
Germany	1,416.5	1,452.2	1513.1	1,542.9	1,651.1	1,695.7	1,841.4	1,897.2
Estonia	-	0.7	0.8	0.8	0.8	0.8	0.9	0.9
Ireland	-	-	-	-	-	-	-	-
Greece	13.5	14.3	14.7	13.9	14.7	15.5	15.4	15.6
Spain	234.0	245.6	244.2	253.5	262.6	272.2	274.9	276.5
France	1,580.7	1,760.5	1,895.6	1,874.7	2,076.6	2,182.1	2,398.5	2,469.7
Italy	462.5	519.3	508.4	503.0	541.1	592.6	679.1	768.9
Cyprus	-	-	-	-	-	-	-	-
Latvia	0.6	0.7	0.8	1.1	1.1	1.1	0.9	1.1
Lithuania	1.2	1.2	1.0	1.0	1.0	1.0	1.2	1.4
Luxembourg	81.3	101.2	121.0	122.1	134.0	142.7	162.6	180.5
Malta	-	-	-	-	-	-	-	-
Netherlands	356.1	373.9	403.5	428.2	458.2	442.6	503.4	474.8
Austria	103.8	110.5	116.0	116.8	126.2	125.7	133.2	134.1
Portugal	56.7	63.3	65.8	59.5	59.2	59.5	64.5	62.4
Slovenia	4.5	4.9	5.3	5.1	6.1	6.4	7.0	6.9
Slovakia	-	5.9	6.2	6.2	6.6	6.6	7.0	6.2
Finland	41.5	47.2	51.8	51.8	55.9	59.2	65.3	69.7
Euro area	4,754	5,144	5,428	5,461	5,907	6,116	6,721	6,958

Financial assets of pension funds

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	10.4	12.7	14.1	14.3	15.8	19.6	22.2	24.4
Germany	298.3	327.4	387.4	404.9	444.6	469.6	509.2	536.7
Estonia	-	1.0	1.2	1.2	1.6	1.9	2.3	2.7
Ireland	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-
Spain	96.6	103.5	105.3	103.9	108.3	113.6	121.7	123.9
France	-	-	-	-	-	-	-	-
Italy	43.8	44.7	41.3	43.4	47.0	50.4	60.8	67.8
Cyprus	-	-	-	-	-	-	-	-
Latvia	0.8	1.1	1.3	1.4	1.7	1.9	2.3	2.7
Lithuania	0.7	1.0	1.2	1.2	1.4	1.6	1.9	2.2
Luxembourg	0.4	0.8	0.9	1.0	1.1	1.2	1.8	2.4
Malta	-	-	-	-	-	-	-	-
Netherlands	693.7	730.1	792.6	865.7	997.2	1,015.7	1,243.9	1,247.3
Austria	11.7	13.6	14.9	14.7	16.2	17.2	19.0	19.4
Portugal	19.6	21.1	18.7	14.8	13.8	14.2	16.0	16.5
Slovenia	1.4	1.7	2.0	2.2	2.0	2.1	2.5	2.7
Slovakia	-	3.9	4.9	5.8	6.8	7.2	7.9	7.9
Finland	4.3	4.8	4.7	5.9	4.4	3.8	4.0	4.1
Euro area	1,247	1,341	1,469	1,556	1,742	1,802	2,119	2,169

Source: ECB (ICPF balance sheet data).

Table 13

Total assets of other euro area non-bank financial entities

(EUR billions, 2015)

	MMFs	Equity funds	Bond funds	Mixed funds	Real estate funds	Hedge funds	Other funds	FVCs	Remaining OFIs
Belgium	12.3	30.2	19.3	74.3	-	-	13.7	74.9	633.9
Germany	3.8	255.9	396.5	840.8	184.6	2.9	114.1	51.1	719.4
Estonia	-	0.3	0.1	-	0.2	0.0	0.0	-	7.3
Ireland	473.7	612.2	615.7	235.6	14.8	220.7	94.0	432.1	784.4
Greece	0.5	1.1	1.1	0.7	2.5	-	0.2	-	15.2
Spain	8.3	26.7	79.1	66.1	1.7	2.1	77.0	227.1	381.3
France	318.7	339.9	281.5	393.1	62.6	2.4	202.7	210.4	613.8
Italy	6.0	34.3	112.8	126.2	60.8	10.7	-	305.4	658.2
Cyprus	-	2.2	0.0	0.4	-	0.0	0.3	-	166.3
Latvia	-	0.1	0.2	0.0	0.0	-	0.0	-	5.4
Lithuania	-	0.1	0.0	0.0	0.2	0.0	0.1	-	5.3
Luxembourg	256.1	1,189.6	1,289.6	973.3	61.7	36.0	101.6	190.3	5,376.1
Malta	0.1	2.2	1.3	1.5	0.1	1.9	3.0	0.8	170.1
Netherlands	9.9	257.5	269.6	17.0	104.8	28.3	85.4	305.6	4,636.9
Austria	0.1	23.8	71.1	68.1	6.4	0.2	-	-	250.7
Portugal	3.1	1.4	5.9	1.3	14.3	0.0	4.3	34.8	133.0
Slovenia	0.1	0.4	1.6	1.9	0.9	-	0.9	-	6.2
Slovakia	0.1	0.4	1.6	1.9	0.9	-	0.9	-	6.2
Finland	3.5	41.3	49.0	7.8	6.8	1.2	-	-	47.8
Euro area	1,096.2	2,819.4	3,196.0	2,810.2	523.4	306.4	698.2	1,832.3	14,617.7

Source: ECB (MFI BSI statistics, investment fund balance sheet statistics, FVC asset and liability statistics, EAA) and ECB calculations.
Note: "Remaining OFIs" excludes FVCs from the OFI sector accounts series S12O.

Table 14.1

Total assets of other euro area non-bank financial entities (cont'd)

(EUR billions)

Euro area MMFs

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	5.6	1.9	1.9	4.4	1.0	1.0	0.9	12.3
Germany	17.3	12.1	10.4	6.6	7.8	4.5	3.9	3.8
Estonia	-	-	-	-	-	-	-	-
Ireland	319.3	310.4	359.0	287.6	297.3	276.3	394.1	473.7
Greece	2.5	1.8	1.2	0.7	0.8	0.7	0.8	0.5
Spain	28.3	13.5	8.2	8.1	7.0	8.4	7.3	8.3
France	485.4	501.3	413.6	369.3	370.2	324.2	294.3	318.7
Italy	59.4	55.8	39.4	28.0	9.5	9.9	7.4	6.0
Cyprus	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	0.1	0.0	-
Lithuania	-	-	-	-	-	-	-	-
Luxembourg	340.2	319.4	284.6	302.7	224.3	198.8	223.8	256.1
Malta	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1
Netherlands	2.5	2.5	1.8	1.8	2.0	2.0	8.6	9.9
Austria	3.8	2.8	2.5	1.3	0.5	0.2	0.2	0.1
Portugal	0.0	0.0	0.0	0.1	1.3	2.4	2.5	3.1
Slovenia	1.6	1.8	1.8	0.4	0.2	0.1	0.1	0.1
Slovakia	1.6	1.8	1.8	0.4	0.2	0.1	0.1	0.1
Finland	12.3	11.8	10.3	11.4	3.2	3.4	3.4	3.5
Euro area	1,280	1,237	1,137	1,023	925	832	948	1,096

Euro area investment funds (excl. MMFs)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	86.1	93.9	93.9	78.6	87.0	103.7	124.0	137.6
Germany	934.5	1,060.0	1,172.3	1,179.5	1,350.4	1,461.2	1,652.0	1,794.8
Estonia	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6
Ireland	349.9	458.6	645.6	818.6	1,018.8	1,181.4	1,551.8	1,793.0
Greece	7.1	7.6	7.2	5.1	5.4	5.7	5.9	5.6
Spain	184.7	193.5	171.8	154.5	148.2	184.0	227.8	252.7
France	878.8	1,013.0	1,089.8	987.6	1,067.8	1,118.7	1,211.4	1,282.2
Italy	227.9	225.1	227.5	201.6	216.3	236.0	299.8	344.8
Cyprus	1.3	1.4	1.5	1.6	2.1	2.7	2.5	2.9
Latvia	-	0.1	0.2	0.2	0.2	0.3	0.2	0.3
Lithuania	0.1	0.1	0.2	0.1	0.2	0.2	0.3	0.4
Luxembourg	1,403.2	1,693.6	2,138.1	2,063.0	2,434.4	2,731.1	3,209.6	3,651.8
Malta	8.2	6.5	8.1	7.8	14.5	8.7	9.4	10.0
Netherlands	189.3	455.7	502.2	515.5	590.0	648.0	756.0	762.6
Austria	129.2	141.1	149.8	138.7	149.6	151.2	164.3	169.8
Portugal	29.4	33.3	30.9	27.5	27.7	27.2	28.7	27.2
Slovenia	1.7	1.7	2.0	2.9	3.6	4.6	5.4	5.7
Slovakia	1.7	1.7	2.0	2.9	3.6	4.6	5.4	5.7
Finland	29.8	43.3	53.5	45.7	66.8	75.5	93.0	106.1
Euro area	4,464	5,431	6,297	6,232	7,187	7,945	9,348	10,354

Source: ECB (MFI BSI statistics, investment fund balance sheet statistics) and ECB calculations.

Table 14.2

Total assets of other euro area non-bank financial entities (cont'd)

(EUR billions)

Financial vehicle corporations (FVCs)

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	-	76.5	87.4	99.1	100.7	94.3	85.3	74.9
Germany	-	83.9	72.6	63.7	48.5	46.4	43.5	51.1
Estonia	-	-	-	-	-	-	-	-
Ireland	-	538.2	576.1	499.6	441.9	418.5	402.8	432.1
Greece	-	-	-	-	-	-	-	-
Spain	-	487.9	496.4	457.3	356.1	279.7	257.0	227.1
France	-	151.4	155.2	209.5	203.8	213.2	221.3	210.4
Italy	-	386.5	339.1	354.4	341.2	329.3	315.9	305.4
Cyprus	-	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-
Luxembourg	-	111.6	108.8	117.7	120.4	129.9	142.3	190.3
Malta	-	-	-	-	0.4	0.9	2.1	0.8
Netherlands	-	479.8	459.3	432.5	401.0	361.4	341.5	305.6
Austria	-	3.5	3.3	3.1	2.9	2.7	-	-
Portugal	-	50.4	61.9	62.4	43.6	41.2	36.3	34.8
Slovenia	-	-	-	-	-	-	-	-
Slovakia	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-
Euro area	-	2,370	2,360	2,299	2,061	1,917	1,848	1,832

Remaining OFIs

	2008	2009	2010	2011	2012	2013	2014	2015
Belgium	621.2	654.4	635.7	701.2	661.4	709.1	653.3	633.9
Germany	669.8	649.4	711.7	751.2	828.9	672.7	714.2	719.4
Estonia	-	-	3.6	3.5	4.2	5.2	5.7	7.3
Ireland	-	-	-	-	595.9	464.9	658.6	784.4
Greece	-	-	-	-	19.2	15.7	15.4	15.2
Spain	879.4	436.4	455.5	395.1	414.9	387.6	403.0	381.3
France	805.8	642.9	687.6	613.2	610.9	648.0	622.5	613.8
Italy	-	-	-	-	591.7	616.0	680.3	658.2
Cyprus	-	-	-	-	154.7	147.9	153.3	166.3
Latvia	5.1	4.5	3.5	3.3	3.6	4.3	4.2	5.4
Lithuania	5.0	3.8	3.4	4.1	3.7	3.6	5.2	5.3
Luxembourg	1,715.0	1,756.9	1,994.5	2,410.1	3,055.8	3,355.0	4,748.6	5,376.1
Malta	108.7	113.8	123.3	138.0	145.9	153.7	160.8	170.1
Netherlands	-	-	3,486.8	3,815.9	4,139.8	4,184.9	4,497.8	4,636.9
Austria	207.4	219.5	206.6	204.1	230.7	232.4	238.9	250.7
Portugal	215.0	183.6	193.7	142.8	139.0	145.0	129.3	133.0
Slovenia	-	-	-	-	7.0	7.5	7.9	6.2
Slovakia	-	-	-	-	7.0	7.5	7.9	6.2
Finland	16.8	16.1	25.4	23.1	28.6	34.6	39.6	47.8
Euro area	5,249	4,681	8,531	9,206	11,643	11,795	13,746	14,618

Source: ECB (FVC asset and liability statistics, EAA) and ECB calculations.
Note: "Remaining OFIs" excludes FVCs from the OFI sector accounts series S12O.

Abbreviations

Countries

AT	Austria	IE	Ireland
BE	Belgium	IT	Italy
BG	Bulgaria	JP	Japan
CH	Switzerland	LT	Lithuania
CY	Cyprus	LU	Luxembourg
CZ	Czech Republic	LV	Latvia
DE	Germany	MT	Malta
DK	Denmark	NL	Netherlands
EA	euro area	PL	Poland
EE	Estonia	PT	Portugal
ES	Spain	RO	Romania
FI	Finland	SE	Sweden
FR	France	SI	Slovenia
GR	Greece	SK	Slovakia
HR	Croatia	UK	United Kingdom
HU	Hungary	US	United States

Others

ATM	automated teller machine
BSI	balance sheet item
CBD	consolidated banking data
CET1	common equity Tier 1
CI	credit institution
EAA	Euro Area Accounts
ECB	European Central Bank
EEA	European Economic Area
EIOPA	European Insurance and Occupational Pensions Authority
ESA	European System of Accounts
ESCB	European System of Central Banks
ESRB	European Systemic Risk Board
EU	European Union
FCL	financial corporation engaged in lending
FSB	Financial Stability Board
FSC	Financial Stability Committee
FSR	Financial Stability Review
FVC	financial vehicle corporation
HI	Herfindahl index
HHI	Herfindahl-Hirschman index
ICPFs	insurance corporations and pension funds
IF	investment fund
IFRS	International Financial Reporting Standards
IFS	International Financial Statistics
IFSU	investment fund shares/units
IMF	International Monetary Fund
M&A	merger and acquisition
MFI	monetary financial institution
MMF	money market fund
NCB	national central bank
NFC	non-financial corporation
non-MMF	non-money market investment fund
NPL	non-performing loan
OFI	other financial intermediary
QSA	Quarterly Sector Accounts
RFS	Report on financial structures
ROA	return on assets
ROE	return on equity
RWA	risk-weighted asset
SDD	securities and derivatives dealer
SFI	special financial institution
SHS	Securities Holdings Statistics
SHSS	SHS by Sector
SNA	System of National Accounts
SPE	special-purpose entity
SREP	Supervisory Review and Evaluation Process
SSI	(banking) structural statistical indicators
SSM	Single Supervisory Mechanism

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ISSN	**2467-0111**
ISBN	**978-92-899-2633-1**
DOI	**10.2866/0400**
EU catalogue No	**QB-BV-16-001-EN-N**