EUROPEAN CENTRAL BANK

EUROSYSTEM

Report on financial structures

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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. Like the ECB Banking Structures Report (BSR), which was published until 2014 and can be seen as a predecessor of the RFS, the RFS has a clear structural focus, thereby serving as a complement to the biannual ECB Financial Stability Review (FSR) which focuses more on cyclical factors.[1]

The RFS has a much wider scope than the BSR, covering not only the banking sector, but also other financial intermediaries, in particular insurance corporations and pension funds (ICPFs) as well as non-bank and non-insurance financial intermediaries, often labelled the “shadow banking” sector. Parts of the non-bank financial 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.

The period covered in this year’s RFS is not uniform. As regards the banking sector, the period covered is 2008 to 2014, with special attention being paid to the changes that have occurred since the publication of the last BSR in 2014. This time period includes the beginning of the financial crisis. In addition, some euro area countries have entered into (and in some cases already concluded) EU/IMF financial assistance programmes.[2] Not surprisingly, these developments have had, and in some cases are still having, a significant impact on developments in the euro area financial sector.

As regards ICPFs and “shadow banks”, the availability of data is more heterogeneous and generally more limited than for the banking sector. This is reflected in the RFS chapters dealing with these parts of the wider euro area financial sector. In addition, given that this year’s RFS provides the first regular review of these parts of the financial sector, the focus is more on the general description of the ICPF and “shadow banking” sectors than on developments during the last year.[3] This heterogeneity within the RFS is expected to gradually disappear in future editions of the report.

Chapter 1 presents the overall structure of the financial sector, looking at the relative importance of the different segments of the financial system in the euro area over

[1] The RFS focusses on euro area/Single Supervisory Mechanism (SSM) 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] At the time of publication of this report, EU/IMF financial assistance programmes were still in place for Greece and Cyprus. The programmes for Ireland, Spain (financial sector only) and Portugal were already concluded. Latvia also successfully concluded a programme during this period, but before entering the euro area.

[3] Last year’s BSR contained a special feature article called “Structural features of the wider euro area financial sector” which provided the basis for a regular analysis of structural features in non-bank financial market segments appearing for the first time in this year’s RFS.

time. It then analyses interconnectedness across different parts of the financial sector in order to fully assess possible structural risks to financial stability in the euro area. Looking at direct exposures between various parts of the financial sector in the euro area as a whole, the analysis shows that banks and other financial intermediaries (OFIs) are the largest holders of loans, and OFIs are also the largest counterparties. For debt securities, banks are both the largest holders and the largest counterparties. Turning to individual Member States, it is found that in the largest euro area economies banks and ICPFs tend to be exposed primarily to banks and OFIs in their home countries. The three most important locations for cross-country bank counterparties are Germany, France and – outside the euro area – the United Kingdom. More generally, geographic proximity and cultural background seem to matter for such cross-country links. Looking at exposures to common assets, the analysis shows that banks in the largest economies are particularly exposed to long-term debt, often issued domestically. Moreover, in countries with a large ICPF sector, the latter is heavily exposed to domestic investment fund shares.

Chapter 2 of the report presents structural developments in the euro area banking sector, providing the set of structural information that was previously discussed in the BSR. Section 2.1 primarily discusses statistics on an unconsolidated basis, including the annual structural financial indicators and monetary financial institution (MFI) balance-sheet indicators, which are available at a higher frequency. Section 2.2 primarily analyses consolidated banking data. In both sections, indicators will be examined from a cross-sectional (i.e. different banking types, business models) and a time perspective.

Section 2.1 reviews developments relating to the market structure of the euro area banking system, i.e. the capacity, consolidation and concentration of the banking sector over time. In 2014 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 5,614 (down from 6,054 in 2013 and 6,774 in 2008). Market concentration continued to increase at the euro area level, reaching a historical maximum at the end of 2014. However, 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 transactions (with euro area banks as acquirers), has followed a declining trend in recent years, both in terms of number of transactions and in terms of total value. More recently, in 2014 and in the first half of 2015, 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 reviews changes in the balance sheet structure, financial performance, capital position and leverage of the euro area banking sector during the period 2008-2014, 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.[4] The analysis shows that growth in total assets and, to a lesser extent, lending resumed for euro area domestic banks in 2014. Total consolidated assets of the euro area banking sector, including foreign branches and subsidiaries, stood at €28.1 trillion at the end of 2014, reflecting an increase of 5% vis-à-vis 2013. On the liabilities side, the gradual shift towards deposit funding came to a halt in 2014, with the median share of customer deposits in liabilities hovering around 42%. The use of wholesale funding stagnated in 2014, although it was well below its peak of 38% in 2009, and banks continued to reduce their reliance on central bank funding. Capital increases resulted in an increase in solvency and a reduction in leverage ratios. More specifically, the median Tier 1 ratio increased to 14.4% in 2014 from 13.0% in 2013. 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, however, still visible in terms of structural deficiencies. Most importantly, a further increase in non-performing loans (NPLs) underlines the need in several euro area countries to take further steps to tackle this problem in order to free up bank capital and boost credit expansion. Cost-cutting efforts by euro area banks are continuing, but remain rather limited, in particular as regards staff costs for large euro area banks. As in previous years, structural developments in the euro area banking system continued to differ across countries in 2014, 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 of the report discusses structural developments in euro area insurance corporations and pension funds, mainly using publicly available data from the balance sheets of ICPFs.[5] The chapter first discusses the general market structure, before shifting its focus to sector-wide balance sheet items. The final section of the chapter focuses on the profitability and solvency of insurers. Assets of euro area ICPFs have grown steadily in recent past years, with a strong concentration of total assets in a relatively small number of countries. Most insurance firms are active in the non-life sector. The high exposure to fixed income assets and the long-term nature of liabilities expose ICPFs to the current low yield environment, but there is little evidence yet of a strong increase in unit-linked insurance and defined benefit pension products. Survey results indicate, however, other structural adjustments, such as diversification into non-life and asset management businesses, the lowering of guaranteed rates on new policies and the use of interest rate derivatives. 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.

[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.

[5] Whenever pertinent, data from other providers are used to provide additional information. In general, publicly available data are more limited for the insurance sector than for the banking sector. The forthcoming Solvency II regime is expected to improve the situation markedly.

Chapter 4 of the report reviews the structural features of the euro area non-bank financial sector, often also labelled the “shadow banking sector”. It examines both the broad measure of shadow banking (including all financial intermediaries except banks and ICPFs) and a more narrowly defined measure (investment funds, money market funds (MMFs) and financial vehicle corporations (FVCs) only). Structural features of key shadow banking sub-sectors for which balance sheet data are available are outlined in more detail, namely for non-money market investment funds (non-MMFs), MMFs, and FVCs. The shadow banking sector has continued to grow over the past year, driven primarily by non-MMF investment funds, which expanded owing to net inflows and rising valuations. The weakening of the euro vis-à-vis other currencies contributed to this, as the share of assets invested outside the euro area amounts to 40%. Euro area MMFs expanded as well, following a protracted period of decline, with net flows into these funds having stabilised since mid-2014. By contrast, euro area FVCs have continued to decline over the past year owing to continued weak loan origination and securitisation activity by euro area credit institutions.

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 market data providers.

1 The euro area financial sector – overview and interconnectedness

Chapter 1 presents the overall structure of the financial sector, looking at the relative importance of the different segments of the financial system in the euro area over time. It then analyses interconnectedness across different parts of the financial sector in order to fully assess possible structural risks to financial stability in the euro area. Looking at direct exposures between various parts of the financial sector in the euro area as a whole, the analysis shows that banks and OFIs are the largest holders of loans, and OFIs are also the largest counterparties. For debt securities, banks are both the largest holder and the largest counterparties. Turning to individual Member States, it is found that in the largest euro area economies that banks and ICPFs tend to be primarily exposed to banks and OFIs in their home countries. The three most important locations for cross-country bank counterparties are Germany, France and – outside the euro area – the United Kingdom. More generally, geographic proximity and cultural background seem to matter for such cross-country links. Looking at exposures to common assets, the analysis shows that banks in the largest economies are particularly exposed to long-term debt, often issued domestically. Moreover, in countries with a large ICPF sector, the latter is heavily exposed to domestic investment fund shares.

In order to get a holistic picture of the wider financial sector, analyses of the structure of individual parts of the financial system (banks, ICPFs and OFIs, also often called "shadow banking institutions") need to be complemented with an analysis of the interconnectedness among these different financial sector components in order to obtain a full picture of possible structural risks to financial stability in the euro area.

Against this background, this chapter first describes the structure of the wider euro area financial sector across countries, before looking at different aspects of interconnectedness within the financial system. More specifically, it looks at interconnectedness between financial institutions within and across the three main parts of the financial sector mentioned above. Interconnectedness is assessed from two angles: first, direct exposures between sectors and countries and, second, exposures to common assets, such as loans, securities, etc. The latter allows an assessment of whether risks are concentrated in certain instruments throughout the different parts of the financial system.

1.1 Structure of the euro area financial sector

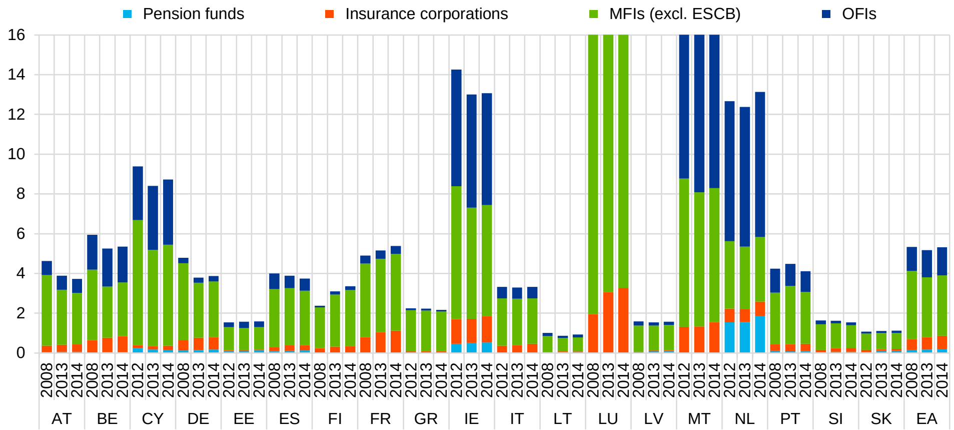
The size and structure of the financial sector varies considerably across euro area countries. At the end of 2014, the size of the wider financial sector (assets held by banks, ICPFs and OFIs combined) ranged from nearly 100 times GDP (Luxembourg) to below 100% of GDP (Lithuania). Other countries with a very large financial sector relative to GDP are Malta, Ireland, the Netherlands and Cyprus (**Chart 1.1**).[6] At the other extreme, the financial sector is less developed in most central and eastern European countries in the euro area. The size of the wider financial sector in these countries was less than 200% of GDP at the end of 2014.

In terms of the evolution of the financial sector over time, the size of the wider financial sector exhibited heterogeneous dynamics across both the larger and the smaller economies in the euro area. The financial sector, measured as the ratio of assets to GDP, tended to contract slightly between 2008 and 2014 in two of the larger economies, namely Germany and Spain (**Chart 1.1**). It remained broadly unchanged in Italy, while it increased in France and the Netherlands. The size of the wider financial sector contracted over the same period in Austria, Belgium, Cyprus and Ireland, while it tended to increase slightly in Greece, mainly due to a significantly stronger contraction in GDP than in financial assets, and particularly in Finland. It remained broadly unchanged in the rest of the smaller economies.

Chart 1.1

Size of the euro area financial sector, 2008, 2013 and 2014

(ratio of assets to GDP)



Sources: Quarterly Sector Accounts (QSA), MFI balance sheet items (BSI), and ECB calculations.
Notes: MFI total assets (excl. ESCB) are the difference between MFI total assets (including national central banks (NCB)) from the QSA and NCB assets from the MFI BSI. Data for 2008 are not available for all the countries, and in such cases data for 2012 are used. 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. For readability, figures for LU and MT are not fully shown in the chart. Complete figures are available in Table 1 of the annex.

Turning to more recent dynamics, the size of the wider financial sector remained broadly unchanged between 2013 and 2014 in Germany, bringing the decrease observed since 2008 to a halt.[7] It also remained broadly unchanged in Italy between

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

7 The decline in size of the financial sector in Germany between 2008 and 2013 was mainly the result of the reduction in the banks` balance sheets in response to stricter regulatory requirements developed since the beginning of the crisis. The balance sheets of the institutions in the other two categories did not decrease over time.

2012 and 2014, while it continued to contract slightly in Spain and continued to increase in France and the Netherlands.

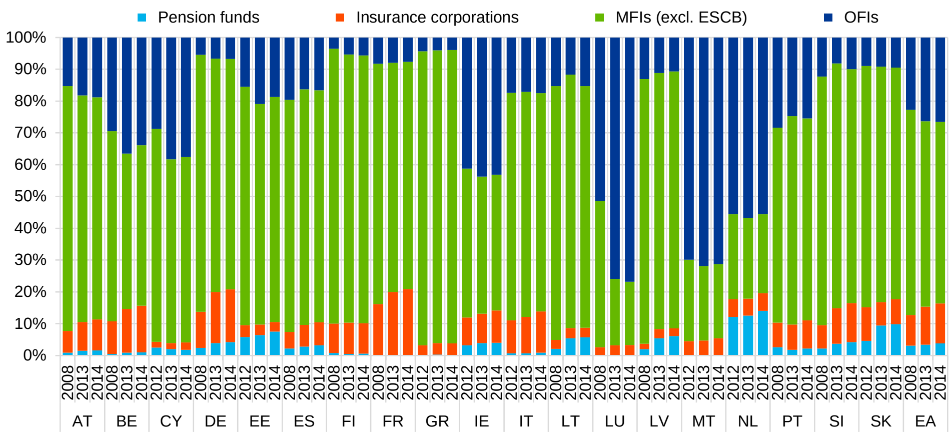
Looking at the composition of the wider financial sector across euro area countries, banks represent the largest share in most of the countries, accounting for between 20% and 95% of total sector assets (**Chart 1.2**). The OFI sector is particularly developed in Luxembourg and Malta (where it represents 75% and 70% of total assets, respectively), but also in the Netherlands, Ireland, Belgium and Cyprus. In the remaining countries, the OFI sector accounts for less than about 30% of total assets. The insurance sector is particularly developed in France, Germany, Belgium, Ireland and Italy. Finally, the pension fund sector is particularly developed in the Netherlands, Slovakia and Estonia.

Looking at the evolution of the composition of the financial sector over the period from 2008 to 2014, the share of the banking sector tended to decline across most countries. Only in Spain, Portugal and Greece did it remain broadly unchanged or increase slightly over the period. By contrast, the OFI sector tended to increase in size across the board.

Chart 1.2

Composition of the euro area financial sector, 2008, 2013 and 2014

(% of total assets of the financial sector)



Sources: Quarterly Sector Accounts (QSA), MFI balance sheet items (BSI) and ECB calculations.
Notes: MFI total assets (excl. ESCB) are the difference between MFI total assets (including national central banks (NCBs)) from the QSA and NCB assets from the MFI BSI. Data for 2008 are not available for all the countries, and in such cases data for 2012 are used. 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. For readability, figures for LU and MT are not fully shown in the chart. Complete figures are available in Table 1 of the annex.

1.2 Approaches to assess interconnectedness

Two main approaches are used in the literature to identify interconnectedness across financial institutions and among sectors in the financial system. The first one is to identify structural risks arising from direct bilateral exposures across sectors, instruments and geographical regions. Direct bilateral exposures are the most direct mechanism of transmission of shocks within the system.

The second approach used to estimate interdependence among financial institutions consists in using price-based measures of interconnectedness (e.g. stock, bond, derivative or credit default swap (CDS) prices). A major advantage of this approach is that it captures interconnectedness arising from both direct and indirect spillover channels. The latter may arise, for example, from exposure to common assets, similar business models, common accounting practices, informational contagion and, perhaps more importantly, the market perception of coincident financial market stress. However, a main drawback of price measures is that they fail to identify the specific channels of contagion, given that they capture only co-movements in asset prices or risk. Another drawback is that such measures might not be available for a large fraction of the financial sector, particularly for those institutions which are not publicly traded or where stock prices are not reliable, owing to, for example, thin trading. Finally, as mentioned before, price-based measures tend to capture mainly the market perception of risk, which may not always reflect the true default probability of an institution.[8]

Against this background, the analysis in this chapter of the report will be based on the first approach to interconnectedness in the wider financial system, looking first at direct exposures across sectors and then focusing on the concentration of exposures towards particular instruments.

1.3 Interconnectedness arising from direct exposures

Understanding financial interconnectedness across sectors and countries is necessary in order to better understand the transmission of possible shocks and contagion throughout the various parts of the financial system. From a financial stability perspective, the analysis of interconnectedness can also help to inform measures that could make the financial system more resilient to shocks.

This chapter focusses on interconnectedness arising from direct exposures across different sectors in the euro area financial system as a whole and across different countries. In addition, it analyses exposures of MFIs located in different countries to non-residents.[9]

Many of the charts presented below are based on Securities Holding Statistics (SHS) data.[10] These data have been collected by the European System of Central Banks (ESCB) since the beginning of 2014 and help to significantly improve the availability of information on securities holdings both within the euro area and between the euro area and the rest of the world. A main advantage of SHS data is that they provide information on securities holdings by main euro area financial sector, with the same

8 For more details about the two approaches, see Arregui, N., Norat, M., Pancorbo, A. and Scarlata, J., "Addressing Interconnectedness: Concepts and Prudential Tools", *IMF Working Paper*, No 199, September 2013.

9 Unlike other Chapters of the RFS, this chapter does not focus on changes in interconnectedness over time, given that most of the data used for the analysis is only available for 2014. As of next year, it will be possible to add a time dimension to the analysis.

10 For more detailed information about SHS data, see "Who holds what? New information on securities holdings", *Economic Bulletin*, Issue 2, ECB, March 2015.

sector on the issuer side, allowing for a thorough analysis of interconnectedness. However, the charts below should be interpreted with care, as the data cover only around 84% of the total outstanding amount of securities issued by euro area financial sectors (using euro area accounts data as a base of comparison).[11]

1.3.1 Interconnectedness within the euro area

Tables 1.1 to **1.4** present the direct exposures across different sectors of the euro area financial system per instrument type in the last quarter of 2014. The tables allow the level of interconnectedness across sectors, and hence the strength of possible contagion channels across the different sectors of the financial system, to be assessed. The rows represent the lender (in the case of loans) or the holding sector (for other instruments), while the columns represent the borrower or the issuing sector, respectively. The last row and the last column report the total debt (for loans) or the total issuance (for other instruments) and the total exposure, respectively.

The scale of direct exposures of one euro area financial sector to another differs significantly according to the type of instrument. In absolute terms, the largest exposure is loans held by MFIs and OFIs, followed by debt securities held by MFIs and investment fund shares held by ICPFs and OFIs. Holdings of shares are comparatively smaller.

Looking at each instrument separately, MFIs are, unsurprisingly, the largest holders of loans to other parts of the financial system, followed by OFIs (**Table 1.1**). In terms of counterparties, OFIs are the largest counterparty to both MFIs and OFIs, representing 83% and 75% of the total loans granted by both sectors, respectively. MFIs are also an important counterparty to both MFIs and OFIs, accounting for about 9% of the total loans granted by both sectors. For MFIs, ICPFs are also a significant counterparty, accounting for 8% of the exposures.

Regarding debt securities, the largest holders are MFIs, followed by OFIs and ICPFs, the latter two holding similar, much smaller amounts (**Table 1.2**). MFIs are the main counterparty for all parts of the financial system, followed by OFIs. Securities issued by MFIs represent about 60% of the holdings in this sector, while securities issued by OFIs represent about 40%. For OFIs and ICPFs, holdings of debt securities issued by MFIs represent 53% and 64%, respectively, while holdings of debt securities issued by OFIs account for the rest.

[11] Coverage also differs across sectors. For instance, SHS coverage tends to reach nearly 90% for MFIs, while it stands at 86% for OFIs and 77% for ICPFs.

Table 1.1

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

(EUR billions; fourth quarter of 2014)

Lender/ Borrower	ICPFs	MFIs	OFIs	Total exposure
ICPFs	83	8	28	119
MFIs	101	97	986	1,184
OFIs	49	138	551	738
Total debt	234	243	1,564	2,041

Sources: Euro Area Accounts (EAA) and ECB calculations.

Table 1.2

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

(EUR billions; fourth quarter of 2014)

Holding sector/ Issuing sector	ICPFs	MFIs	OFIs	Total exposure
ICPFs	17	586	313	917
MFIs	5	1,739	1,241	2,985
OFIs	17	536	459	1,012
Total issuance	38	2,862	2,014	4,914

Sources: Securities Holding Statistics (SHS), Euro Area Accounts (EAA) and ECB calculations.Notes: The ratio between the total outstanding amount from the EAA and the SHS for this instrument is used to rescale the exposures per sector obtained from SHS.

Turning to listed shares (**Table 1.3**), the largest holders are OFIs. MFIs and ICPFs hold much smaller amounts, representing about 30% and 16%, respectively, of OFI holdings. In terms of counterparties, OFIs are particularly exposed to MFIs, which account for slightly more than half of the total exposure. Equity issued by OFIs and ICPFs also represents large shares of total OFI exposure. MFIs appear largely exposed to equity issued by other MFIs, while ICPFs are largely exposed to equity issued by OFIs.

Table 1.3

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

(EUR billions; fourth quarter of 2014)

Holding sector/ Issuing sector	ICPFs	MFIs	OFIs	Total exposure
ICPFs	5	15	34	54
MFIs	14	73	9	96
OFIs	56	170	103	328
Total issuance	75	258	145	479

Sources: Securities Holding Statistics (SHS), Euro Area Accounts (EAA) and ECB calculations.
Notes: The ratio between the total outstanding amount from the EAA and the SHS for this instrument is used to rescale the exposures per sector obtained from SHS.

Table 1.4

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

(EUR billions; fourth quarter of 2014)

Holding sector/ Issuing sector	ICPFs	MFIs	OFIs	Total exposure
ICPFs		88	2,257	2,345
MFIs		39	228	266
OFIs		130	1,239	1,369
Total issuance		257	3,723	3,980

Sources: Securities Holding Statistics (SHS), Euro Area Accounts (EAA) and ECB calculations.
Notes: The ratio between the total outstanding amount from the EAA and the SHS for this instrument is used to rescale the exposures per sector obtained from SHS.

Finally, turning to investment fund shares (**Table 1.4**), 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, representing between 85% and 96% of the holdings of this instrument for the entire euro area financial system.

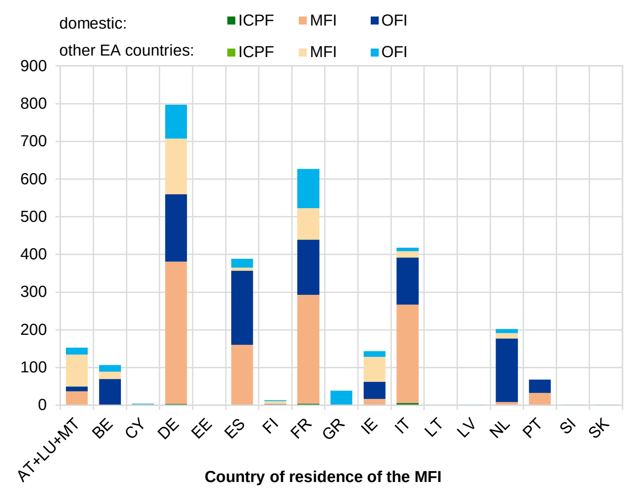
1.3.2 Interconnectedness across individual countries

This section looks at the structural interconnectedness across different parts of the euro area financial sector located in individual Member States. In particular, **Chart 1.3** to **Chart 1.5** show the exposures of MFIs, ICPFs and OFIs to their home country (domestic exposures) and the rest of the euro area (other EA exposures). Exposures of each sector are computed for three instruments combined: debt securities, shares and investment fund shares. The charts are calculated on the basis of SHS data.

Chart 1.3

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

(EUR billions; fourth quarter of 2014)

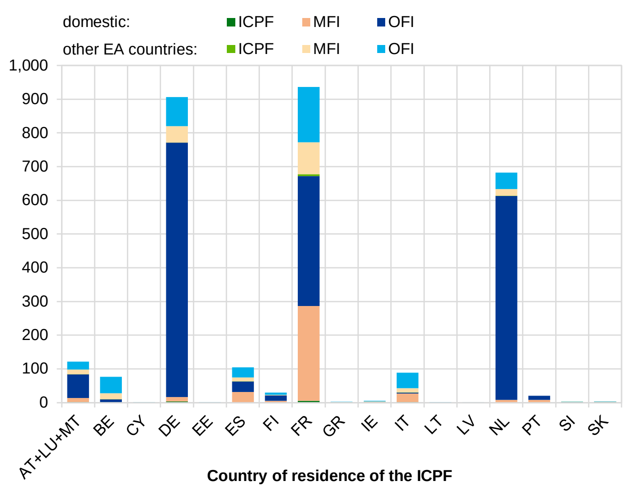


Sources: ECB (SHS sector) and ECB calculations. Underlying data are available on request.
Notes: Exposures of each sector are computed for three instruments combined: securities, shares and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. DE domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Chart 1.4

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

(EUR billions; fourth quarter of 2014)



Sources: ECB (SHS sector) and ECB calculations. Underlying data are available on request.
Notes: Exposures of each sector are computed for three instruments combined: securities, shar es and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Reflecting in part the absolute size of their banking systems, exposures of MFIs tend to be sizable in the four largest economies of the euro area (Germany, France, Italy and Spain). They are, however, also large in the Netherlands, Ireland and Belgium, as well as in Austria, Malta and Luxembourg combined (**Chart 1.3**).[12] In most countries, MFIs tend to be exposed primarily to financial sectors in their home countries. In Germany and France, domestic exposures amount to about 70% of the total exposures to these three sectors, while in the case of Italy and Spain the share is about 94%. In the Netherlands and Portugal, domestic exposures are also sizable, standing at 87% and 91%, respectively, whereas the domestic share for Belgium is somewhat lower at 65%. 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.

Looking at the exposure to sectors, in Germany and France most MFI exposures are to other MFIs, mainly in the same country but also to a large extent in other euro area countries. In Italy, the largest MFI exposure is to domestic MFIs. MFI exposure

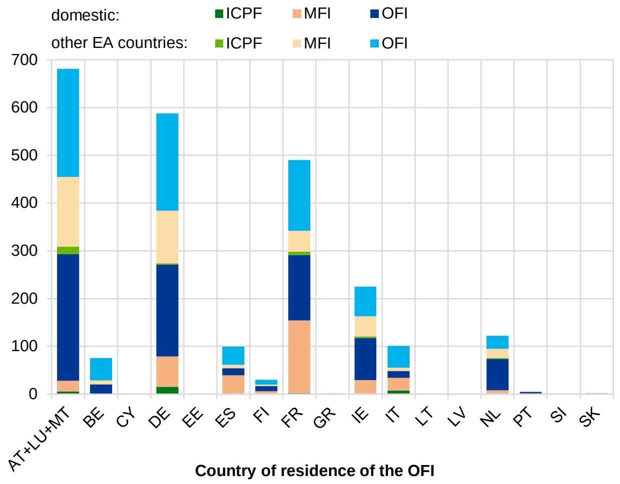
[12] As mentioned in the notes to Charts 1.3 to 1.5, Austria, Luxembourg and Malta are reported together for confidentiality reasons. However, developments are likely to be driven mainly by Luxembourg and Malta, owing to the different financial structure of Austria.

to OFIs (at home or in other euro area countries) is, however, not negligible in Germany, France and Italy, and particularly large in Spain and the Netherlands.[13]

Chart 1.5

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

(EUR billions; fourth quarter of 2014)



Sources: ECB (SHS sector) and ECB calculations. Underlying data are available on request.
Notes: Exposures of each sector are computed for three instruments combined: securities, shares and investment fund shares. Austria, Luxembourg and Malta are reported together for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Chart 1.4 shows that the ICPF sector is particularly developed in France, Germany and the Netherlands. In other big euro area economies, such as Spain and Italy, it tends to be less than one fifth of the size of the sector in 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.

OFI exposures are particularly large in Austria, Malta and Luxembourg combined, as well as in Germany and France, followed by Ireland (**Chart 1.5**). Austria, Malta and Luxembourg combined and Germany are strongly 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 about 60%, these are concentrated mainly in domestic MFIs, followed by domestic and euro area OFIs. In Ireland, OFIs are mainly exposed to domestic and non-domestic OFIs and also to domestic and non-domestic MFIs. In the Netherlands, exposures tend to be concentrated in domestic OFIs. For Italy and Spain, the absolute value of exposures tends to be much smaller, with exposures being concentrated mainly in domestic MFIs and OFIs in other euro area countries.

1.3.3 Interconnectedness with non-residents

The third analysis performed in this chapter looks at MFI exposures to non-residents (non-domestic MFIs and non-domestic non-MFIs). In this sub-section, we include several non-euro area EU Member States, because they are large counterparties for many euro area countries. The main difference to the cross-country analysis presented above is the focus on each of the three largest counterparty cross-country exposures per country. The focus is on MFIs only, because the euro area is a largely bank-based economy. Exposures are computed for the sum of three instruments, namely loans, securities and MMF shares/units.

[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.

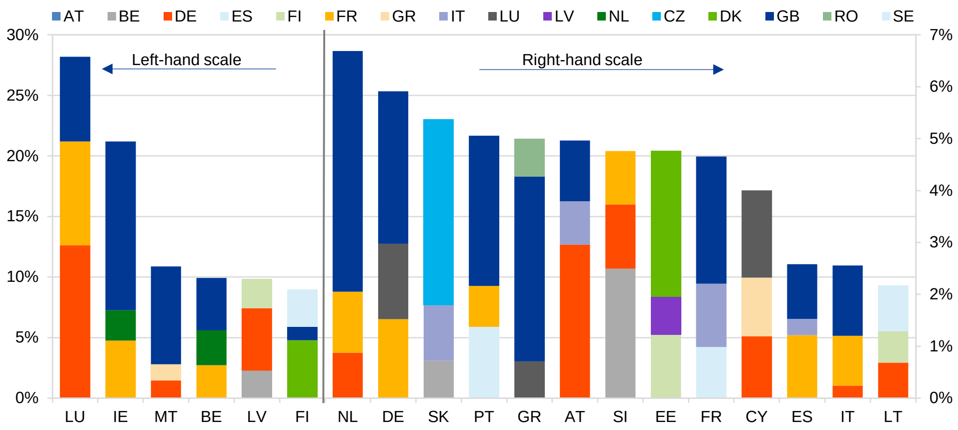
Chart 1.6 and **Chart 1.7** report for each euro area country, the share of each of the three largest counterparty cross-country exposures relative to total assets for non-domestic MFIs and non-domestic non-MFIs.[14]

Regarding exposures of MFIs to non-domestic MFIs (**Chart 1.6**), the two countries with the largest exposures are Luxembourg and Ireland. For these two countries, the three largest exposures combined represent about 28% and 21% of total assets, respectively. Countries with sizeable, although much smaller exposures, are Malta, Belgium, Latvia, Finland and the Netherlands, where exposures to non-domestic MFIs vary between 7% and 11%. 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. Proximity or cultural background matter as well. For example, Belgium is strongly exposed to the Netherlands, Cyprus to Greece, Portugal to Spain, Estonia and Finland are exposed to Denmark, Latvia to Finland and Slovakia to the Czech Republic.

Chart 1.6

Three largest exposures of MFIs to non-domestic MFIs

(% of total assets; December 2014)



Source: MFI balance sheet items (BSI).
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. For LU, IE, MT, BE, LV and FI, refer to the left-hand scale; for remaining countries, refer to the right-hand scale.

MFI exposures to non-domestic non-MFIs (**Chart 1.7**) tend to be smaller than those to non-domestic MFIs. The countries with the largest exposures are Greece, Luxembourg and Ireland, where the shares vary between 9% and 15%. In the remaining countries, the share of the three largest exposures to non-domestic non-MFIs represents less than 7% of total assets. The geographic distribution of counterparties appears to be more diverse than in the case of non-domestic MFIs. In particular, while the United Kingdom, Germany and France are major counterparties, the Netherlands also tends to be significant across the board and Greece appears to

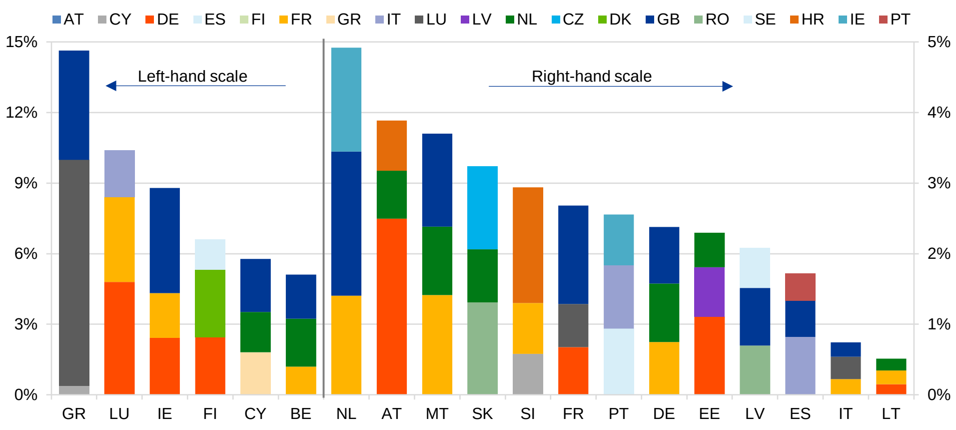
[14] Unlike the cross-country analysis performed before, which is based on SHS data, this analysis is based on country-by-country MFI balance sheet items (BSI), which also contain information on non-euro area EU counterparty countries.

be particularly exposed to Luxembourg.[15] Some clustering of countries is also present for non-domestic non-MFIs. For example, Austria and Slovenia are exposed to Hungary, Cyprus to Greece, Estonia to Latvia, Portugal to Spain and Slovakia to the Czech Republic.

Chart 1.7

Three largest exposures of MFIs to non-domestic non-MFIs

(% of total assets; December 2014)



Source: MFI balance sheet items (BSI).
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. For GR, LU, IE, FI, CY and BE, refer to the left-hand scale; for remaining countries, refer to the right-hand scale.

1.3.4 Interconnectedness from common exposures to 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 or in the rest of the euro area. This analytical angle is useful for assessing the possible transmission of stress in specific financial markets across sectors and countries. For example, if a sector of the financial system in a particular euro area country is largely exposed to listed shares, a sharp collapse in stock markets may have negative consequences for the sector in that country.

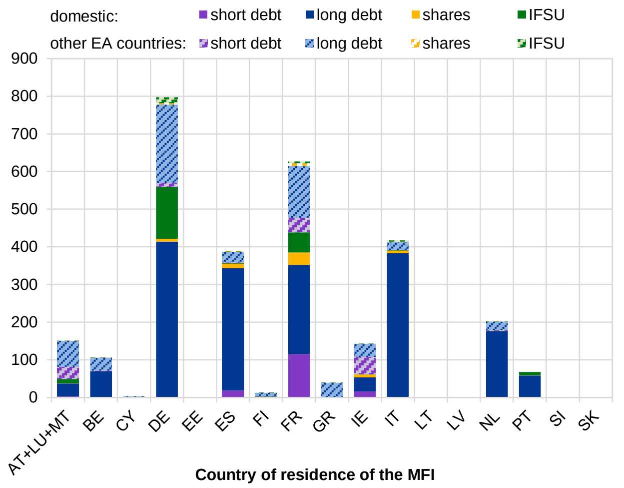
Chart 1.8 to **Chart 1.10** show the exposures of MFIs, ICPFs and OFIs located in euro area countries to different instruments, either issued in the same country (domestic exposures) or in the rest of the euro area. The focus is on short and long-term debt, shares and investment fund shares. Because the sources of the data are the same, these Charts are similar to **Chart 1.3** to **Chart 1.5** above, but the breakdown is by counterparty instrument, rather than by counterparty sector.

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

Chart 1.8

Holdings of instruments by MFIs

(EUR billions; fourth quarter of 2014)

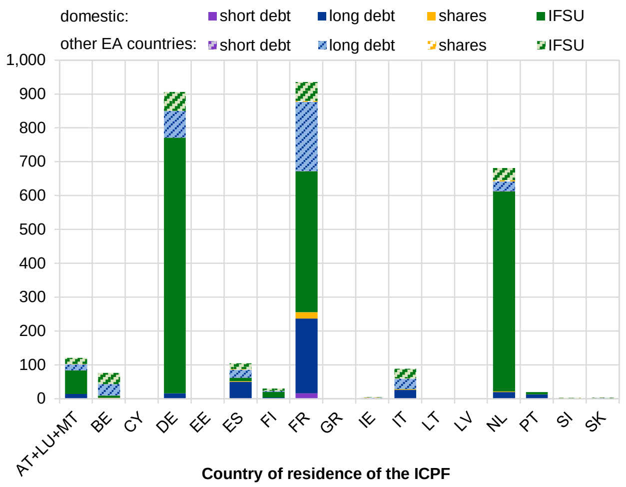


Sources: ECB (SHS sector) and ECB calculations. Underlying data available on request.
Notes: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Chart 1.9

Holdings of instruments by ICPFs

(EUR billions; fourth quarter of 2014)

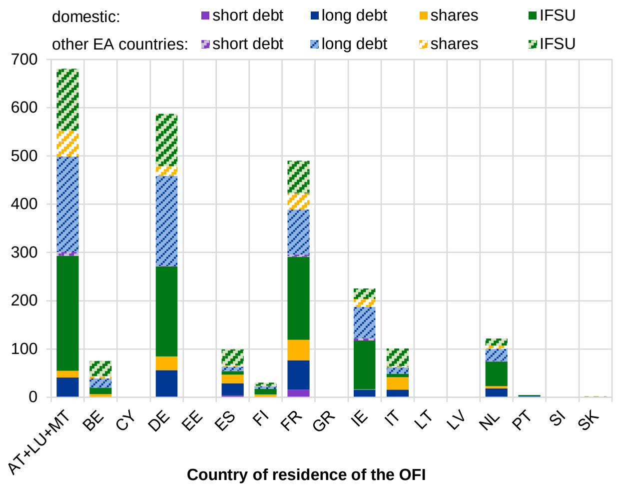


Sources: ECB (SHS sector) and ECB calculations. Underlying data available on request.
Notes: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. DE domestic holdings of quoted shares and investment funds shares/units are aggregated for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Chart 1.10

Holdings of instruments by OFIs

(EUR billions; fourth quarter of 2014)



Source: ECB (SHS sector) and ECB calculations. Underlying data are available on request.
Note: Exposures are computed for three sectors combined: ICPFs, MFIs and OFIs. Austria, Luxembourg and Malta are reported together for confidentiality reasons. PT domestic and EA non-domestic holdings of securities issued by ICPFs are aggregated for confidentiality reasons.

Regarding exposures of MFIs (**Chart 1.8**), in the countries with the largest exposures (namely Germany, France, Italy and Spain), domestic long-term debt tends to be the main counterparty instrument, accounting for between about 40% and 90% of the total exposure. However, in Germany and France, long-term debt issued in other euro area countries also tends to be significant (26% and 22% of total exposures, respectively). Germany and France are also exposed to some extent to investment fund shares and short-term debt, respectively, issued in the same country. MFIs in the Netherlands display a similar pattern, with most of the exposure being to domestic long-term debt. MFIs in Ireland hold a more mixed set of instruments.

As mentioned before, the ICPF sector is particularly developed in France, Germany and the Netherlands (**Chart 1.9**). In France, the ICPF sector is particularly exposed to domestic investment fund shares, but also to domestic and foreign long-term debt. In Germany and the Netherlands, most of the exposure is to investment fund shares issued domestically.

OFI exposures were already reported to be particularly large in Austria, Malta and Luxembourg combined, in Germany, France and Ireland (**Chart 1.10**).[16] 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. In Spain and Italy, exposures tend to be concentrated in long-term debt issued by other euro area countries.

16 As mentioned before, Austria, Luxembourg and Malta are reported together for confidentiality reasons. However, developments are likely to be driven mainly by Luxembourg and Malta, due to the different financial structure of Austria.

2 The euro area banking system

2.1 The market structure of the euro area banking system

This chapter provides an overview of the structure of bank intermediation in the euro area. It reviews overall banking sector capacity by country, highlighting the main developments in 2014, i.e. since the publication of the last ECB Banking Structures Report, in the last year and in the seven years to the end of 2014. This time period includes the beginning of the financial crisis and the time when some euro area countries exited financial assistance programmes.

2.1.1 Banking sector capacity

The rationalisation process in the euro area banking sector which started in the late 1990s has continued. This consolidation of the banking sector is largely due pressures to achieve cost containment and restructuring, in particular in a context of enhanced financial integration. In recent years, the financial crisis that erupted in 2008 has put additional pressure on banks to deleverage and consolidate, particularly in those countries that were more severely affected by the financial crisis.

On a non-consolidated basis, the total number of credit institutions in the euro area declined to 5,614 at the end of 2014 from 6,054 at the end of 2013 (see **Chart 2.1**).[17] By comparison, at the end of 2008 there were 6,774 credit institutions.[18] The net decrease of 440 credit institutions between the end of 2013 and the end of 2014 was the largest absolute fall since data started to be collected in the late 1990s. By comparison, between end 2012 and end 2013, there was a net decrease of 140 credit institutions. Taking a longer time perspective, the net decrease over the period from 2008 to 2014 is 1,160 credit institutions (-17.1%).

Looking at more recent dynamics in individual countries, all euro area countries except Belgium, Estonia, Lithuania and Slovakia experienced a decrease in the number of credit institutions between 2013 and 2014. The country that experienced the strongest absolute decline was France (-167), though strong declines were also recorded in Spain (61), Cyprus (44), Germany (40) and Finland (35).[19] Taking a medium-term perspective, since the onset of the crisis, Greece, Cyprus and Spain have recorded the largest relative decrease, due to the restructuring and

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17 The figures reported in **Chart 2.1** include all the countries that had adopted the euro by 1 January 2015.

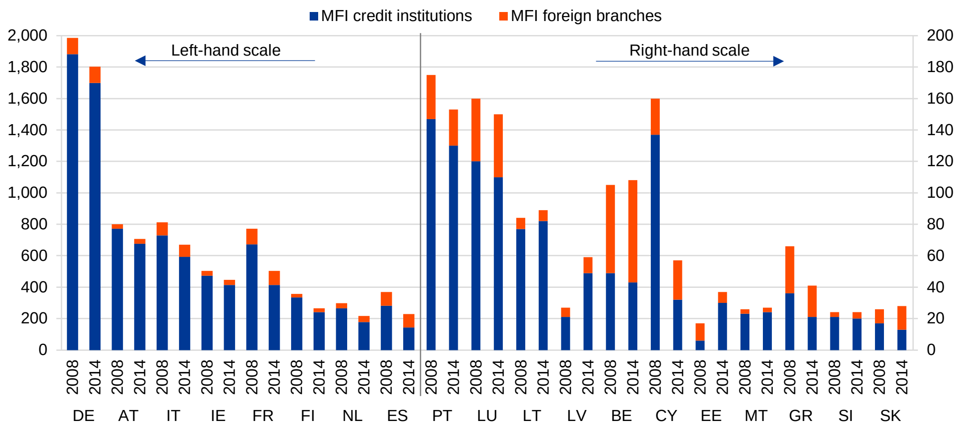
18 MFI statistics are residence-based and compiled on an individual (as opposed to a consolidated) basis. **Chart 2.1** thus refers to all credit institutions legally incorporated in euro area countries, which includes foreign subsidiaries and branches. Credit institutions account for the bulk of monetary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

19 In the case of France, the drop is largely due to a reclassification related to the adoption of EU regulations. In particular, the CRR defines credit institutions as those that grant credit and receive deposits. Under French law, by contrast, financial corporations that granted credit without receiving deposits were also classified as credit institutions until 2013.

consolidation of their banking sectors in the context of the crisis. Pronounced relative declines over that period were also noticeable in Finland, France, Italy, Portugal and the Netherlands.

Chart 2.1

Number of credit institutions and foreign branches in 2008 and 2014



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

Reflecting both the size and structural features of their countries, Austrian, French, German and Italian credit institutions accounted for around 69% of euro area credit institutions at the end of 2014, compared with 67% in 2008. The share of Spanish credit institutions in the euro area is relatively small, standing at about 3% in 2014.

Looking at the euro area as a whole, the share of foreign branches in the total number of euro area credit institutions increased from about 10% to about 13% between 2008 and 2014. More than half of this increase occurred between 2013 and 2014. This development is 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 4,910 (domestic banks and banking groups) at the end of 2014, down from 6,069 in 2008 and 5,347 at the end of 2013. The number of foreign branches decreased to 704 on a consolidated basis at the end of 2014 from 705 in 2008 and 707 in 2013.

Focusing on the resizing process, total assets of the euro area banking sector, including foreign subsidiaries and branches, stood at €28.1 trillion on a consolidated basis at the end of 2014, reflecting a decline of 15.7% compared with 2008 and 4.8% compared with 2012. The largest reductions in the value of total assets since 2008 were recorded in Ireland, Estonia and Cyprus, amounting to drops of 69%, 40.7% and 39.8% respectively.[20] On the other hand, Finland and Malta recorded an increase in the total value of banking assets of 48.5% and 17.6% respectively. The

[20] 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.

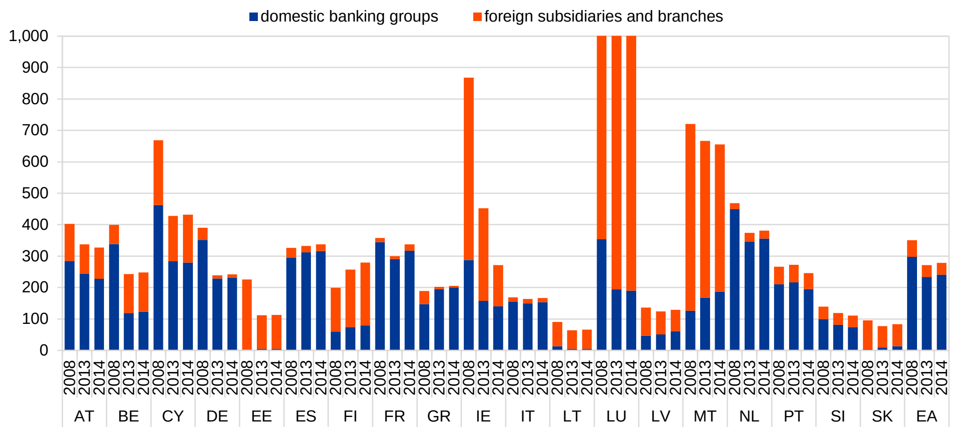
largest reductions in the value of assets in 2014 were observed in Ireland (36%) and Portugal (8%), followed by Slovenia (3.8%), Cyprus (2.6%) and Austria (1%).

At the end of 2014, France and Germany still had the largest banking sectors in the euro area, with total asset values of €7.2 trillion and €7.1 trillion, respectively. The banking sectors in Spain and Italy were a considerable distance behind, with total assets amounting to €3.6 trillion and €2.7 trillion respectively. At the other end of the spectrum, the assets of the Estonian and Lithuanian banking sectors amounted to €22 billion and €24 billion, respectively.

If the sizes of the different euro area banking sectors are measured in relation to GDP, the overall picture is radically different (see **Chart 2.2**). In terms of national GDP, Luxembourg stands out as the largest banking sector, with assets representing 1,618% of GDP, followed by Malta, Cyprus and the Netherlands with banking assets representing 656%, 432% and 382% of GDP respectively. It is worth mentioning that these percentages are still lower than at the end of 2012. Moreover, in Luxembourg, Malta and Ireland, the vast majority of banking assets are held by foreign-controlled subsidiaries and branches.

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, 2013 and 2014



Sources: ECB/Financial Stability Committee (FSC) consolidated banking data and ECB calculations. For readability, figures for LU are not fully shown in the chart.
Note: Data for domestic banking groups and foreign subsidiaries and branches are consolidated, hence including branches and subsidiaries of banks that can be classified as other financial institutions, except insurance companies.

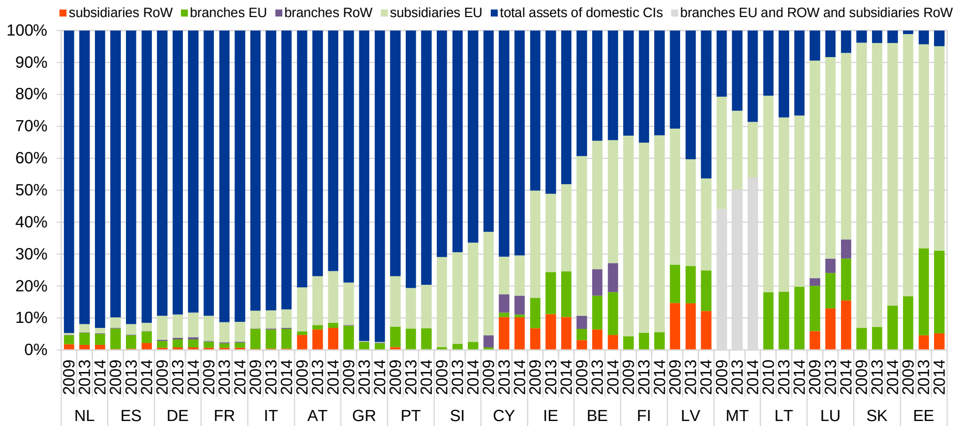
Banking sectors across euro area countries differ substantially when it comes to the presence of foreign banks (via bank branches or subsidiaries) and their relative weight with respect to domestic credit institutions (see **Chart 2.3**). When looking at medium-term dynamics over the period 2009-2014, the size of domestic banking assets increased somewhat in countries that were or still are subject to EU/IMF financial assistance programmes, such as Portugal and Cyprus, but particularly in Greece. The size of the domestic banking sector also increased in Malta and Estonia, the latter from a very low level. Other bigger economies that recorded smaller increases are France and Spain.

In terms of the composition of foreign banks, as measured by their share in euro area banking sector assets, bank subsidiaries prevailed over foreign branches in most countries. However, activity conducted through branches of banks from other EU countries is important in the Netherlands, Spain and Italy. Activity through branches has also increased since 2009 in Belgium, Slovakia and Estonia. It also increased slightly in Ireland and Cyprus.

As a result of the continued process of rationalisation and resizing in the euro area banking system, the number of local bank units (i.e. branches) in the euro area declined by 16% between 2008 and 2014. In absolute figures, the number of local bank units in the euro area declined by 29,394 between 2008 and 2014 and by 5,187 between 2013 and 2014. Almost half of the decrease in the number of local bank units since 2008 is accounted for by Spain. 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, particularly in 2014.

Chart 2.3

The composition of banking sector assets in euro area countries by type of credit institution (CI) in 2009, 2013 and 2014

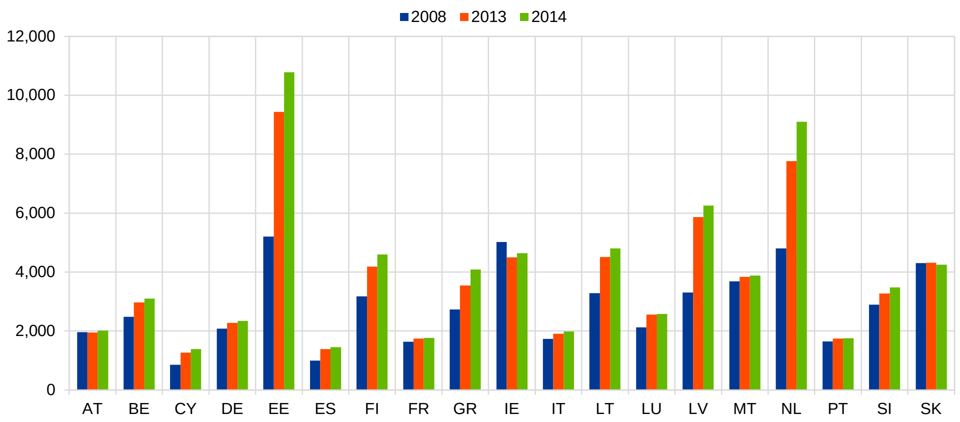


Sources: ECB MFI statistics, Banking Structural Statistical Indicators, Latvijas Banka, Eesti Pank and ECB calculations.
Notes: Data for 2009 are not available for Lithuania. Due to confidentiality reasons, data for Malta combines branches of credit institutions from EU countries and branches and subsidiaries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

The decline in the number of bank units in the euro area was reflected in the increase in two key banking system capacity indicators: population per local branch and population per banking employee (see **Chart 2.4** and **Chart 2.5**). This increase was common to most euro area countries over the years from 2008 to 2014 and reflects the rationalisation process mentioned before. Compared with 2013, the increase in relative terms in the population per local branch was particularly noticeable in the Netherlands, Finland and Estonia, but also in Greece and Cyprus. As regards the population per banking employee, the increase since 2008 was particularly marked in Ireland, Greece, Spain and Latvia.

Chart 2.4

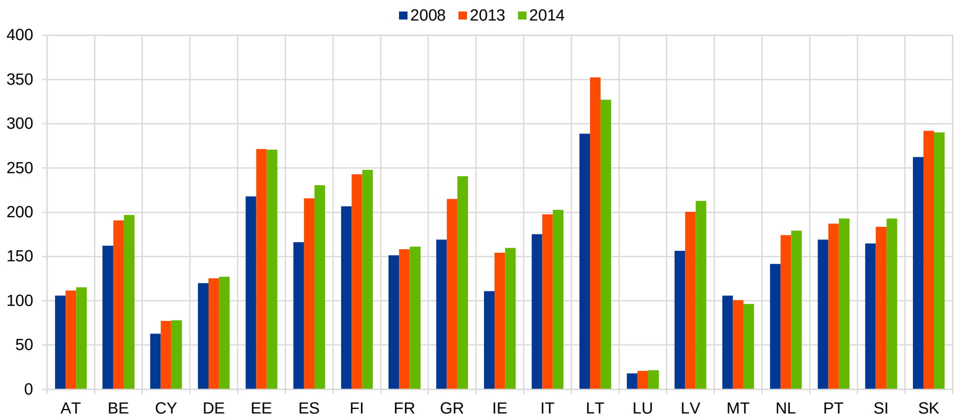
Population per local branch in euro area countries in 2008, 2013 and 2014



Source: EU structural financial indicators and ECB calculations.
Notes: Branches refer to the local units of credit institutions.

Chart 2.5

Population per banking employee in euro area countries in 2008, 2013 and 2014



Source: EU structural financial indicators and ECB calculations.

Table 2.1 displays additional capacity indicators for the euro area and individual countries as at the end of 2014, in which structural and cyclical factors play an important role. In the case of assets per employee, there has been an upward trend for the euro area as a whole since 2008. This upward trend was the product of different factors across countries, but it is mainly due to the consolidation process mentioned before that resulted in a substantial fall in the number of bank employees. This fall, more than offset the fall in assets due to the ongoing deleveraging process in several countries. By contrast, in some cases, such as Austria, Cyprus and Ireland, the effect of the deleveraging process outweighed the fall in the number of bank employees, leading to decreases in the ratio in recent years. In 2014 the ratio increased somewhat compared with 2013 owing to a faster decline in the number of employees than in total assets. The continued trend in these indicators suggests an increasingly efficient use of resources in the euro area banking sectors. This 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 2014

	Population per credit institution	Population per branch	Population per ATM	Population per bank employee	Assets per bank employee	Population density
Belgium	108,320	3,093	747	197	19,466	337
Germany	45,552	2,334	991	127	12,054	231
Estonia	35,562	10785	1,712	271	4,415	29
Ireland	10,347	4,643	1,498	160	37,400	66
Greece	274,820	4,090	1,523	241	8,713	83
Spain	205,593	1,452	892	230	14,744	92
France	133,405	1,759	1,124	161	19,895	120
Italy	90,739	1,979	1,212	203	13,424	202
Cyprus	14,956	1,386	1,298	78	8,320	92
Latvia	33,816	6,254	1,710	213	3,292	31
Lithuania	32,909	4,801	2,346	327	2,847	45
Luxembourg	3,772	2,573	1,185	22	37,297	216
Malta	15,819	3,883	1,956	96	11,909	1,335
Netherlands	77,358	9,096	2,275	179	26,078	413
Austria	12,085	2,012	994	115	11,874	102
Portugal	69,341	1,752	648	193	8,708	113
Slovenia	85,908	3,483	1,160	193	4,078	102
Slovakia	193,520	4,243	2,097	290	3,443	111
Finland	20,155	4,598	2,427	248	26,310	16
euro area	60,046	2,111	1,078	166	15,394	128

Sources: Calculations are based on figures in the Annex, the ECB Blue Book and United Nations data.
Notes: Assets per employee are measured in EUR thousands. Population density is expressed as inhabitants per square kilometre. Population per ATM refers to 2013.

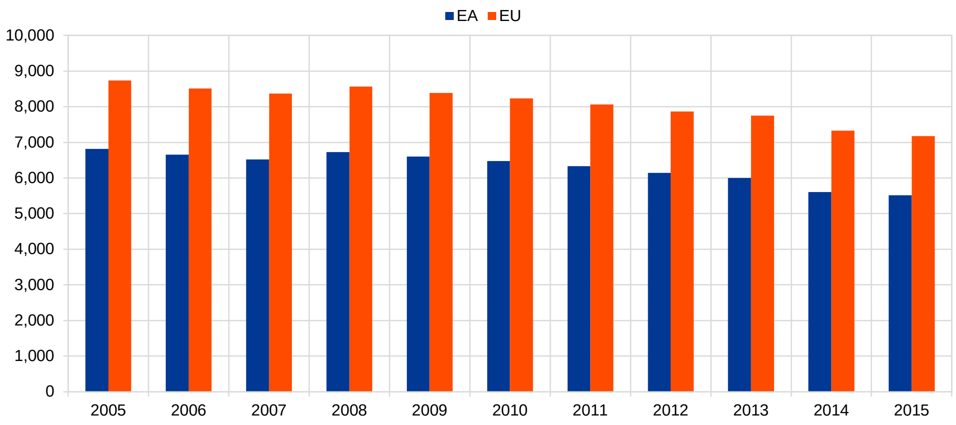
2.1.2 Consolidation and merger and acquisition activity

Unlike the rest of this chapter, 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. As emphasised in the previous section, consolidation of the euro area banking sector has continued since 2008, with the number of credit institutions declining at a steady pace for both the euro area and the EU as a whole (see **Chart 2.6**).

Total M&A activity in the EU banking sector has, however, declined since the high values recorded in 2007, especially in terms of the value of transactions, but also in terms of the number of transactions. Regarding the former, the decline was recorded across the board. Based on the trend observed in the first half of 2015, however, an increase in the value of M&A activity could be observed compared with the last three years. In terms of the number of transactions, M&A activity in the euro area banking sector has been falling almost continuously since 2000. Amid some volatility in recent years and rebounds in 2010 and in 2013, the number of M&A transactions is still much lower than observed pre-crisis and well below the peak of 2001. Cross-border transactions (within the euro area) and outward transactions (with euro area banks as acquirers) were those most affected by this decline.

Chart 2.6

Number of credit institutions



Source: ECB MFI statistics.
Note: Data for 2015 refer to June.

Following the start of the crisis in 2008, the number of domestic transactions[21] remained broadly unchanged until 2013, reflecting ongoing consolidation in the banking system, including intragroup transactions in Italy and Germany, and the restructuring of the banking sector in EU/IMF programme countries.[22] As a result, the relative share of domestic M&As increased until 2013, but declined somewhat thereafter (see **Chart 2.7**).

The transaction value of M&A activity has decreased sharply since 2007 across all categories and continued to follow a downward path until 2014. In 2015, M&A transaction values seem to be recovering somewhat, as the volumes recorded in the first half of the year already accounted for about 70% of the total amount recorded in 2014 (see **Chart 2.8**).[23]

From 2008 to 2014, the overall value of transactions decreased from about €39 billion to about €8 billion. In the first half of 2015, the value of transactions recorded was €5.5 billion.

M&A activity in 2014 and in the first half of 2015 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 transactions recorded in 2014 and the first half of 2015 were relatively small, although one of them exceeded €1 billion (in Spain) and another one

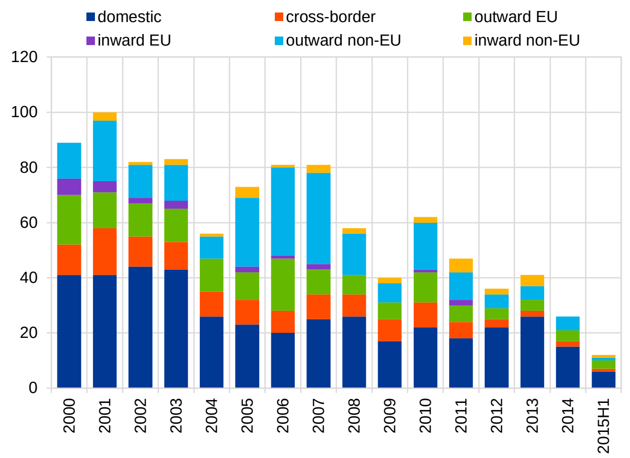
[21] "Domestic transactions" denote transactions that take place within national borders. In this report, transactions within the euro area are referred to as "cross-border M&As".

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

[23] The peak in transaction values in 2007 reflected the acquisition of ABN Amro by the consortium of Royal Bank of Scotland, Fortis and Santander as well as the merger of Sanpaolo IMI and Banca Intesa.

exceeded €3 billion (in Finland). Cross-border (intra-euro area) transactions were also relatively small, with none exceeding €0.4 billion. Two large and several smaller transactions were recorded in which a euro area institution acquired institutions outside the euro area.

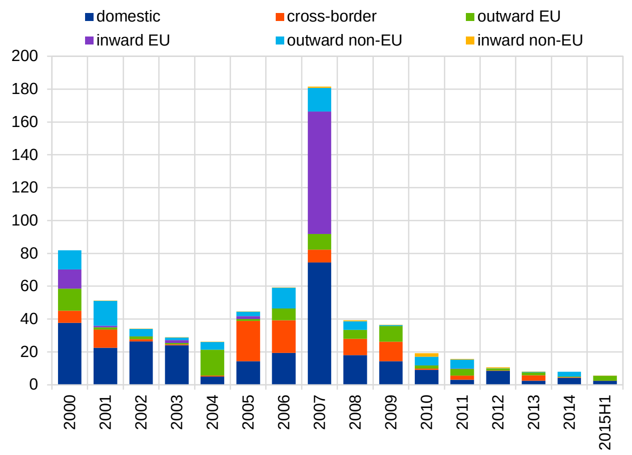
Chart 2.7
Bank M&As – number of transactions



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.

Chart 2.8
Bank M&As – value of transactions

(EUR billions)



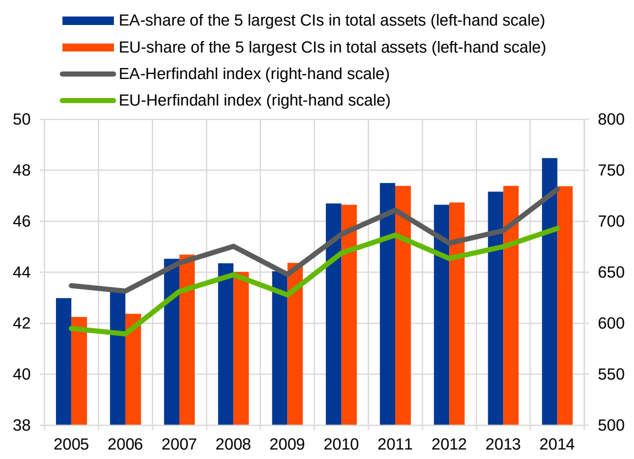
Source: Dealogic M&A.
Notes: M&As include both controlling and minority stakes. The value of some of the transactions is not reported. “Cross-border” M&As refer to intra-euro area transactions involving a non-domestic acquirer. “Inward” refers to M&As by non-EU or non-euro area EU banks in the euro area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

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 broadly continued on an upward path both at the euro area and EU level since the pre-crisis period. The increase in market concentration reflects primarily the decline in the number of credit institutions mentioned before (see **Chart 2.9**). For the euro area, both indicators continued to rise until 2014, driven mainly by developments in Germany, Italy and Spain. For the EU, the share of total assets held by the five largest credit institutions stabilised at 2013 levels in 2014, while the Herfindahl index has continued to rise.

[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 a non-consolidated basis, meaning that banking subsidiaries and foreign branches are considered to be separate credit institutions.

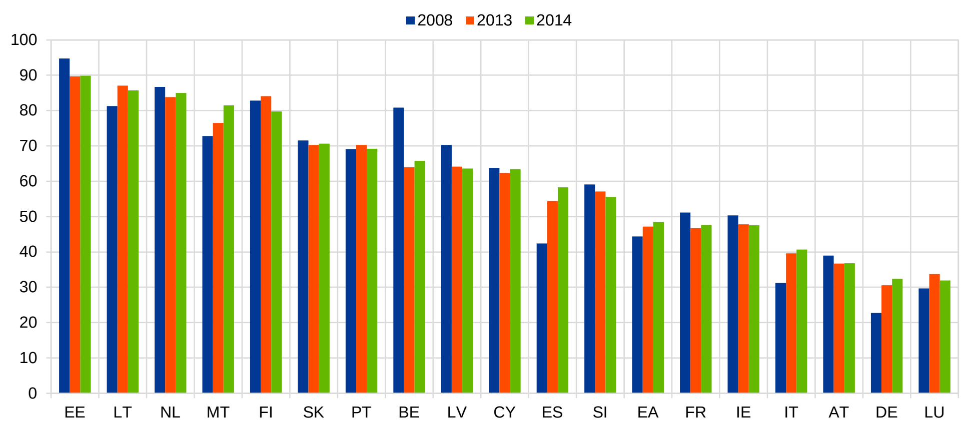
Chart 2.9
Market concentration



Source: EU structural financial indicators.

Taking a cross-country view, concentration indices reflect a number of structural factors. Banking systems in larger countries, such as France, Germany and Italy, are more fragmented and include strong savings and cooperative banking sectors, particularly in the latter two. Consequently, concentration levels tend to be lower in these countries. By contrast, banking systems in smaller countries tend to be less fragmented and more concentrated, such as in Cyprus, Estonia, Finland, Greece and Lithuania. The exceptions are Austria and Luxembourg, in the former owing to a banking sector structure similar to that of larger countries, in the latter due to the presence of a large number of foreign credit institutions. At the end of 2014, market concentration (measured by the share of assets held by the five largest banks) ranged from close to 95% in Greece, to just about 32% in Germany and Luxembourg (see **Chart 2.10**).[25]

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



Source: EU structural financial indicators.
Note: Figures are reported on an unconsolidated basis.

Regarding developments in the period from 2008 to 2014 in the share of assets held by the five largest banks, the banking sector structcccure 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 other smaller economies, such as Malta and Lithuania. Concentration in other larger economies, such as in Germany and Italy, also increased over this period. On the other hand, concentration in countries like Estonia, Belgium and Slovenia decreased.

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

2.2 Structural developments in banking activity

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 2008-2014, with a focus on developments during the last year. In contrast to the first part of Chapter 2, which mainly discussed unconsolidated banking data, the analysis here is based on consolidated, domestic banking sector data.[26] *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 in which foreign presence is substantial, or where this is unavoidable owing to restrictions in data availability.*

On the liabilities side, in 2014 the gradual shift towards deposit funding came to a halt, the use of wholesale funding stagnated and banks continued to reduce their reliance on central bank funding. At the same time, capital increases resulted in an increase in solvency and a reduction in leverage ratios. 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, however, still visible in terms of structural deficiencies. Most importantly, a further increase in non-performing loans (NPLs) underlines the need in several euro area countries to take further steps to tackle this problem in order to free up bank capital and boost credit expansion. Cost-cutting efforts by euro area banks are continuing, but remain rather limited, in particular as regards staff costs for large euro area banks.

2.2.1 Balance sheet structure

The total assets of the euro area banking sector, including foreign branches and subsidiaries, stood at €28.1 trillion on a consolidated basis at the end of 2014, reflecting an increase of 5% vis-à-vis 2013. The total assets of the domestic euro area banks also increased from €23.1 trillion in 2013 to €24.3 trillion in 2014. Exceptions from the rather broad-based increase were the Austrian, Cypriot, Irish, Portuguese and Slovenian banks, many of which continued to deleverage, in some cases as a condition for receiving state aid.

Growth has also resumed in total loans for the euro area, although at a slow pace. The median share of loans in total assets decreased slightly in 2014. At the same time, the cross-country heterogeneity of this indicator has increased (see **Chart 2.11**). Looking at country-level data, the turnaround in total loan growth has been driven mainly by strong growth in Germany, while lending has also grown in Estonia, Latvia, Luxemburg and Malta. In contrast, the negative trend continued in other countries.

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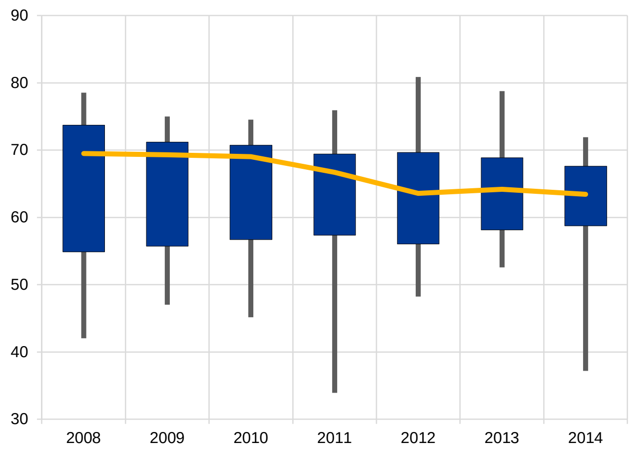
[26] The domestic banking sector comprises the consolidated accounts of banks that have their headquarters in a given country or economic area, including their foreign branches and subsidiaries abroad.

The growth in the share of debt securities relative to total banking sector assets halted in 2014, with many countries seeing significant reductions in their relative importance (see **Chart 2.12**). However, strategies concerning debt securities holdings differ greatly across euro area banking sectors.

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

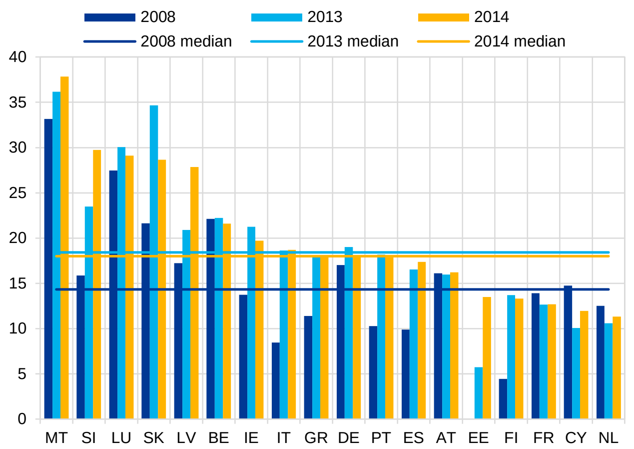
(all domestic banks; percentages; maximum, minimum, interquartile range and median across national banking sectors)



Sources: ECB/FSC consolidated banking data.
Note: Total loans include both interbank loans and loans to non-banks.

Chart 2.12
Share of debt securities in total assets of euro area banking sectors

(all domestic banks; percentage of total assets)



Sources: ECB/FSC consolidated banking data.

The breakdown of assets highlights large cross-country differences in the asset structures of euro area banking sectors (see **Chart 2.13**). For instance, the share of loans in total assets varies from 34% in Latvia to 77% in Greece.[27] The share of financial assets held for trading is typically below 10%, with the high figures observed in Germany and France reflecting the presence of large banks with sizable investment banking activities. Including foreign branches and subsidiaries in the analysis would single out Finland as having a high share of financial assets held for trading, owing to the regionally concentrated investment banking and derivatives activities of large foreign banks present in the country.

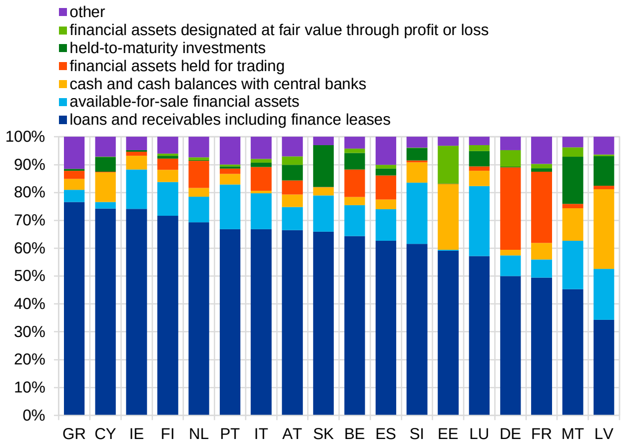
The asset structure also differs by bank size. Trading assets feature most prominently in the balance sheets of large banks, whereas their share has decreased to almost non-existent in the aggregate balance sheet of the medium-sized and small domestic banks (see **Chart 2.14**). Medium-sized banks display a higher share of loans in total assets (67%) than large and small banks, indicating that banks in this size group tend to follow business models which are more geared towards traditional banking activities. The market share of the smaller banks in this market appears to be on the rise, following an increase in the average share of loans from 54% in 2012 to 59% in 2014.

[27] It should be noted that the majority of domestic banks in Latvia – accounting for less than 50% of the banking sector – focus on non-resident business and do not have close links with the domestic economy. The share of loans in total assets for the banking sector, including foreign branches and subsidiaries, amounted to 58% in 2014.

Chart 2.13

Asset breakdown for euro area banking sectors

(2014; all domestic banks; percentage of total assets)

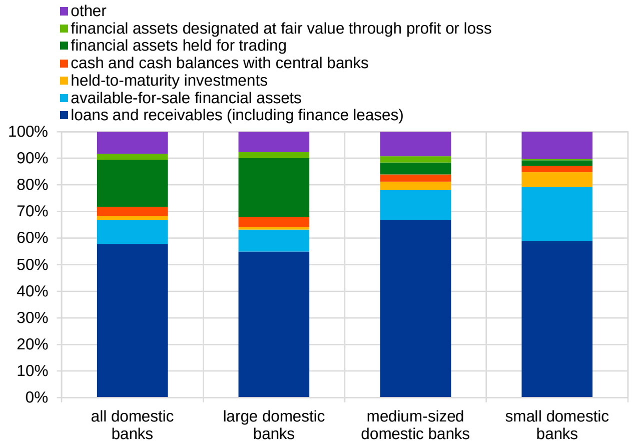


Source: ECB/FSC consolidated banking data.
Notes: IFRS reporting banks only. Other assets include, for instance, derivatives used for hedging purposes, tangible assets (e.g. property), intangibles and investments.

Chart 2.14

Asset breakdown for euro area banks in different size groups

(2014; all domestic banks; percentage of total assets)



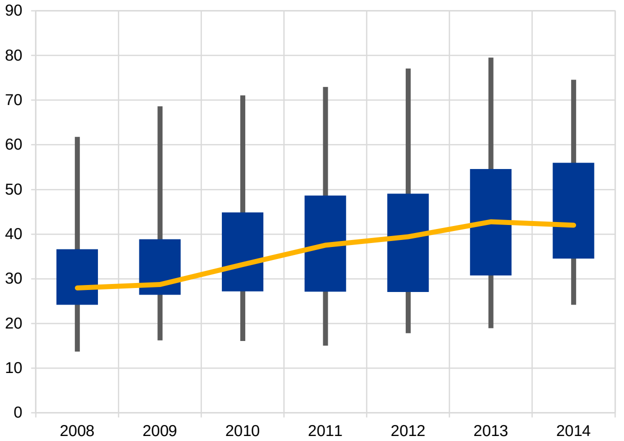
Source: ECB/FSC consolidated banking data.
Notes: IFRS reporting banks only. Other assets include, for instance, derivatives used for hedging purposes, tangible assets (e.g. property), intangibles and investments.

As regards banks' liabilities, the gradual shift towards deposit funding came to a halt in 2014, with the median share of customer deposits in liabilities hovering around 42% and thus demonstrating growth in line with assets (see **Chart 2.15**). The use of wholesale funding stagnated in 2014, with the median share of wholesale funding in total funding amounting to 26%, almost unchanged from the previous year but well below its peak of 38% in 2009 (see **Chart 2.16**). The cross-country dispersion of wholesale funding reliance continued to decrease.

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)

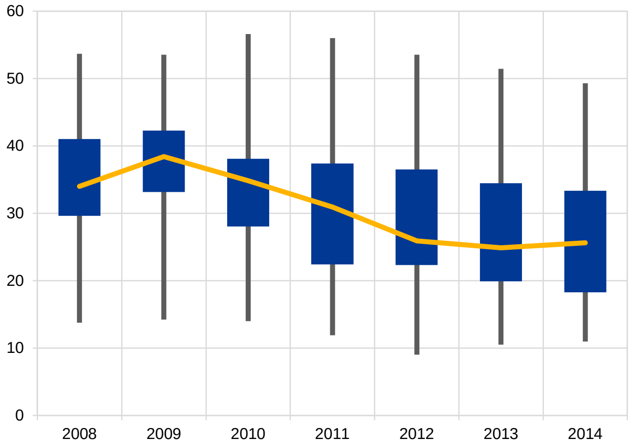


Sources: ECB BSI statistics.

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)



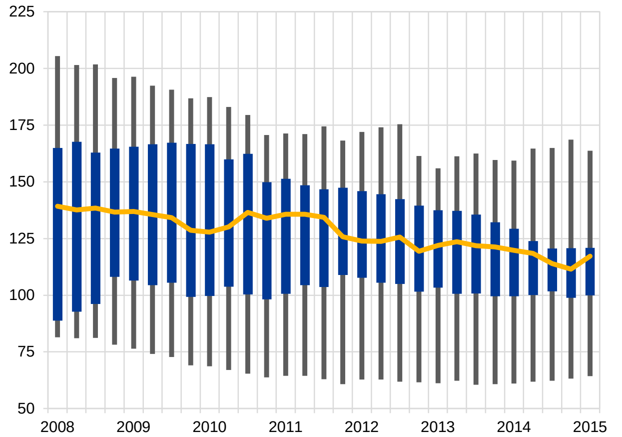
Sources: ECB/FSC consolidated banking data.
Note: Wholesale funding includes interbank liabilities and debt securities.

Positive developments in retail deposits and only moderate extension of credit to the economy led to a further decrease in the median euro area loan-to-deposit ratio from around 121% in 2013 to 111% in 2014 (see **Chart 2.17**). The first quarter of 2015 showed, however, a slight increase compared with the last quarter of 2014, following increases in lending.

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)

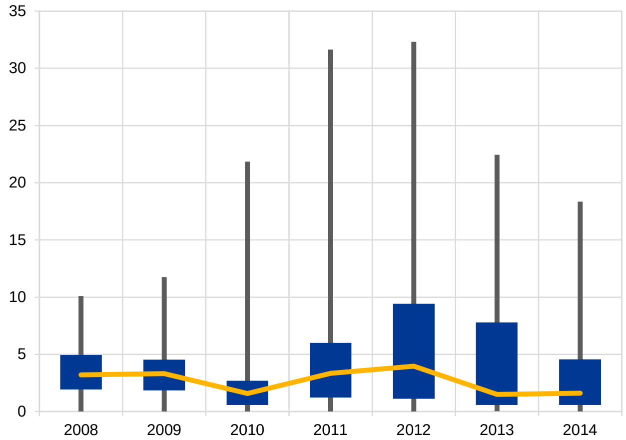


Sources: ECB MFI statistics and ECB calculations.

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)

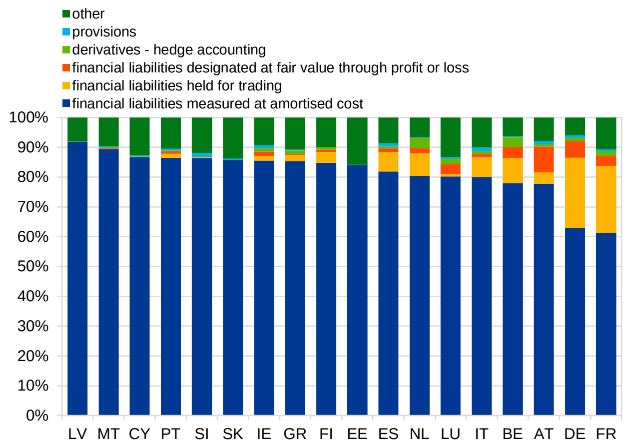


Sources: ECB BSI statistics, IMF International Financial Statistics (IFS) data and ECB calculations.

Chart 2.19

Liability breakdown for euro area banking sectors

(2014; all domestic banks; percentage of total liabilities)



Sources: ECB/FSC consolidated banking data 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.

Banks continued to reduce their reliance on central bank funding in 2014, especially in the banking sectors at the high end of the distribution (see **Chart 2.18**). This indicates that new borrowing through the ECB's targeted longer-term operations (LTROs) was offset by repayments of funds borrowed through the three-year LTROs in 2011 and 2012.

Looking at cross-country differences in the structure of banks' liabilities, the share of financial liabilities measured at amortised cost – a category largely consisting of deposits – ranged from 92% in Latvia to 61% in France in 2014 (see **Chart 2.19**). Mirroring the business model related patterns on the asset side, the share of trading liabilities is largest for banks in Germany and France, accounting for more than 20% of total liabilities.

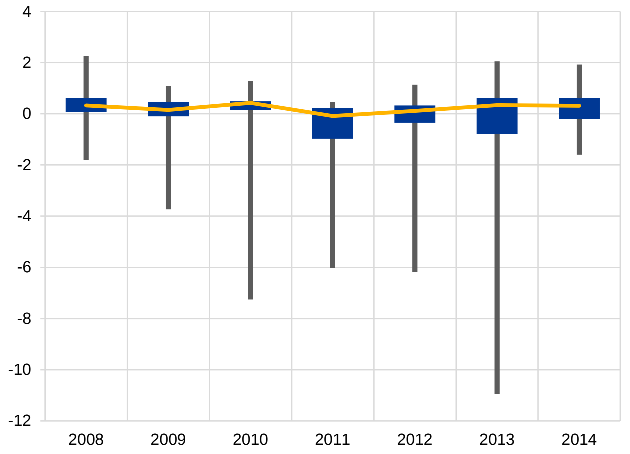
2.2.2 Financial performance and cost structure

The subdued financial performance of the euro area banking sector observed since the onset of the financial crisis continued almost unchanged in 2014. However, cross-country differences decreased significantly during the year (see **Chart 2.20** and **Chart 2.21**). A decrease in impairments in a subset of vulnerable countries from the very high levels seen in 2013 was the main contributor to this development. The positive factors included increases in net interest income and in gains on financial assets realised during the year. Negative contributions originated from restructuring costs and litigation charges, with increased provisions in some cases.

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)

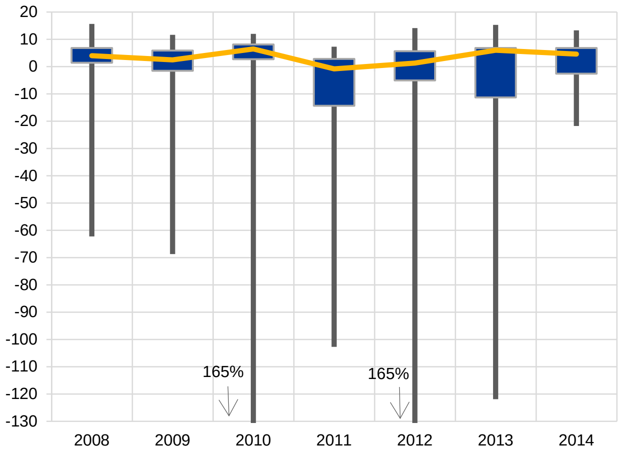


Sources: ECB/FSC consolidated banking data.

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)



Sources: ECB/FSC consolidated banking data.

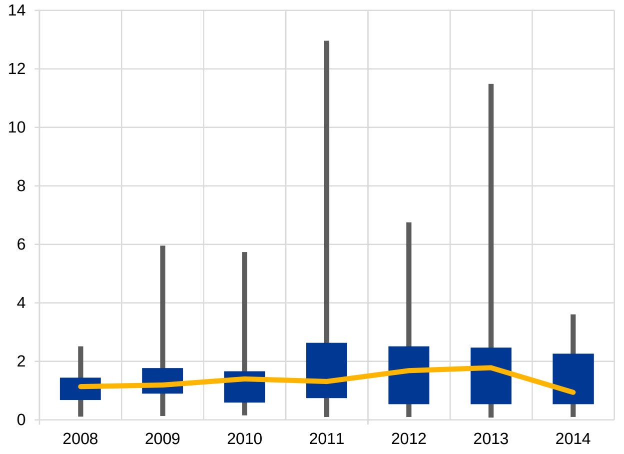
Chart 2.22 illustrates the decrease in impairments and provisions, particularly in the banking sectors belonging to the higher part of the distribution. Impairment charges and provisions sharply declined in countries such as Cyprus, Slovenia and Ireland. This resulted in a general improvement in profitability for most of these countries (see **Chart 2.23**). In contrast, increases in impairments and provisions were recorded in some other euro area economies, including Austria, Malta, Estonia and Greece.[28] The resolution of a large Portuguese bank resulted in a substantial loss for the Portuguese banking sector, partly due to large impairments and provisions resulting from that event.

28 For Estonia, it should be noted that domestic banks form only 5% of the Estonian banking sector. Looking at the banking sector as a whole, impairments and provisions have decreased in 2013 and 2014.

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)

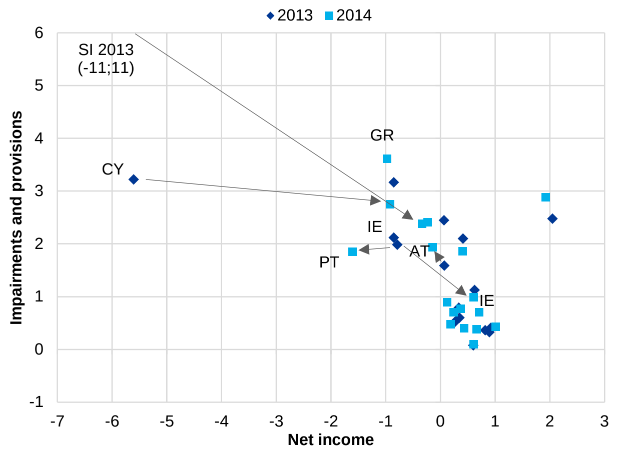


Sources: ECB/FSC consolidated banking data.

Chart 2.23

Net income and impairments and provisions of euro area banking sectors

(all domestic banks; percentage of total assets)



Sources: ECB/FSC consolidated banking data.

Most of the impairment charges during 2014 were attributable to losses on loans and receivables (see **Chart 2.24**). In some countries, sizeable impairments were also incurred on other financial and non-financial assets. The latter mainly concern goodwill write-downs associated with divestments, restructurings and resolutions. The general increase in the prices of Irish assets resulted in a reversal of impairments in available-for-sale financial assets.

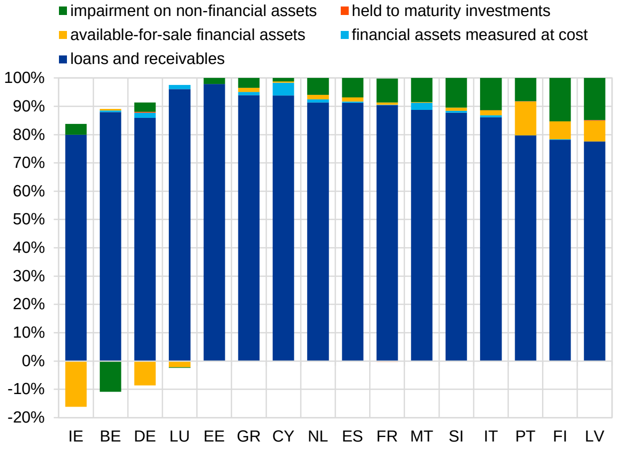
Deteriorating loan quality has resulted in a steady and broad-based increase in NPLs in many countries since 2008, with fairly pronounced further increases in some cases during 2014 (see **Chart 2.25**). Some of these increases are attributable to the adjustments made following the ECB's 2014 comprehensive assessment, which used a simplified version of the EBA's newly adopted common definition for non-performing exposures.[29] The further increase in NPLs underlines the need in several euro area countries to take further steps to tackle this problem, which must be dealt with in order to free up bank capital and boost credit expansion.

29 See also "Resolving the legacy of non-performing exposures in euro area banks", *Financial Stability Review*, ECB, May 2015, pp. 146-154, available at http://www.ecb.europa.eu/pub/fsr/shared/pdf/sfcfinancialstabilityreview201505.en.pdf. The EBA's final draft Implementing Technical Standards on supervisory reporting on forbearance and non-performing exposures under Article 99(4) of Regulation (EU) No 575/2013 are available at https://www.eba.europa.eu/documents/10180/449824/EBA-ITS-2013-03+Final+draft+ITS+on+Forbearance+and+Non-performing+exposures.pdf.

Chart 2.24

Impairment charges breakdown for euro area banking sectors

(2014; all domestic banks; percentage of total impairments)

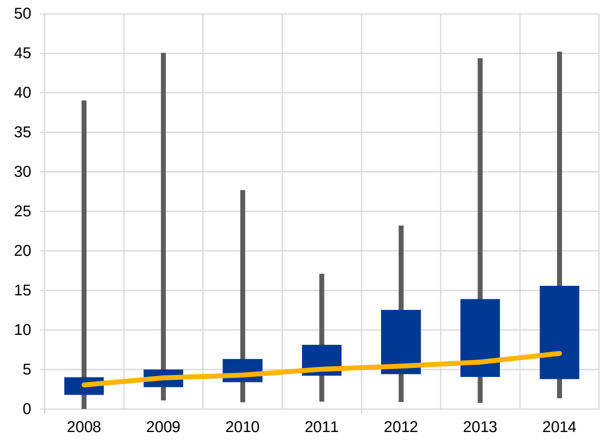


Source: ECB/FSC consolidated banking data.
Note: Data are not available for Finland and Slovakia.

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)



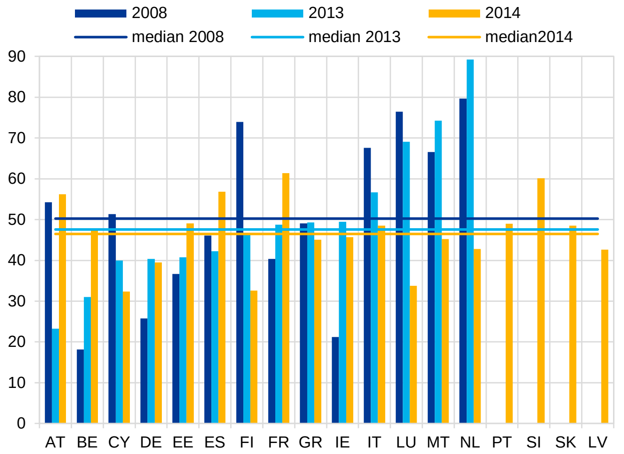
Source: ECB/FSC consolidated banking data.
Notes: Data are available from 2012 on for Ireland and from 2014 on for Luxembourg and Slovenia. Data are not fully comparable across countries owing to different definitions of non-performing loans across countries and over time.

Banks raised sufficient provisions to compensate for the increase in NPLs, with the median euro area coverage ratio decreasing marginally to 47% in 2014 from 48% in 2013 (see **Chart 2.26**). Nevertheless, coverage ratios declined significantly in some countries, where profitability developments would have turned out less favourably if coverage ratios had been kept constant.

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)

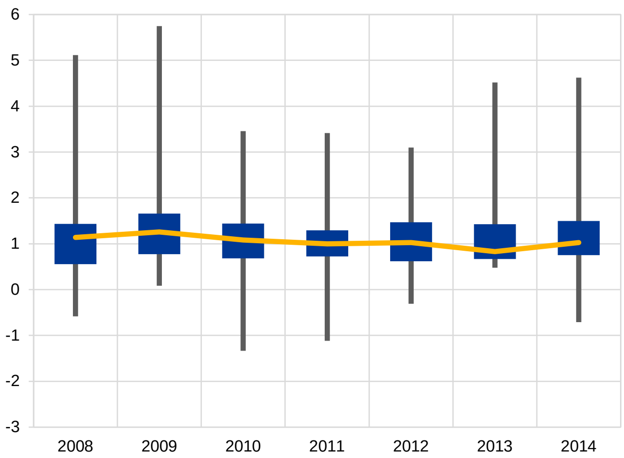


Source: ECB/FSC consolidated banking data.
Notes: Data for 2008 and 2013 are not available for Portugal, Slovenia, Slovakia and Latvia. Data are not fully comparable across countries owing to different definitions of non-performing loans across countries.

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)



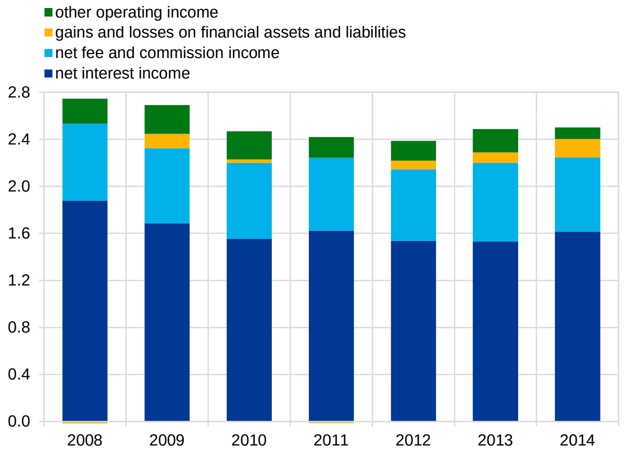
Source: ECB/FSC consolidated banking data.

Operating profits across euro area banking sectors increased somewhat in 2014 (see **Chart 2.27**). Seven countries reported small falls in operating profits, whereas Ireland reported a significant surge.

Chart 2.28

Operating income structure of the euro area banking sector

(2014; all domestic banks; percentage of total assets)

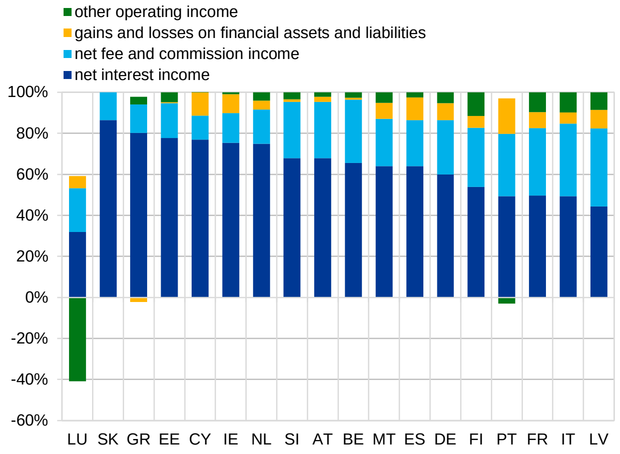


Source: ECB/FSC consolidated banking data.

Chart 2.29

Operating income structure of euro area banking sectors

(2014; all domestic banks; percentage of total operating income)



Source: ECB/FSC consolidated banking data.

Operating income remained subdued in 2014 owing to slightly decreased fee and commission income and other operating income. Interest rate and other asset price developments in 2014 resulted in gains on financial assets, especially in some vulnerable countries. The contribution of net interest income also increased for the first time since 2011 on account of more rapidly declining funding costs than asset yields in the vulnerable countries (see **Chart 2.28**).[30]

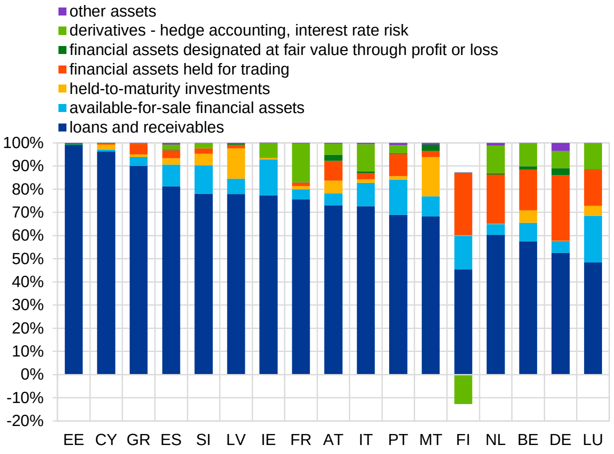
The structure of operating income differs considerably across countries (see **Chart 2.29**). The share of net interest income, for example, ranges from 44% in Latvia to 86% in Slovakia. These cross-country differences can be explained by, among other things, the relative importance of non-bank financial intermediation and the business models of the domestic banks, including their cross-border outreach. For example, banks in countries with more mature corporate bond markets tend to earn more fee and commission income from bond underwriting activities.

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

Chart 2.30

Interest income structure of euro area banking sectors

(2014; all domestic banks; percentage of total interest income)



Source: ECB/FSC consolidated banking data.
Note: Data are not available for Slovakia.

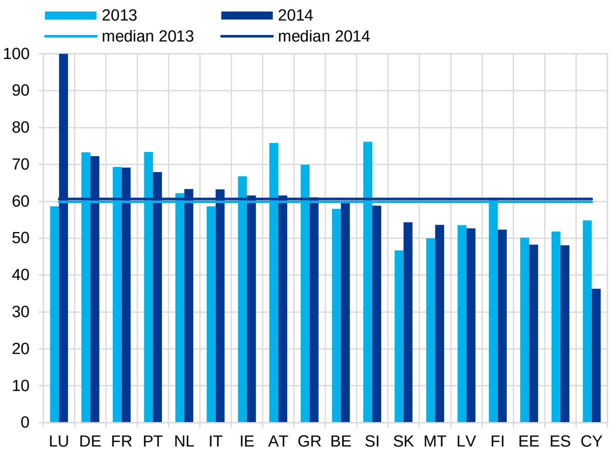
Interest income from loans and receivables accounted for more than half of total interest income in all countries except Luxembourg and Finland in 2014 (see **Chart 2.30**). In some countries, interest income from other financial assets reported as available for sale and/or held for trading was also significant.

The median cost-to-income ratio for euro area banking sectors rose from 60% in 2013 to 61% in 2014, suggesting that cost-cutting efforts by euro area banks are continuing but remain rather limited (see **Chart 2.31**). Overall, operating costs decreased slightly relative to total assets in 2014 owing to a reduction in staff costs (see **Chart 2.32**). Cost cutting is more pronounced in small banks, where the ratio of staff costs to total operating income fell from 4.7% in 2013 to 3.1% in 2014. By contrast, staff costs continued to increase for large banks, amounting to 35% of total operating income in 2014.

Chart 2.31

Cost-to-income ratio of euro area banking sectors

(all domestic banks; percentages)

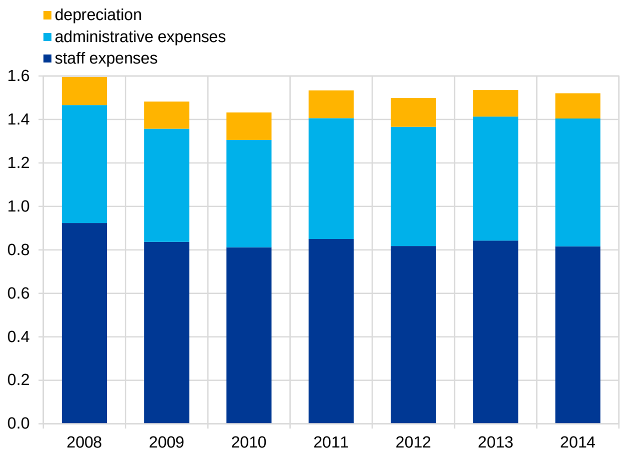


Source: ECB/FSC consolidated banking data.

Chart 2.32

Composition of operating expenses of the euro area banking sector

(all domestic banks; percentage of total assets)



Source: ECB/FSC consolidated banking data.

2.2.3 Capital and leverage

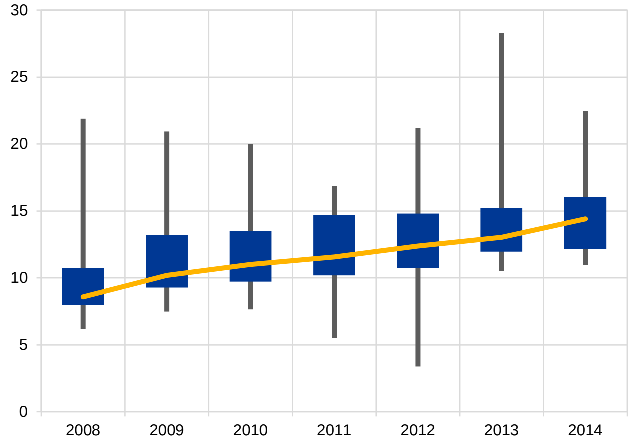
The regulatory capital ratios of euro area banks continued to improve in 2014, with the median Tier 1 ratio increasing to 14.4% from 13.0% in 2013 (see **Chart 2.33**). In particular, the lower end of the dispersion moved upwards, with the minimum amounting to 11.4%, compared to 10.5% in 2013. The median phased-in common equity Tier 1 ratio amounted to 14%. The improved capital ratio resulted from capital increases, while risk-weighted assets (RWAs) increased slightly over the year. The implementation of the Capital Requirements Directive (CRD IV) and the Capital Requirements Regulation (CRR) as of January 2014 required banks to raise capital to comply with the new rules and the resulting higher average RWAs. In addition, many banks completed capital raisings during the year to address capital shortfalls identified in the ECB's comprehensive assessment exercise.

Looking at the composition of risk allocation in banks' balance sheets, credit and market risk-related RWAs gained in importance during 2014, while operational risk-related RWAs remained close to 10% of the total (see **Chart 2.34**). The increase in total assets and RWAs, together with the shift towards credit risk, give some tentative signs that a turning point in the deleveraging and de-risking trend may have been reached. Partly incentivised through regulation, banks may have started moving towards more traditional banking activities and lower complexity.

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)

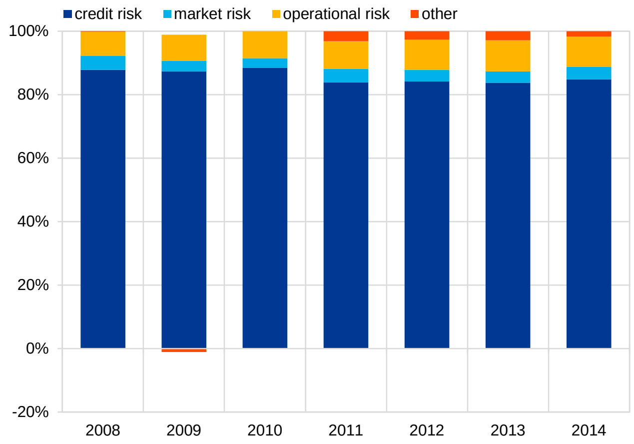


Source: ECB/FSC consolidated banking data.

Chart 2.34

Breakdown of risk-weighted assets of euro area banks

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



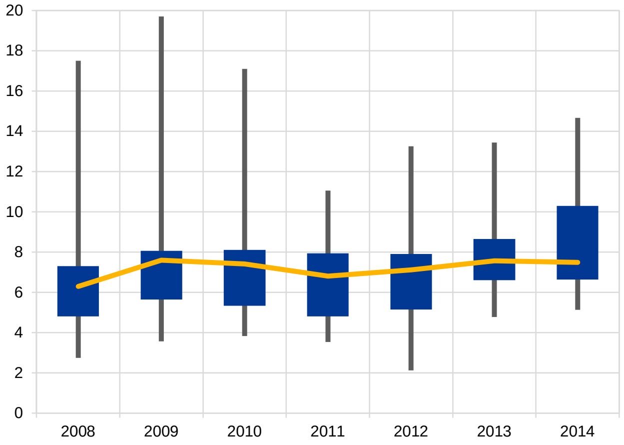
Source: ECB/FSC consolidated banking data.

Banks have also improved their balance sheet-based leverage ratios in most euro area countries (see **Chart 2.35**). The median equity-to-assets ratio for euro area domestic banks remained stable at 7.5%, as the impact of the increase in equity (9%) was counterbalanced by the growth in total assets (5%). The improvement in leverage ratios was broadly based across euro area countries, as indicated by the upward shift in the interquartile range of country values. However, dispersion across countries still remains significant, with equity-to-total assets ratios ranging from 5.1% to 14.7%.

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)

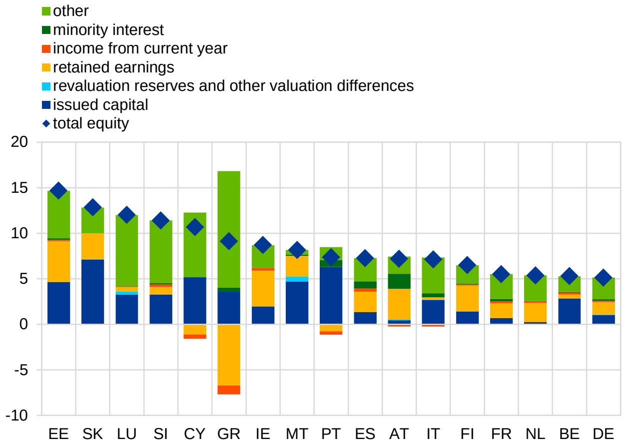


Source: ECB/FSC consolidated banking data.

Chart 2.36

Main components of total equity of euro area banks by country

(2014; all domestic banks; percentage of total assets)



Source: ECB/FSC consolidated banking data.
Note: The category “other” includes, among other things, share premium, equity instruments issued other than capital, and accumulated other comprehensive income.

In addition to capital issuance, the improvement in equity resulted mostly from improved profitability in 2014. At the same time, declines in retained earnings and revaluation reserves offset some of these increases. A decomposition of total equity at country level shows significant cross-country heterogeneity, although issued capital and retained earnings are typically the largest components (see **Chart 2.36**).

3 Insurance corporations and pension funds

This chapter discusses recent structural developments in the euro area insurance and pension fund sectors, mainly using publicly available data from the balance sheets of insurance corporations and pension funds (ICPFs).[31] *The chapter first discusses the general market structure, before shifting its focus to sector-wide balance sheet items. The final section of the chapter focuses on the profitability and solvency of insurers.*

The assets of euro area ICPFs have grown steadily in recent years, with a strong concentration of total assets in a relatively small number of countries. Most insurance firms are active in the non-life sector. The high exposure to fixed income assets and the long-term nature of liabilities expose ICPFs to the current low yield environment, but there is little evidence yet of a strong increase in unit-linked insurance and defined contribution pension products. Survey results indicate, however, more widespread diversification into non-life and asset management businesses, the lowering of guaranteed rates on new policies and the use of interest rate derivatives.

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 under the current Solvency I regime.

3.1 Market structure

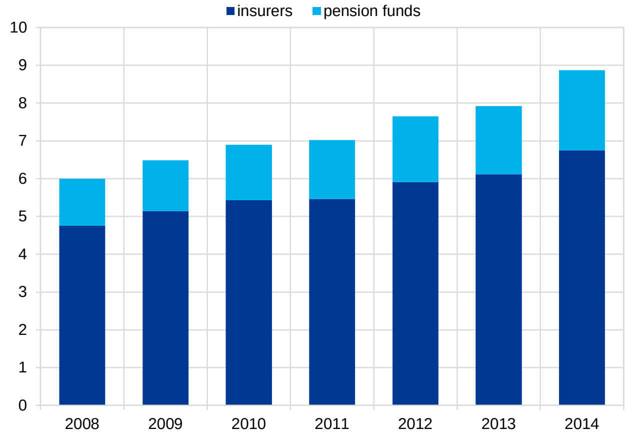
In contrast to the developments in the banking sector, the assets of euro area ICPFs have grown steadily in recent years (**Chart 3.1**). Looking at the country level reveals a strong concentration of total assets in a relatively small number of countries (**Chart 3.2**). Specifically, the bulk of the euro area insurance assets are located in France and Germany, whereas the Netherlands stands out for the size of its occupational pension funds. When related to the size of the economy, the largest insurance sectors can be found in Luxemburg and Ireland. Occupational pension funds are very significant players in the Netherlands, also relative to the size of the Dutch economy (**Chart 3.3**).

[31] Where relevant, data from other providers are used to provide additional information. In general, publicly available data are more limited for the insurance sector than for the banking sector. The forthcoming Solvency II regime is expected to improve the situation markedly.

Chart 3.1

Total assets of euro area ICPFs

(2008-2014; EUR trillions)

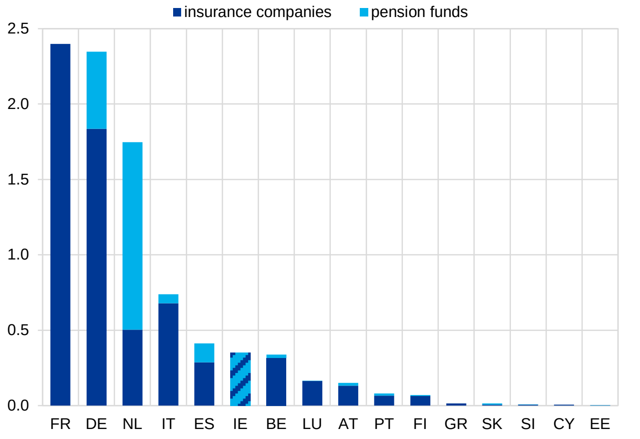


Source: ECB data from ICPF balance sheets.

Chart 3.2

Assets of ICPFs in euro area countries

(2014; EUR trillions)

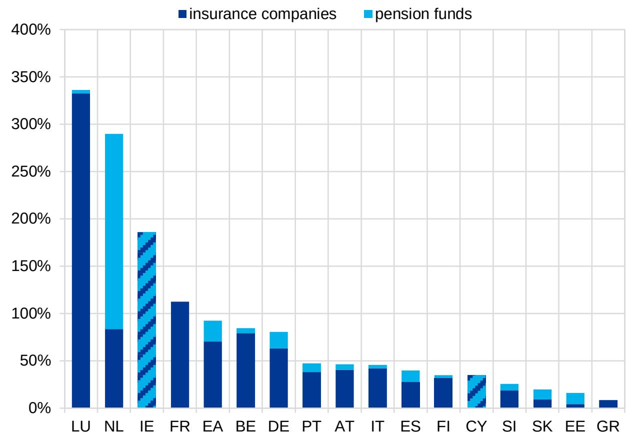


Source: ECB data from ICPF balance sheets.
Notes: Data for Cyprus and Ireland are available only for the aggregate assets of insurance companies and pension funds.

Chart 3.3

ICPF assets in relation to GDP

(2014; percentages)



Source: ECB data from ICPF balance sheets.
Notes: Data for Cyprus and Ireland are available only for the aggregate assets of insurance companies and pension funds.

The significant heterogeneity in the importance of the occupational pension funds reflects to a large extent the institutional differences between the pension systems across euro area countries. In particular, many euro area countries are relying largely on public pension schemes, which are not included in the ICPF statistics.

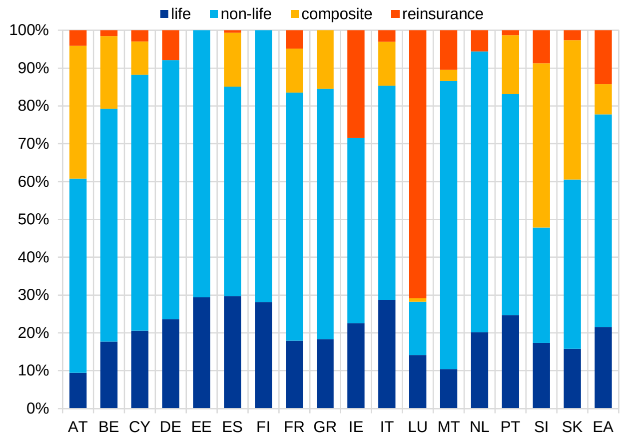
Chart 3.4 and **Chart 3.5** use data from the European Insurance and Occupational Pensions Authority (EIOPA) to shed more light on the insurance market structure. Most insurance firms are active in the non-life sector (56% for the euro area as a whole). This is followed by the life and reinsurance sectors. The presence of composite insurers, i.e. companies that offer both life and non-life insurance via subsidiaries, may be related to the use of a conglomerated business model of banking and insurance in a given market. Typically, conglomerates are large firms that, among other financial units, also incorporate both life and non-life insurance subsidiaries. Owing to their size, their significance is also more visible in the concentration ratio than in the number of firms.

Not surprisingly, insurance markets are typically more concentrated in smaller euro area countries than in larger ones. Among the large countries, Germany has a rather low concentration ratio in both life and non-life insurance. The French market, in contrast, is somewhat more concentrated owing to the dominance of the *bancassurance* model, where insurance is often located within financial conglomerates. The reinsurance market is very concentrated and dominated by a few companies in all the countries except Luxembourg and Ireland. This reflects the fact that the global reinsurance market is itself very concentrated and dominated by a small number of large, mostly European, players. In contrast, Luxembourg and Ireland host a large number of captive reinsurers, making them the main European hubs for this type of specialised activity.[32]

Chart 3.4

Composition of insurance markets in euro area countries

(2013; percentages of the number of firms)

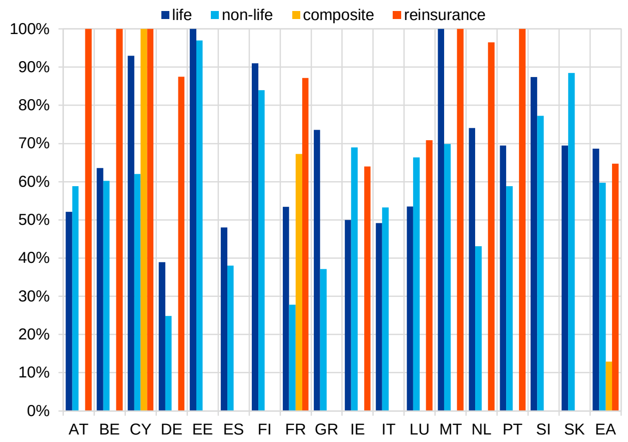


Source: EIOPA EU/EEA insurance and reinsurance statistics.
Notes: The number of firms in given country includes firms with head offices in the country and foreign branches of firms from other EU/EEA and third countries. Data for Slovenia refer to 2012.

Chart 3.5

Concentration ratio in insurance markets

(2013; percentages of gross written premiums)



Source: EIOPA EU/EEA insurance and reinsurance statistics.
Notes: Gross written premiums of the five largest companies as a percentage of total gross written premiums in the domestic sector for which data are available and relevant. The market comprises less than five companies in the Cypriot and Belgian reinsurance and Cypriot composite markets. Data for Slovenia refer to 2012.

3.2 Asset and liability structure

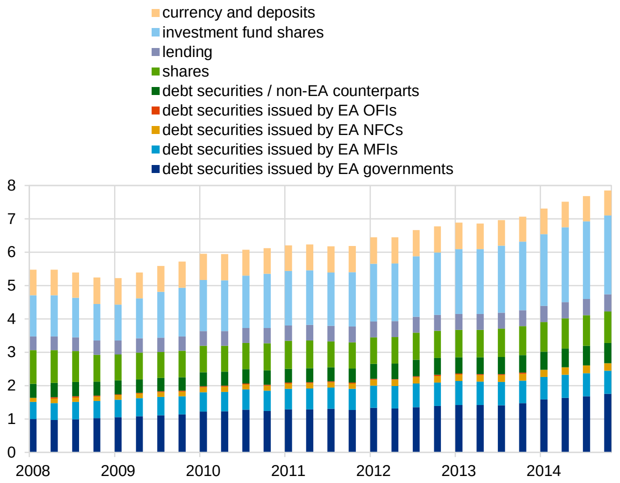
Euro area ICPFs are large investors in government and corporate bonds and in mutual funds, the shares of which continued to grow. Since 2008 more than 10% of total assets have shifted towards these positions (**Chart 3.6**). A corresponding proportional decline took place mainly in holdings of currency and deposits and in investments in shares and other equity. The latter decrease is partly attributable to value declines in equity holdings during the financial crisis, but also to a change in investment strategies with the aim of de-risking investment exposures, a development which had already begun before the financial crisis in 2008. Lately, insurers in particular are likely to have reallocated investments with a view to capital optimisation under Solvency II (**Chart 3.7**). Besides the higher capital charges for equities, investing in very long-term fixed income assets, which are typically government bonds, can reduce asset-liability mismatches, which require more capital. It is also likely, however, that yield developments in 2014 contributed to the asset distribution, as lower yields on fixed income assets have resulted in valuation gains in available-for-sale portfolios.

32 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 3.6

Breakdown of financial assets – euro area ICPFs

(2008-2014; EUR trillions)

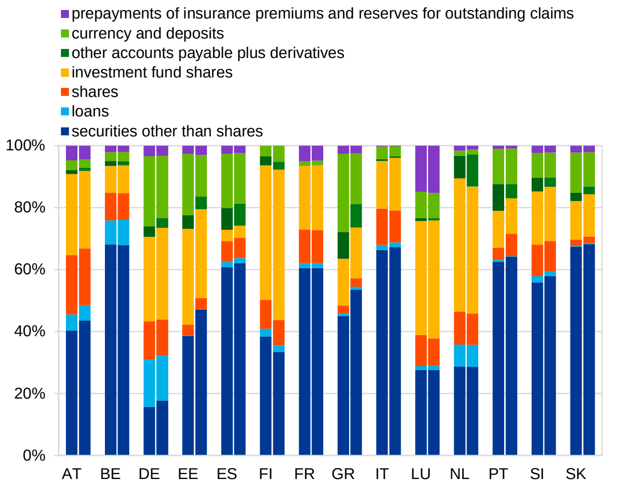


Source: ECB data from ICPF balance sheets.
Note: Investment fund shares exclude MMF shares.

Chart 3.7

Asset breakdown for insurance corporations in euro area countries

(2013-2014; percentages of total assets)

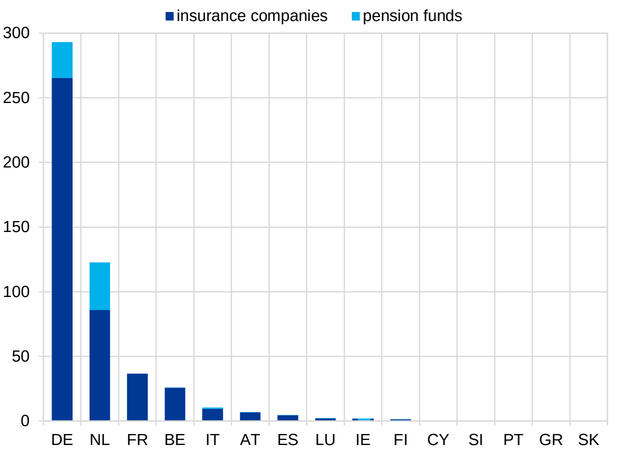


Source: ECB data from ICPF balance sheets.
Note: Investment fund shares exclude MMF shares.

Chart 3.8

Lending by euro area ICPFs

(2014; EUR billions)



Source: ECB data from ICPF balance sheets.
Notes: Data for Cyprus and Ireland refer to the aggregate assets of insurance companies and pension funds.

Direct lending by ICPFs remains small on aggregate and so far there is no indication of a large-scale, cross-country revision of insurance business models towards credit intermediation in search for yield (**Chart 3.8**). Lending by ICPFs is, however, significant and increasing in the Netherlands and Germany Belgian insurers have also strongly increased their lending activities to a significant degree recently, albeit starting from a lower level. More generally, lending by ICPFs has concentrated on households (in those jurisdictions where direct lending is allowed) and on governments.[33]

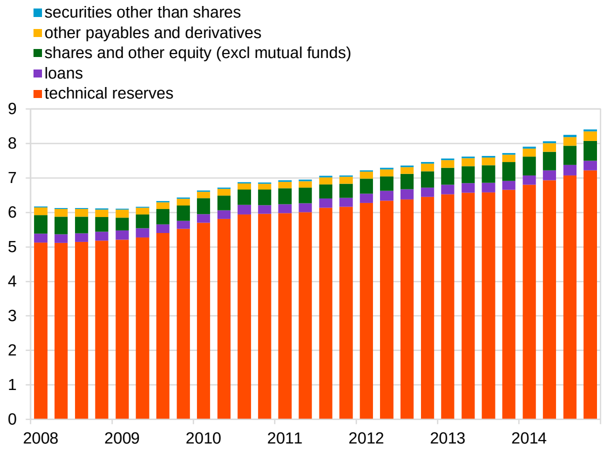
Technical reserves, i.e. obligations to the policyholders, constitute the bulk of the liabilities of ICPFs (**Chart 3.9**). The business model of insurance and pension provision implies that the average maturity of liabilities is typically longer than that of the corresponding assets, i.e. the maturity structure is inverted when compared to banking. This inverted maturity structure implies highly predictable, long-term outflows, in particular for life insurers and pension funds. For non-life insurers, the underwriting risks related to insured claims are typically limited to an acceptable level by the law of large numbers (e.g. for motor insurance) or, in the case of bulk claims (e.g. those related to natural catastrophes), through the use of reinsurance.

[33] See the box entitled “Lending by insurers”, *Financial Stability Review*, ECB, June 2011, pp. 115-116.

Chart 3.9

Liabilities of euro area ICPFs

(2008-2014; EUR trillions)

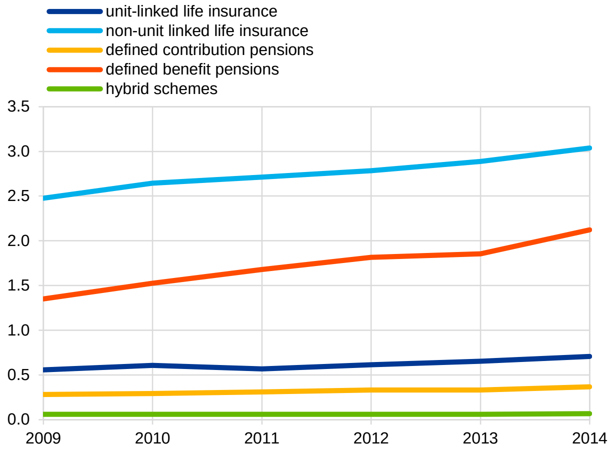


Source: ECB data from ICPF balance sheets.

Chart 3.10

Net equity of households in life insurance and pension plans

(2008-2014; EUR trillions)



Source: ECB data from ICPF balance sheets.

The high exposure to fixed income assets and the long-term nature of liabilities make ICPFs vulnerable to the protracted low-yield environment. First, low yields will hit investment income as the cash flows from paid premiums and maturing investments are gradually re-invested at lower rates (to the extent that they are not used for payments to policyholders). Second, a low discount rate implies an elevated value of liabilities. The valuation effect is typically larger on the liabilities side than on the assets side because the duration of the liabilities is often longer than that of the assets.[34] A prolonged low-yield environment can thus ultimately affect the solvency of the ICPFs. Liquidity, in contrast, is rarely a problem for ICPFs, owing to the time lag between receiving premiums and making payments to policyholders, provided penalties are in place to deter policyholders from surrendering their policies easily.

The degree of vulnerability to low interest rates is dependent on the business model of individual firms. Small and medium-sized, non-diversified life insurers are typically more exposed (to the extent they have sold policies that are not unit-linked, possibly also with a high level of yield guarantees). For pension funds, the impact is large for defined benefits schemes, whereas policyholders tend to take the hit in the case of defined contribution schemes.[35]

Despite the incentives for ICPFs to move towards policies where the policyholders bear the investment risk, **Chart 3.10** shows that non-unit linked insurance and

[34] The EIOPA Insurance stress test 2014 showed that the low interest rate environment is particularly harmful for sectors which have large duration gaps and internal rate of return mismatches between their assets and liabilities. The stress test results are available at https://eiopa.europa.eu/financial-stability-crisis-prevention/financial-stability/insurance-stress-test

[35] 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 contribution may vary significantly over time, depending on the reserves or funding shortfall of the fund.

defined benefit pensions still constitute the bulk of the policies on the balance sheets of life insurers and pension funds. The low growth rates of the unit-linked and defined contribution policies may reflect their competitive disadvantage as an investment product in the current low yield environment, as expected returns to policyholders are low.

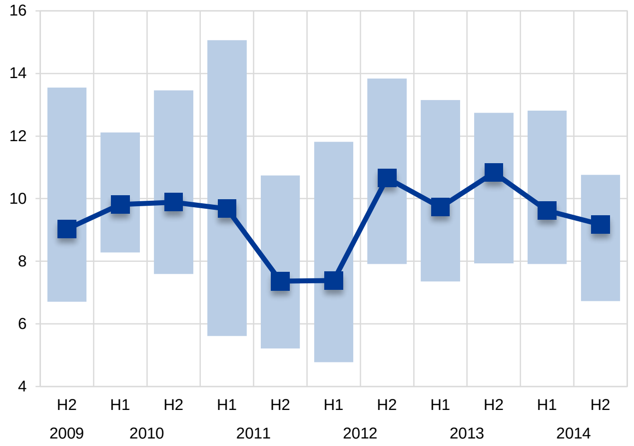
Other adjustment mechanisms available for ICPFs include diversification into the non-life and asset management businesses, the lowering of guaranteed rates on new policies and the use of interest rate derivatives. EIOPA's Low interest rate environment stock taking exercise 2014 provides evidence that such adjustment mechanisms are indeed being used by the industry to a significant degree.[36]

3.2.1 Profitability and solvency of insurers

This section reviews structural changes in the activity of insurance companies since the end of 2009, with particular focus on changes in 2014, and the broad implications for their profitability performance and solvency position. The section relies on data provided by EIOPA which focus on a sample of large European insurance groups.

Chart 3.11
Return on equity

(EU; percentages; interquartile range and median; last observation: H2 2014)



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 solid in relative terms when compared with that of the banking sector, has been constrained by the low interest rate environment and weak macroeconomic conditions experienced by several euro area countries. Indeed, the median return on equity (ROE) for the total insurance business, including both the life and non-life sectors, declined from 10.8% in the second half of 2013 to 9.2% at the end of 2014 (**Chart 3.11**).

On the liability side, the insurance industry tried to shift towards products characterised by a more flexible yield structure. On the asset side, the industry engaged in reallocation of investments with a view to optimising the capital allocation under the forthcoming Solvency II regime (see **Chart 3.7**).

Growth in the life sector in 2014 remained subdued. Indeed, the life business recorded a median annual growth of life premiums of about 2.7% in mid-2014 and 2.2% at the end of 2014 (**Chart 3.12**).[37] The development of the life sector exhibited a certain degree of heterogeneity across euro area countries, reflecting diverse social and economic

[36] The study is available at https://eiopa.europa.eu/financial-stability-crisis-prevention/financial-stability/insurance-stress-test/insurance-stress-test-2014

[37] According to Insurance Europe, total gross written premiums subscribed in Europe in 2013 were about €1,117 billion and life premiums accounted for about 60% of all premiums written in Europe. In the life sector, the three largest markets in the euro area were France, Germany and Italy.

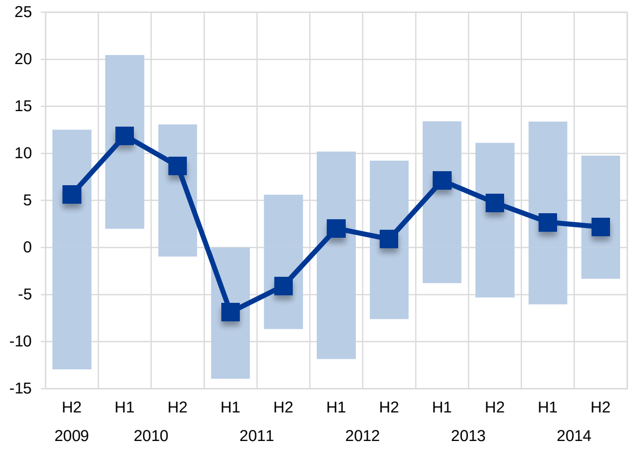
conditions. However, at the end of 2014, there was a reduction in the degree of heterogeneity.

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 experience a uniform trend across the euro area (see **Chart 3.10**). While in some countries these products underwent sustained growth, resulting in a gradual replacement of more traditional products, in other euro area countries their growth remained much more limited.

Chart 3.12

Gross premiums written – life insurance

(EU; annual growth rates; interquartile range and median; last observation: H2 2014)

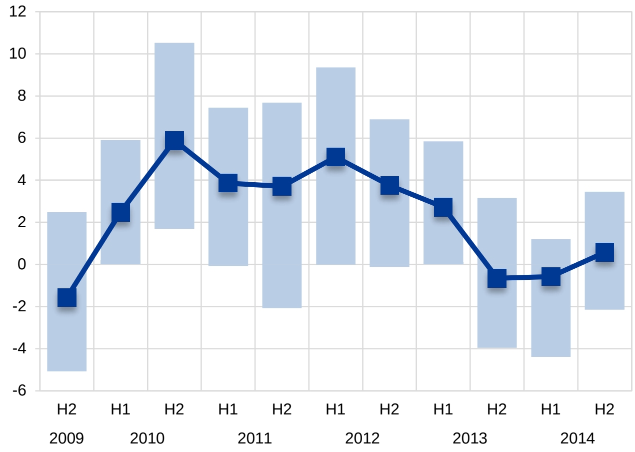


Source: EIOPA.

Chart 3.13

Gross premiums written – non-life insurance

(EU; annual growth rates; interquartile range and median; last observation: H2 2014)



Source: EIOPA.

The return on assets (ROA) of the life industry remained stable at relatively low levels in 2014. The median ROA for the large life-insurers in the sample has been hovering below 0.5% in recent semesters.

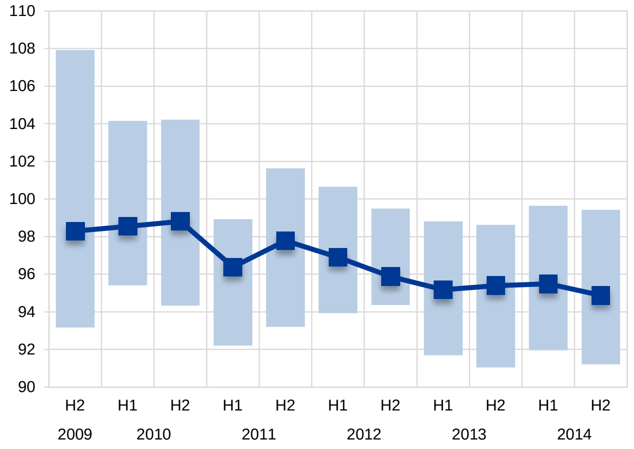
Most insurers in the sample exhibited low growth in non-life premiums in the second half of 2014 (**Chart 3.13**). On average, premiums in 2014 were generally stable (albeit at low levels) with growth at around 0%.[38] The steadiness of this development can be explained by the mandatory nature of most non-life insurance policies.

At the same time, claims related to the non-life insurance business remained stable in 2014 owing to the moderate motor vehicle accident rate and the absence of "extreme" claims in connection with natural disasters.

38 According to Insurance Europe, non-life premiums accounted for about 40% of all premiums written in Europe at the end of 2013. In the non-life sector, the three largest markets in the euro area were Germany, France and the Netherlands.

Chart 3.14
Combined ratio – non-life insurance

(EU; percentages; interquartile range and median; last observation: H2 2014)



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

The non-life business is characterised on the investment side by a shorter duration than the life business. It also benefits from a faster "adaptation" mechanism to the current low interest rate environment. However, non-life insurance companies can also be exposed to the low interest rate environment as well as stock market and real estate developments.

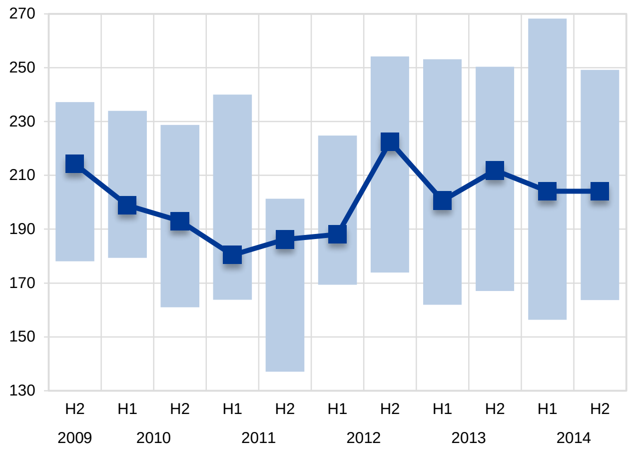
Chart 3.14 shows the development of the "combined ratio". The median value in 2014 was about 95%. Overall, the combined ratio was stable in 2013 and 2014, but it has improved compared with the 99% recorded in 2010.

The solvency ratio for the life sector (**Chart 3.15**) marginally decreased in 2014, due to the increasing weight of existing commitments to policyholders. The median European company has a solvency ratio of around 200% which is well in line with the current Solvency I requirements.

Unlike the life business, the solvency ratio of the non-life sector (**Chart 3.16**) increased at the end of 2014, exhibiting a median value of above 300%, which is the highest value recorded since 2009.

Chart 3.15
Solvency ratio – life insurance

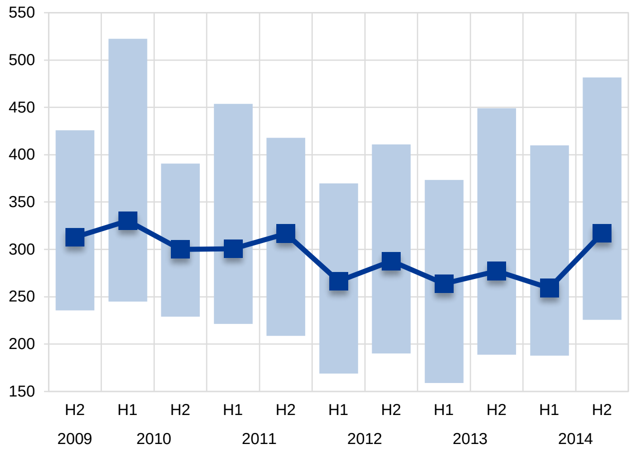
(EU; percentages; interquartile range and median; last observation: H2 2014)



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 2014)



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

However, the EIOPA 2014 stress test found that 14% of the core stress participants (representing 3% of total assets in the sample) would not have met the Solvency II capital requirement ratio under the baseline scenario at the end of 2013. This demonstrates the weakness of the solvency ratios of some insurers according to market-based valuations.

4 Other euro area non-bank financial entities

This Chapter reviews the structural features of the euro area non-bank financial sector often also labelled the "shadow banking sector". It examines both the broad measure of shadow banking (including all financial intermediaries except banks and ICPFs) and a more narrowly defined measure (investment funds, money market funds (MMFs) and financial vehicle corporations (FVCs) only). Structural features of key shadow banking sub-sectors for which balance sheet data are available are outlined in more detail, namely for non-money market investment funds (non-MMFs), MMFs, and FVCs.

The shadow banking sector has continued to grow over the past year, driven primarily by non-MMF investment funds, which expanded owing to net inflows and rising valuations. The weakening of the euro vis-à-vis other currencies contributed to this, as the share of assets invested outside the euro area amounts to 40%. Euro area MMFs expanded as well, following a protracted period of decline, with net flows into these funds having stabilised since mid-2014. By contrast, euro area FVCs have continued to decline over the past year owing to continued weak loan origination and securitisation activity by euro area credit institutions. Available data for the FVCs also suggest a notable decline in the relative share of liquid assets, while the issuance of short-term liabilities has remained constant over the past year.

4.1 Development of shadow banking aggregates

Over the past few years, growth in total euro area financial assets has been driven primarily by non-bank financial entities, while total banking assets have rebounded to levels last observed in 2008.[39] Of the approximately €60 trillion of total financial system assets in the euro area, more than €23 trillion are now held by shadow banking entities. Using the broad definition of shadow banking of the Financial Stability Board (FSB), shadow banking entities have increased their share of the total assets of the financial sector from 33% to 38% since 2009, while – in parallel – credit institutions have seen their share shrink from 55% to 48%. Over the last year, the share of the shadow banking sector grew by 3 percentage points.

The broad shadow banking measure comprises MMFs, non-MMFs and FVCs (see **Chart 4.1**). In 2015 non-MMFs account for more than 40% of total shadow banking

[39] Structural features of the shadow banking sector were previously reviewed in the special feature entitled "Structural features of the wider euro area financial system", *Banking Structures Report*, ECB, October 2014, pp. 28-45. For a more cyclical and risk perspective on shadow banking, see e.g. Section 3.1.3 of *Financial Stability Review*, ECB, May 2015, pp. 87-99.

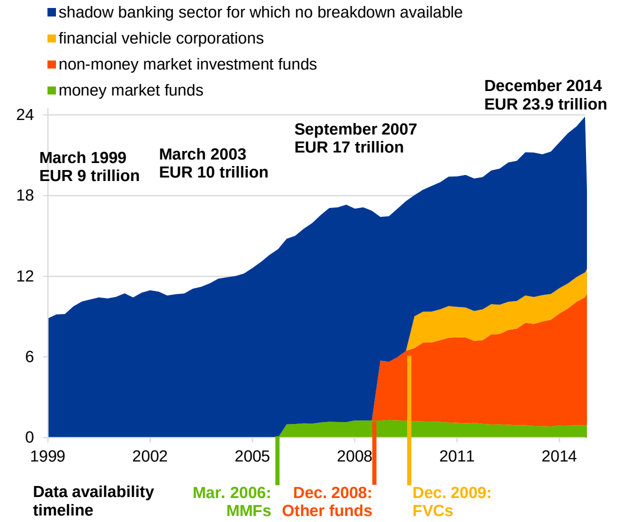
assets. Smaller shares of total assets are held by FVCs (8%) and MMFs (4%). For more than 50% of the sector's total assets, a breakdown is not available.[40]

While FVCs and MMFs have struggled to cope with the collapse in demand for securitised products and the low interest rate environment respectively, the non-MMF investment fund industry has witnessed a rapid expansion amid an intense search for yield among global investors since the global financial crisis.

Chart 4.1

Total assets of the shadow banking sector by the broad measure

(Mar. 1999 – Dec. 2014; EUR trillions)

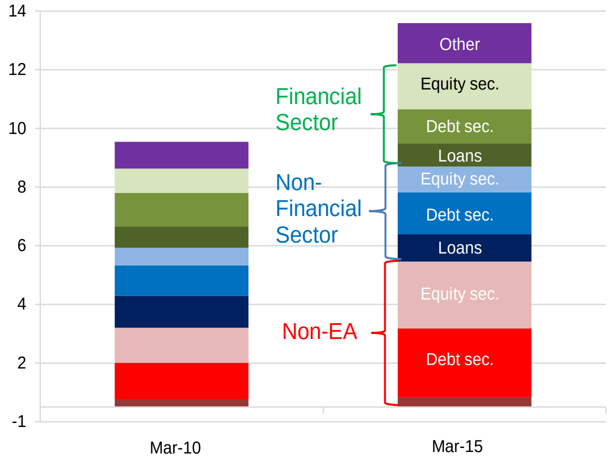


Sources: ECB and ECB calculations.
Note: A breakdown of statistical data for MMFs, other funds, and FVCs is available only from the indicated dates onwards.

Chart 4.2

Financial assets of the shadow banking sector by the narrow measure

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



Sources: ECB and ECB calculations.
Note: This narrow measure of shadow banking entities includes MMFs, investment funds, and FVCs. Other shadow banking entities for which no breakdown is available are excluded.

The shadow banking sector is an increasingly important provider of funding to the euro area economy. According to the narrow shadow banking measure (i.e. excluding other OFIs for which no breakdown is available), in 2015 these entities are providing €3.2 trillion of funds to the euro area non-financial sector in the form of loans, debt securities and equity financing (see **Chart 4.2**).

In addition, €3.5 billion are being provided to the euro area financial sector in the form of loans, debt securities and equity financing and approximately one third (€5 trillion) of assets are invested in non-euro area countries. The largest share of assets by the narrow aggregate are held by investment funds (about 79%), followed by FVCs (13%) and MMFs (8%).

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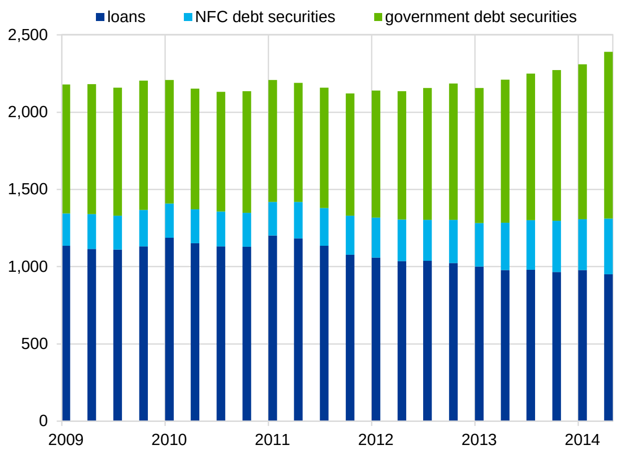
[40] Following the recent reclassification under the ESA 2010, some limited information on the size, asset composition and geographical distribution of this "residual" has become available. Two-thirds of these residual assets are held in the Netherlands and Luxembourg. In the Netherlands, De Nederlandsche Bank estimates that special financial institutions (SFIs) account for two-thirds of the broad Dutch shadow banking sector. In the case of Luxembourg, the residual includes a significant proportion of holding companies and other entities not engaged in shadow banking activities that have very limited financial links to the banking sector.

Chart 4.3
Credit provision to the euro area non-financial sector by the narrow shadow banking measure

(Mar. 2010 – Mar. 2015; EUR billion)



Sources: ECB and ECB calculations.
Notes: This narrow measure of shadow banking entities includes MMFs, investment funds, and FVCs; Other shadow banking entities for which no breakdown is available are excluded. Loans include direct loans to non-financial corporations (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.

Shadow banking entities also have an important and growing role in non-bank credit intermediation. Credit provision by the (narrowly measured) shadow banking sector to the euro area non-financial sector has increased by 6% over the past year to reach €2.3 trillion in the first quarter of 2015 (see **Chart 4.3**). €1.3 trillion of this credit is provided to non-financial corporates and households. The fall in securitisation activity has resulted in a decline in loan provision via FVCs since 2011. However, this dip in lending has been more than offset by the increase in debt securities held by the investment funds, which have become an important source of credit for non-financial corporates and governments, holding 27% and 12% of their outstanding debt securities respectively.

Euro area non-bank financial entities are also important providers of bank funding. The narrowly defined shadow banking sector currently holds around 10% of bank debt securities. Conversely, direct exposures of euro area banks to euro area non-bank financial entities amount to 8% of the aggregate balance sheet of MFIs. In addition to direct funding, banks can provide liquidity backstops, indemnification or credit lines to non-banks in times of stress. Further links between banks and shadow banking entities exist in the form of mutual contractual obligations in derivatives markets and securities financing transactions.

Box 1
Defining the shadow banking perimeter

Section 4.1 looks at non-bank financial intermediation in the broad shadow banking aggregate used by the FSB for monitoring purposes (MUNFI).[41] The broad measure calculated for the euro area comprises MMFs, non-MMFs, FVCs and remaining other financial institutions (OFI). For the latter, the entity types cannot be identified on the basis of national accounts data. This broad measure is complemented by a narrow measure, which excludes remaining OFIs. The aggregation thus follows a pragmatic approach by taking important data limitations into account. However, the narrow measure in particular should not be understood as the more relevant aggregate for assessing systemic risk.

The ongoing academic and regulatory debate reveals some challenges in defining a uniform perimeter for shadow banking in light of its complexity and changing nature. Some emphasise the role of shadow banking entities in non-bank credit intermediation, others are concerned more generally with non-traditional activities such as securitisation or securities lending. Most think of

[41] *Global Shadow Banking Monitoring Report 2014*, Financial Stability Board, 30 October 2014.

shadow banking as entities or activities that exploit regulatory "boundaries" (Goodhart, 2008)[42] between the regulated and less or non-regulated parts of the financial sector.

The FSB takes a functional approach by defining shadow banking as "credit intermediation that involves entities and activities fully or partially outside the regular banking system", which covers all non-bank and non-insurance entities. A narrower definition focuses more specifically on "entities that raise i) systemic risks […] and/or ii) regulatory arbitrage concerns".[43] Maturity and liquidity transformation, and leverage outside the regular banking system are seen as critical functions, especially when they involve close ties to the regular banking system.

The literature furthermore points to the role of banks and non-banks in creating money-like claims outside the traditional depository system (e.g. Adrian and Ashcraft, 2012).[44] Mehrling, Pozsar, Sweeney and Neilson (2014)[45] suggest having secured money-market funding at the core of the shadow baking definition. This view also stresses the importance of collateral markets, such as repo and derivative margins, in creating money-like claims (Pozsar, 2014;[46] Claessens, Pozsar, Ratnovski and Singh, 2012)[47], whereby the role of bankruptcy privileges is noted as a key feature of the secured funding model (Perotti, 2014).[48] Others propose considering private and public backstops outside traditional banking, where the financial activities enjoying such backstops should be viewed as shadow banking (Claessens and Ratnovski, 2014).[49]

A holistic approach to defining the perimeter of shadow banking would need to identify bank-like intermediation activities in addition to entities that perform bank-like functions outside the regulatory perimeter of banks. The activities covered under such an approach would encompass securitisation activities, but also securities financing transactions (SFTs) or economically equivalent functions e.g. through derivatives markets. There would be, however, no reliable estimates regarding the size of the shadow banking sector if such an approach were used.

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42 Goodhart, C., "The boundary problem in financial regulation", *National Institute Economic Review*, Vol. 206(1), 2008, pp. 48-55.

43 *Shadow Banking: Scoping the Issues*, Financial Stability Board, 12 April 2011, p. 3

44 Tobias, A. and Ashcraft, A.B., "Shadow Banking: A Review of the Literature", *FRBNY Staff Reports*, No 580, Federal Reserve Bank of New York, October 2012.

45 Mehrling, P., Pozsar, Z., Sweeney, J. and Neilson, D.H., "Bagehot was a Shadow Banker: Shadow Banking, Central Banking, and the Future of Global Finance", in Claessens, S., Evanoff, D., Kaufman, G. and Laeven, L. (eds.), "Shadow Banking Within and Across National Borders", *World Scientific Studies in International Economics*, Volume 40, 2014.

46 Pozsar, Z., "Shadow Banking: The Money View", *OFR Working Papers*, No 14-04, Office of Financial Research, 2 July 2014.

47 Claessens, S., Pozsar, Z.; Ratnovski, L. and Singh, M., "Shadow Banking: Economics and Policy", *IMF Staff Discussion Notes*, No 12/12, IMF, Washington, 4 December 2012.

48 Perotti, E., "The roots of shadow banking"; *CEPR Policy Insight*, No 69, December 2013.

49 Claessens, S. and Ratnovski, L., "What is Shadow Banking?", *IMF Working Papers*, No. 14/25, IMF, 11 February 2014.

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

4.2.1 The investment fund sector

Assets managed by investment funds other than MMFs have expanded rapidly over the past few years. Since the end of 2009, total assets have almost doubled from €5.4 trillion to €10.5 trillion in the first quarter of 2015 (94%). Compared to last year, there has been 27% growth. Excluding valuation and reclassification effects, i.e. measured by the index of notional stock, the sector has grown by 30% since 2009. The net inflow of funds has accounted for around two thirds of this growth, with net inflows amounting to €2.1 trillion between the end of 2009 and the first quarter of 2015 and €0.5 trillion during the last year alone.

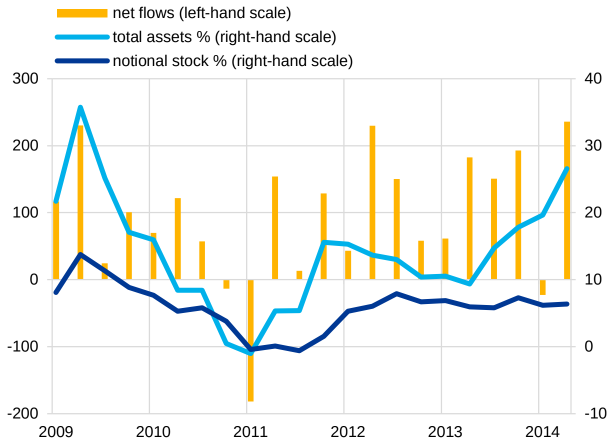
The expansion of the sector has been broad-based and all types of funds have contributed to growth. Since 2009, net inflows for bond funds and mixed funds amounted to €1.5 trillion overall, for equity funds €250 billion, for real estate funds €95 billion, and for hedge funds €33 billion. Last year was no notable exception from this diverse pattern.

The more recent acceleration in growth of total assets since the beginning of 2014 has been caused predominantly by valuation effects. Between the first quarter of 2014 and the first quarter of 2015, the average annual growth in total assets was close to 20%, partly due to a depreciation of the euro vis-à-vis other major currencies in that period. Excluding valuation effects, the sector has expanded at a relatively constant rate between 5% and 7% over the past year (see **Chart 4.4**).

Chart 4.4

Euro area investment funds – quarterly net flows and annual growth rates

(Q4 2009 – Q1 2015; 2015; EUR billions (left-hand scale); % annual change (right-hand scale))

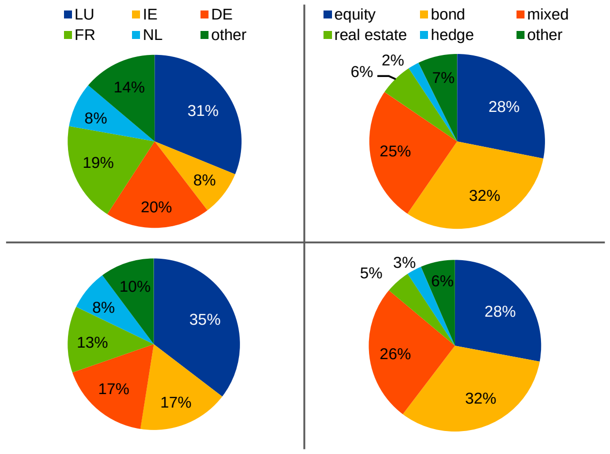


Sources: ECB and ECB calculations.

Chart 4.5

Euro area investment funds – assets by location and fund type

(Q4 2009 (top row); Q1 2015 (bottom row); percentage of total assets)



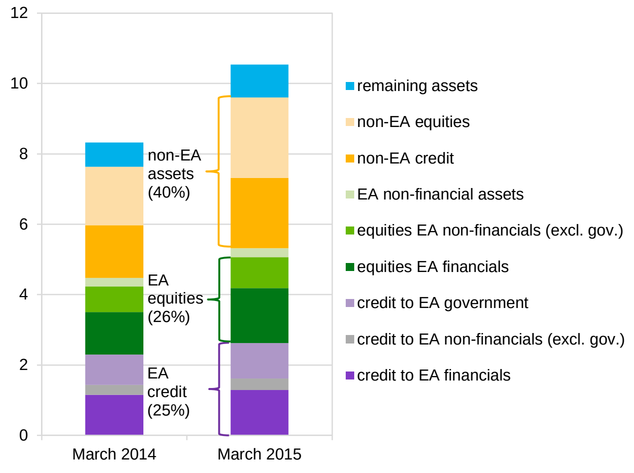
Sources: ECB and ECB calculations.
Notes: The columns refer to fund assets by location and type. The first and second rows represent the situation in 2009 and 2015, respectively.

Concentration is high in the fund sector, with more than 90% of assets under management domiciled in Luxembourg, Germany, Ireland, France and the Netherlands (see **Chart 4.5**). The geographic concentration has further increased in 2014, with a more pronounced expansion in Ireland and Luxembourg. Funds in these two countries tend to hold a higher share of assets outside the euro area, which has contributed to the increase in holdings of non-euro area assets by the euro area fund sector.

Chart 4.6

Euro area investment funds – assets by type

(Q1 2014; Q1 2015; EUR trillions)



Sources: ECB and ECB calculations.
Notes: Credit includes loans and debt securities; non-financial assets include real estate and other non- financial assets.

As of the first quarter of 20015, investment funds domiciled in the euro area are providing €1.3 trillion in credit to euro area financials, €1 trillion to euro area governments, and €325 billion to other euro area non-financials (see **Chart 4.6**). They have also invested €2.4 trillion in euro area equities and €250 billion in euro area non-financial assets, including real estate. In addition, the investment funds hold €4.3 trillion of non-euro area assets,[50] which is about 40% of total fund assets. This share has increased over the past year (from 38% in March 2014).

In recent years, euro area investment funds have kept their exposures to euro area MFIs broadly stable, but have increased their exposures to the non-financial sector. This mirrors the general expansion of market-based funding of the non-financial corporate sector, relative to bank-based funding. As a result, claims on the non-financial sector now account for a quarter of all investment fund assets in the euro area, compared to a fifth at the end of 2008. At the same time, the share of claims on MFIs has fallen from over 30% of total claims in the euro area at the end of 2008 to less than 25% in 2015.

4.2.2 Money market funds

The euro area money market fund (MMF) sector expanded again last year following a protracted period of decline, which started in March 2009. The MMF sector added nearly €120 billion in total assets between the first quarter of 2014 and the first quarter of 2015, of which €34 billion were net inflows and the rest mainly due to valuation effects.[51] Total assets measured in euro amount to more than €1 trillion in the first quarter of 2015.

Recent growth was driven predominately by MMFs domiciled in Ireland and Luxembourg, although the pace of growth declined in the first quarter of 2015 (see

50 These include €1.9 trillion of debt securities, nearly €2.3 trillion of equities, €120 billion of deposits and loans, and €20 billion of non-financial assets.

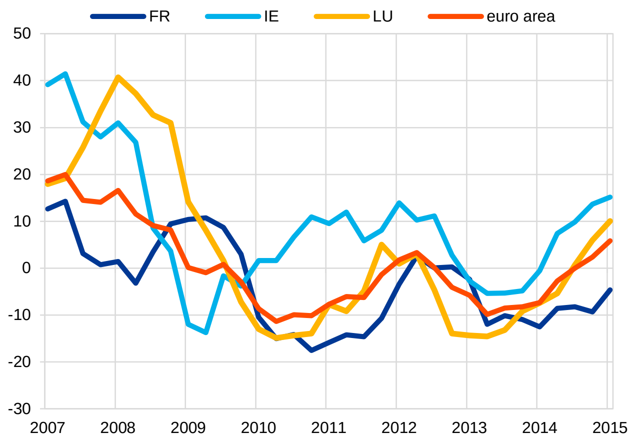
51 More than 50% of MMF assets are invested in non-euro area assets because funds also operate in foreign currency; USD and GBP in particular.

Chart 4.7). During the first quarter of 2015, French MMFs also started to have positive net inflows, although annual growth remained negative.

Chart 4.7

Euro area money market funds – notional growth by country of domicile

(Q1 2007 – Q1 2015; index of notional stock; % annual change)

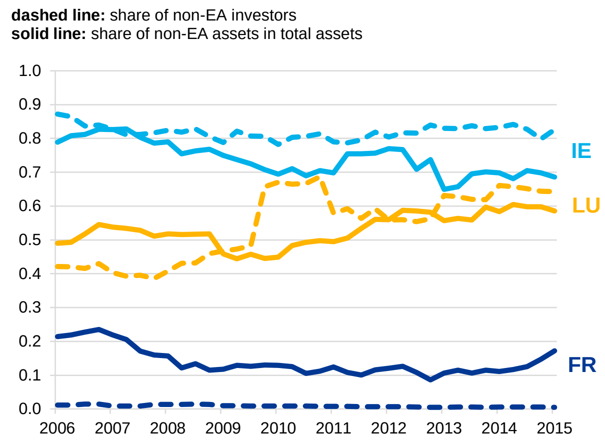


Sources: ECB and ECB calculations.

Chart 4.8

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

(Q2 2006 – Q1 2015; ratio)



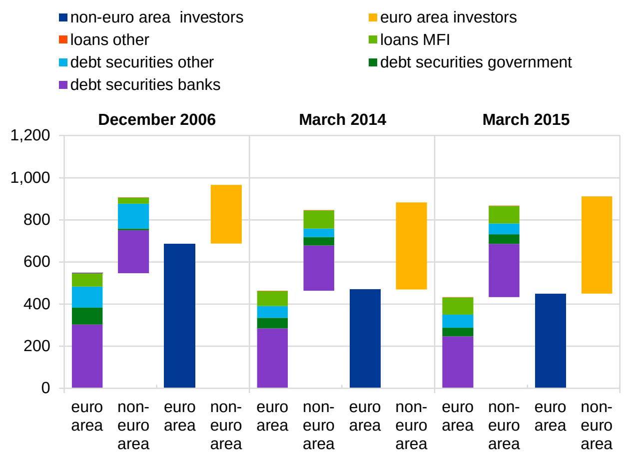
Sources: ECB and ECB calculations.
Note: Calculation of the share in non-EA assets excludes assets for which no geographic information is available.

The geographical concentration of the euro area MMF sector is high, with Ireland accounting for 43%, France for 30% and Luxembourg for 24% of total assets held by euro area MMFs in 2015. Other parts of the euro area account for less than 3%.

Chart 4.9

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

(EUR billions)



Sources: ECB and ECB calculations.

Many MMFs domiciled in the euro area operate in foreign currency markets; USD and GBP in particular. US MMFs have been a key source of US dollar funding for euro area banks, while Irish funds denominated in GBP have strong links to UK banks. 23% and 26% of MMFs total assets are denominated in GBP and USD, respectively.

Irish MMFs – and, to a lesser extent, also Luxembourgish MMFs – invest mainly in non-euro area bank debt securities or loans. The French funds invest predominantly in the euro area; although their share in non-euro area assets has increased over the past year from 11% to 17% in the first quarter of 2015 (see **Chart 4.8**). The investor base varies accordingly: while French MMFs are almost exclusively euro area investors, investors in Irish and, to a lesser extent, Luxembourgish funds are largely non-euro area residents.

There is a high degree of interdependence with the regular euro area banking sector, as more than 40% of MMF assets are either holdings of euro area MFI debt securities or loans to euro area MFIs (see **Chart 4.9**).

Bank debt securities remain by far the most important asset class held, accounting for three-quarters of the MMF balance sheet. In the first quarter of 2015, euro area MMFs held €327 billion of euro area bank debt (debt securities and loans) and €337 billion of non-euro area bank debt. The overall amount of bank debt remained constant compared to 2014, although the share in non-euro area bank debt increased relative to the euro area.

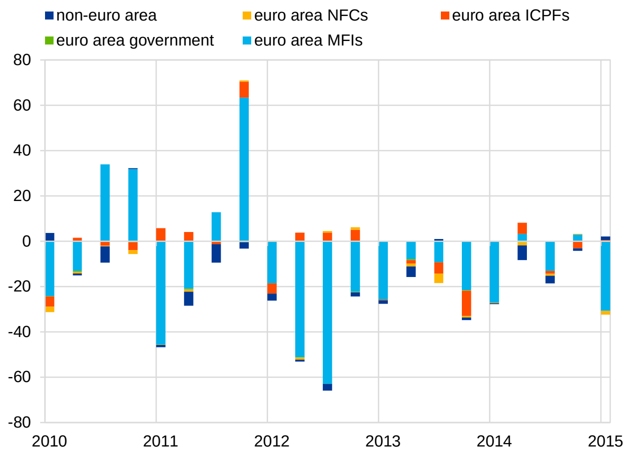
4.2.3 Financial vehicle corporations

Euro area financial vehicle corporations (FVCs) have continued to decline over the past year. Accumulated net flows between the first quarter of 2014 and the first quarter of 2015 amounted to minus €50 billion. Measured by total assets, FVCs have shrunk by 23% since the end of 2009, when reporting of the series started. The decline in FVC assets can be explained by a weakening of loan origination and securitisation activity by euro area credit institutions over the past few years, which in turn was largely driven by a reduced securitisation of loans to households. This trend also continued in 2014, albeit at a slower pace.

Chart 4.10

Financial vehicle corporations – quarterly transaction volume by originated loan sector

(Q1 2010 - Q1 2015; EUR billions)



Sources: ECB 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 40% of outstanding FVC debt securities are held by euro area MFIs. This share rose after the global financial crisis, but has been gradually falling again since mid-2012 (see **Chart 4.10**).

With €1.8 trillion of total assets, FVCs remain an important channel for the intermediation of credit to euro area households. More than 10% of all MFI loans to euro area households are securitised through FVCs. In fact, in the Netherlands and Ireland, nearly a third of MFI loans to households are securitised through FVCs.

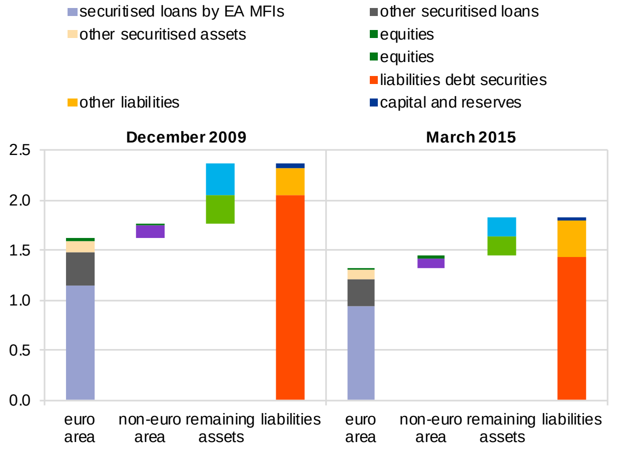
FVCs also have strong links with euro area banks. Loans originated by euro area credit institutions account for 51% (€930 billion) of the FVC balance sheet. Securitised loans originated by euro area non-MFIs amounted to €272 billion by the first quarter of 2015 (see **Chart 4.11**).

Approximately 75% of total FVC assets are longer-term (with an original maturity of more than one year) and this share has remained stable throughout the crisis. However, FVC balance sheets (€1.4 trillion) are also largely financed through the issuance of longer-term debt securities, so, on aggregate, the maturity mismatch of assets and liabilities on FVC balance sheets appears to be limited.

Chart 4.11

Financial vehicle corporations – assets and liabilities

(Q4 2009; Q1 2015; EUR trillions)

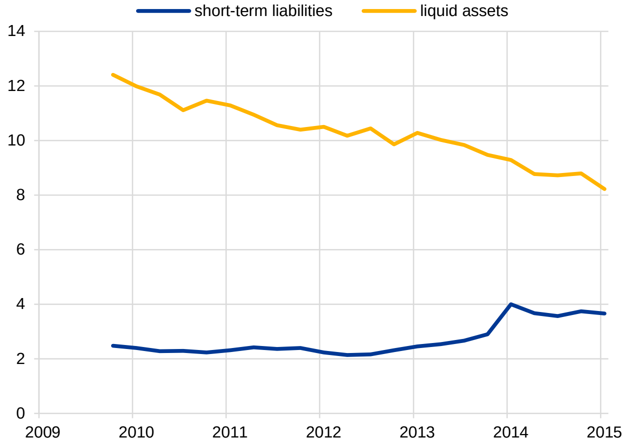


Sources: ECB and ECB calculations.
Note: Excludes other liabilities, i.e. (i) any differences between the nominal amount of principal outstanding of securitised loans and the transaction value paid by the FVC in purchasing such loans; (ii) financial derivatives liabilities subject to on-balance-sheet 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.

Chart 4.12

Financial vehicle corporations – short-term liabilities vs. liquid assets

(Q4 2009 – Q1 2015; percentage of total assets)



Sources: ECB and ECB calculations.
Note: Short-term liabilities include debt securities issued with an original maturity of less than one year; liquid assets include deposits at MFIs, debt securities with an original maturity of less than one year and equity (excluding securitisation fund units issued by other FVCs).

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 tend to match the maturity of their assets and liabilities, but it cannot be ruled out that a growing proportion of the sector is engaging in maturity transformation. Available data point to a notable decline in the relative share of liquid assets, while the issuance of short-term liabilities has remained broadly constant over the past few years (see **Chart 4.12**).

5 Statistical annexes

Table 1.1
Ratio of assets of MFIs (excl. ESCB) to GDP

(ratio)

	2008	2009	2010	2011	2012	2013	2014
Belgium	3.6	3.3	3.1	3.1	2.8	2.6	2.7
Germany	3.9	3.6	3.3	3.2	3.1	2.8	2.8
Estonia	-	-	1.4	1.2	1.2	1.1	1.1
Ireland	-	-	-	-	6.7	5.6	5.6
Greece	-	-	-	-	2.1	2.1	2
Spain	2.9	3.1	3.1	3.1	3.2	2.9	2.7
France	3.7	3.7	3.7	4	3.8	3.7	3.8
Italy	-	-	-	-	2.4	2.3	2.3
Cyprus	-	-	-	-	6.3	4.9	5.1
Latvia	1.3	1.6	1.7	1.4	1.3	1.2	1.3
Lithuania	0.8	1	0.9	0.8	0.7	0.7	0.7
Luxembourg	34.3	31.2	26.8	26.1	22.1	19.8	19.6
Malta	-	6.9	7.7	7.4	7.5	6.7	6.7
Netherlands	-	-	3.3	3.4	3.4	3.1	3.3
Austria	3.6	3.5	3.3	3.2	3	2.8	2.6
Portugal	2.6	2.8	3	3.1	3.2	2.9	2.6
Slovenia	1.3	1.5	1.4	1.4	1.4	1.2	1.1
Slovakia	-	-	-	-	0.8	0.8	0.8
Finland	2.1	2.2	2.7	3.3	3	2.6	2.8
euro area	3.4	3.4	3.4	3.5	3.5	3.2	3.1

Table 1.2
Ratio of assets of other financial institutions to GDP

(ratio)

	2008	2009	2010	2011	2012	2013	2014
Belgium	1.8	2.1	2.0	2.1	2.0	1.9	1.8
Germany	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Estonia	-	-	0.2	0.2	0.2	0.3	0.3
Ireland	-	-	-	-	5.9	5.7	5.6
Greece	-	-	-	-	0.1	0.1	0.1
Spain	0.8	0.9	0.9	0.8	0.7	0.6	0.6
France	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Italy	-	-	-	-	0.6	0.6	0.6
Cyprus	-	-	-	-	2.7	3.2	3.3
Latvia	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	0.1
Luxembourg	38.6	43.7	45.8	57.3	71.0	72.3	76.0
Malta	-	18.6	18.7	20.1	20.4	20.6	20.6
Netherlands	-	-	6.3	6.6	7.0	7.0	7.3
Austria	0.7	0.8	0.7	0.7	0.7	0.7	0.7
Portugal	1.2	1.3	1.4	1.2	1.1	1.1	1.0
Slovenia	0.2	0.2	0.2	0.2	0.1	0.1	0.2
Slovakia	-	-	-	-	0.1	0.1	0.1
Finland	0.1	0.1	0.1	0.1	0.1	0.2	0.2
euro area	-	-	-	-	1.3	1.3	1.4

Sources: Quarterly Sector Accounts, MFI balance sheet items (BSI), Eurostat and ECB calculations.
Notes: Differences from Table 5 are primarily due to differences between locational (QSA) data and consolidated banking data. 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
Belgium	2.9	3.6	3.9	3.8	4.1	4.6	5
Germany	11.5	13.4	13.7	13.8	15.6	14.5	16.4
Estonia	-	-	7.9	7.4	8.9	10	11.9
Ireland	-	-	-	-	45.9	51	52.4
Greece	-	-	-	-	-	0.5	0.2
Spain	8.7	9.6	9.8	9.7	10.3	11	11.8
France	0	0	0	0	0	0	0
Italy	-	-	-	-	2.2	2.3	2.8
Cyprus	-	-	-	-	22.9	16.5	15.9
Latvia	3.2	6.1	7.5	7.1	7.5	8.3	9.5
Lithuania	2	3.6	4.1	3.9	4.3	4.6	5.3
Luxembourg	0.7	2.3	2.3	2.3	2.5	2.5	2.4
Malta	-	-	-	-	0	0	0
Netherlands	-	-	124	135.2	153.4	154.7	184.6
Austria	4	4.8	5.1	4.8	5.2	5.5	5.8
Portugal	11	11.9	10	8.2	7.7	8	9.1
Slovenia	3.6	4.7	5.4	5.5	5.8	6	6.5
Slovakia	-	-	-	-	5	10.4	10.9
Finland	1.8	2	2.3	2	1.7	1.5	1.8
euro area	-	-	-	-	16.1	16.4	18.8

Table 1.4

Ratio of assets of insurance corporations to GDP

(percentages)

	2008	2009	2010	2011	2012	2013	2014
Belgium	60.7	67.5	68.0	67.3	73.1	72.1	78.9
Germany	54.3	57.5	57.8	56.5	59.5	61.3	63.9
Estonia	-	-	6.8	5.7	5.6	5.3	4.8
Ireland	-	-	-	-	123.8	120.3	132.4
Greece	-	-	-	-	7.2	8.1	8.1
Spain	21.0	22.8	22.6	23.6	24.9	26.4	27.2
France	79.2	90.7	94.8	91.3	99.7	103.2	112.3
Italy	-	-	-	-	34.3	37.5	43.1
Cyprus	-	-	-	-	17.3	15.9	19.8
Latvia	2.6	3.8	4.4	5.6	5.0	4.5	3.9
Lithuania	2.9	3.7	3.1	2.8	3.2	2.7	2.7
Luxembourg	194.7	267.2	298.8	281.3	302.6	303.7	325.4
Malta	-	53.3	69.6	132.2	131.2	133.3	155.6
Netherlands	-	-	65.0	65.3	70.2	66.7	72.9
Austria	31.8	35.2	35.4	33.7	35.7	35.3	36.4
Portugal	32.6	36.5	37.5	33.2	35.1	35.7	36.3
Slovenia	12.0	13.9	14.9	14.9	17.2	18.0	18.9
Slovakia	-	-	-	-	11.3	8.1	8.8
Finland	22.1	26.5	28.4	26.7	29.2	30.5	32.2
euro area	-	-	-	-	64.2	66.3	71.1

Sources: Quarterly Sector Accounts, Eurostat and ECB calculations.

Table 2.1

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

(percentages)

	2008	2009	2010	2011	2012	2013	2014
Belgium	59.9	54.0	53.6	52.4	50.3	48.9	50.5
Germany	80.8	78.0	76.3	76.1	74.4	73.3	72.4
Estonia	-	-	78.0	77.5	75.0	69.3	70.8
Ireland	-	-	-	-	46.9	43.1	42.7
Greece	-	-	-	-	92.4	92.1	92.3
Spain	72.9	72.3	71.7	73.4	74.9	74.1	73.0
France	75.6	73.7	72.9	75.1	73.3	72.0	71.5
Italy	-	-	-	-	71.6	70.8	68.6
Cyprus	-	-	-	-	66.9	57.8	58.3
Latvia	83.2	82.5	84.2	83.2	81.4	80.5	80.8
Lithuania	79.8	81.9	82.3	80.3	80.1	79.7	75.9
Luxembourg	45.9	40.2	35.5	30.3	23.0	20.8	19.8
Malta	-	26.5	28.3	25.8	25.6	23.5	23.3
Netherlands	-	-	29.0	28.5	26.7	25.3	24.8
Austria	76.9	75.0	74.5	75.3	72.2	71.3	69.9
Portugal	61.3	61.0	61.3	66.0	67.6	65.5	63.4
Slovenia	78.2	79.1	79.1	79.5	78.8	77.1	73.5
Slovakia	-	-	-	-	75.9	74.0	72.8
Finland	86.4	85.7	85.8	89.1	87.1	84.3	84.2
euro area	-	-	-	-	61.9	59.5	57.9

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
Belgium	29.4	34.3	34.1	35.6	35.7	36.5	33.9
Germany	5.5	6.5	7.1	7.2	7.6	6.6	6.8
Estonia	-	-	13.8	14.0	15.5	21.0	18.7
Ireland	-	-	-	-	41.2	43.7	43.1
Greece	-	-	-	-	4.4	4.0	3.9
Spain	19.7	20.1	20.7	18.7	16.9	16.3	16.6
France	8.3	8.2	8.3	7.6	7.7	8.0	7.6
Italy	-	-	-	-	17.4	17.1	17.6
Cyprus	-	-	-	-	28.8	38.3	37.7
Latvia	13.1	12.4	9.9	9.4	10.6	11.2	10.7
Lithuania	15.3	11.9	11.2	12.8	11.8	11.7	15.4
Luxembourg	51.5	56.3	60.6	66.4	73.8	75.9	76.9
Malta	-	71.5	69.2	69.6	69.9	71.9	71.3
Netherlands	-	-	54.5	54.9	55.6	56.8	55.6
Austria	15.3	16.5	16.2	15.7	17.8	18.2	18.8
Portugal	28.4	28.6	29.0	25.2	23.3	24.8	25.5
Slovenia	12.3	10.9	9.8	8.9	8.0	8.1	10.0
Slovakia	-	-	-	-	8.9	9.2	9.5
Finland	3.5	3.3	4.3	3.1	4.0	5.4	5.7
euro area	-	-	-	-	23.8	25.0	25.5

Sources: Quarterly Sector Accounts, MFI balance sheet items (BSI) and ECB calculations.

Table 2.3

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

(percentages)

	2008	2009	2010	2011	2012	2013	2014
Belgium	0.5	0.6	0.7	0.6	0.7	0.9	0.9
Germany	2.4	2.9	3.2	3.3	3.7	3.8	4.2
Estonia	-	-	4.4	4.8	5.8	6.4	7.5
Ireland	-	-	-	-	3.2	3.9	4.0
Greece	-	-	-	-	0.0	0.2	0.1
Spain	2.2	2.2	2.3	2.3	2.4	2.8	3.1
France	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	-	-	-	-	0.7	0.7	0.8
Cyprus	-	-	-	-	2.4	2.0	1.8
Latvia	2.0	3.2	3.7	4.1	4.9	5.4	6.1
Lithuania	2.0	3.1	3.7	4.0	4.7	5.4	5.7
Luxembourg	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malta	-	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	-	-	10.8	11.2	12.1	12.5	14.1
Austria	0.9	1.0	1.2	1.1	1.3	1.4	1.6
Portugal	2.6	2.6	2.0	1.7	1.6	1.8	2.2
Slovenia	2.2	2.5	2.9	3.2	3.3	3.7	4.2
Slovakia	-	-	-	-	4.6	9.5	9.8
Finland	0.8	0.8	0.7	0.5	0.5	0.5	0.5
euro area	-	-	-	-	2.9	3.1	3.5

Table 2.4

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

(percentages)

	2008	2009	2010	2011	2012	2013	2014
Belgium	10.2	11.1	11.7	11.4	13.2	13.7	14.7
Germany	11.4	12.6	13.5	13.4	14.2	16.2	16.5
Estonia	-	-	3.8	3.7	3.7	3.3	3.0
Ireland	-	-	-	-	8.7	9.3	10.1
Greece	-	-	-	-	3.2	3.6	3.7
Spain	5.2	5.3	5.3	5.6	5.8	6.8	7.3
France	16.2	18.1	18.7	17.3	19.1	20.0	20.9
Italy	-	-	-	-	10.3	11.4	13.0
Cyprus	-	-	-	-	1.8	1.9	2.3
Latvia	1.7	2.0	2.2	3.3	3.2	2.9	2.5
Lithuania	2.9	3.1	2.8	2.9	3.5	3.2	3.0
Luxembourg	2.6	3.4	3.9	3.3	3.1	3.2	3.3
Malta	-	2.0	2.6	4.6	4.5	4.6	5.4
Netherlands	-	-	5.7	5.4	5.5	5.4	5.6
Austria	6.9	7.5	8.1	7.9	8.7	9.1	9.8
Portugal	7.7	7.8	7.7	7.0	7.5	8.0	8.8
Slovenia	7.3	7.5	8.2	8.5	9.9	11.1	12.3
Slovakia	-	-	-	-	10.5	7.3	7.9
Finland	9.3	10.2	9.1	7.2	8.4	9.8	9.6
euro area	-	-	-	-	11.4	12.5	13.2

Sources: Quarterly Sector Accounts, MFI balance sheet items (BSI) and ECB calculations.

Table 3

Number of credit institutions and foreign branches

Number of credit institutions

	2008	2009	2010	2011	2012	2013	2014
Belgium	49	48	48	47	44	39	43
Germany	1,882	1,840	1,819	1,789	1,762	1,734	1,698
Estonia	6	7	7	7	8	24	30
Ireland	472	468	461	448	442	431	414
Greece	36	36	36	34	30	21	21
Spain	282	271	255	249	230	204	144
France	672	660	635	611	596	579	413
Italy	729	717	697	672	635	611	592
Cyprus	137	130	127	116	110	74	32
Latvia	21	21	21	22	20	54	49
Lithuania	77	78	77	83	86	84	82
Luxembourg	120	118	118	114	112	121	110
Malta	23	23	26	26	28	27	24
Netherlands	266	262	254	250	224	204	177
Austria	771	760	750	736	721	701	677
Portugal	147	139	133	131	129	127	130
Slovenia	21	22	22	22	20	20	20
Slovakia	17	15	15	14	14	13	13
Finland	334	328	318	305	290	279	241
euro area	6,062	5,943	5,819	5,676	5,501	5,347	4,910
EU	8,570	8,383	8,237	8,062	7,868	7,747	7,331

Number of foreign branches

	2008	2009	2010	2011	2012	2013	2014
Belgium	56	55	58	61	59	64	65
Germany	103	104	108	110	108	109	105
Estonia	11	10	11	10	8	7	7
Ireland	32	33	34	38	36	34	33
Greece	30	30	26	23	22	20	20
Spain	87	89	88	87	85	85	84
France	99	98	95	92	87	91	90
Italy	84	82	77	79	78	81	79
Cyprus	23	25	25	25	27	27	25
Latvia	6	8	10	9	9	9	10
Lithuania	7	7	9	9	8	7	7
Luxembourg	40	37	37	35	36	37	40
Malta	3	3	3	3	3	3	3
Netherlands	32	33	33	35	36	39	39
Austria	30	29	30	30	29	30	30
Portugal	28	27	26	24	23	24	23
Slovenia	3	3	3	3	3	3	4
Slovakia	9	11	14	17	14	15	15
Finland	22	22	24	24	22	22	25
euro area	705	706	711	714	693	707	704
EU	982	976	983	990	967	978	983

Sources: ECB structural financial indicator, ECB list of financial institutions and Latvijas Banka.
Note: Figures for Latvia include credit unions starting from 2013.

Table 4

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

(EUR billions)

Domestic banking groups

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

Foreign subsidiaries and branches

	2008	2009	2010	2011	2012	2013	2014
Belgium	219	600	561	591	528	491	501
Germany	1,005	861	379	419	309	278	312
Estonia	37	33	30	19	20	20	21
Ireland	1,083	822	732	812	647	514	243
Greece	100	104	98	82	63	13	11
Spain	350	328	309	309	289	217	231
France	276	215	212	223	227	189	427
Italy	236	236	229	247	252	227	225
Cyprus	39	48	44	40	38	26	27
Latvia	22	19	19	16	17	17	16
Lithuania	25	23	20	21	21	20	22
Luxembourg	875	783	704	697	650	628	706
Malta	36	34	41	41	42	38	37
Netherlands	121	118	349	318	273	181	169
Austria	345	272	274	293	316	301	328
Portugal	101	109	118	114	112	94	88
Slovenia	15	15	15	15	14	13	14
Slovakia	60	49	50	49	49	50	53
Finland	270	264	337	494	450	372	410
euro area	5,071	4,860	4,454	4,761	4,280	3,653	3,820

Source: ECB consolidated banking data statistics.

Table 5

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

Foreign subsidiaries and branches

	2008	2009	2010	2011	2012	2013	2014
Belgium	0.6	1.7	1.5	1.6	1.4	1.2	1.2
Germany	0.4	0.3	0.1	0.2	0.1	0.1	0.1
Estonia	2.2	2.3	2.1	1.1	1.1	1.1	1.1
Ireland	5.8	4.9	4.4	4.7	3.7	2.9	1.3
Greece	0.4	0.4	0.4	0.4	0.3	0.1	0.1
Spain	0.3	0.3	0.3	0.3	0.3	0.2	0.2
France	0.1	0.1	0.1	0.1	0.1	0.1	0.2
Italy	0.1	0.2	0.1	0.2	0.2	0.1	0.1
Cyprus	2.1	2.6	2.3	2.0	1.9	1.5	1.5
Latvia	0.9	1.0	1.1	0.8	0.8	0.7	0.7
Lithuania	0.8	0.8	0.7	0.7	0.6	0.6	0.6
Luxembourg	23.2	21.6	17.8	16.5	14.9	13.6	14.3
Malta	5.9	5.5	6.2	6.0	5.8	5.0	4.7
Netherlands	0.2	0.2	0.6	0.5	0.4	0.3	0.3
Austria	1.2	1.0	0.9	0.9	1.0	0.9	1.0
Portugal	0.6	0.6	0.7	0.6	0.7	0.6	0.5
Slovenia	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Slovakia	0.9	0.8	0.8	0.7	0.7	0.7	0.7
Finland	1.4	1.5	1.8	2.5	2.3	1.8	2.0
euro area	0.5	0.5	0.5	0.5	0.4	0.4	0.4

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

Table 6.1

Composition of banking sector assets by type of credit institution

(percentages)

Domestic credit institutions

	2009	2010	2011	2012	2013	2014
Belgium	39	40	35	36	35	34
Germany	89	89	88	88	89	88
Estonia	1	6	11	4	4	5
Ireland	50	56	52	52	51	48
Greece	79	80	81	84	97	98
Spain	90	90	91	91	92	92
France	89	90	90	89	91	91
Italy	88	87	86	87	88	87
Cyprus	63	69	65	65	71	70
Latvia	31	31	35	33	40	44
Lithuania	17	20	27	28	27	27
Luxembourg	9	6	6	7	8	7
Malta[1]	21	19	20	22	25	29
Netherlands	95	85	87	89	92	93
Austria	80	80	79	78	77	75
Portugal	77	78	79	79	81	80
Slovenia	71	72	72	71	69	66
Slovakia	4	4	4	4	4	4
Finland	33	29	28	33	35	33

Sources: MFI balance sheet items (BSI), ECB structural financial indicators, Latvijas Banka, Eesti Pank and ECB calculations.
1) Data for Malta are consolidated.

Table 6.2

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
Belgium	18.0	50.0	47.8	47.1	42.3	40.2	38.4
Germany	7.9	7.6	7.6	8.1	7.7	7.3	7.7
Estonia	-	82.1	65.1	61.6	63.7	63.9	63.9
Ireland	37.9	33.6	27.0	25.8	23.4	24.5	27.2
Greece	13.6	13.3	12.8	8.1	7.5	0.2	0.2
Spain	3.3	3.3	3.3	3.4	3.3	3.3	2.5
France	8.9	8.0	7.7	7.4	8.1	6.2	6.1
Italy	5.6	5.6	6.0	5.9	6.1	5.8	5.8
Cyprus	29.9	32.4	24.9	20.1	15.3	11.9	12.5
Latvia	-	42.7	40.4	36.7	34.8	33.3	29
Lithuania	67.2	65.8	61.5	54.5	52.4	54.5	53.5
Luxembourg	68.8	68.1	71.0	68.0	66.8	63.1	58.4
Malta	-	35	36	35	32	25	17
Netherlands	0.7	0.6	10.3	7.2	3.8	2.6	1.7
Austria	17.9	13.8	13.6	14.3	14.8	15.3	16.2
Portugal	15.8	15.8	14.4	13.4	12.1	12.7	13.5
Slovenia	29.8	28.2	27.2	27.1	27.8	28.7	31.1
Slovakia	88.5	89.2	89.2	88.6	88.3	88.9	82.2
Finland	64.6	62.7	65.6	65.4	60.0	59.4	61.5

Branches of credit institutions from EU countries

	2008	2009	2010	2011	2012	2013	2014
Belgium	3.6	3.6	3.9	6.6	8.3	10.6	13.4
Germany	2.0	2.1	2.0	2.3	3.2	2.5	2.5
Estonia	-	16.8	27.2	27.6	28.6	27.2	25.9
Ireland	9.5	9.5	10.3	12.1	14.2	13.2	14.3
Greece	8.4	7.6	7.0	10.8	8.7	2.5	2.2
Spain	6.8	6.4	5.9	5.7	5.3	4.2	3.5
France	1.9	1.8	1.6	1.5	1.6	1.4	1.5
Italy	7.3	6.2	6.6	7.0	6.7	6.0	6.2
Cyprus	3.5	0.8	1.1	1.5	1.8	1.4	1.0
Latvia	-	12.0	12.1	12.3	13.4	11.8	12.8
Lithuania	17.6	17.6	18.1	18.9	19.7	18.2	19.8
Luxembourg	13.8	14.3	12.7	11.3	11.6	11.1	13.2
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0
Netherlands	2.9	2.9	3.2	4.1	5.4	3.7	3.4
Austria	1.1	1.1	1.1	1.1	1.2	1.4	1.6
Portugal	5.8	6.4	6.8	7.5	8.1	6.5	6.6
Slovenia	1.0	0.9	1.0	1.3	1.5	2.0	2.5
Slovakia	6.6	6.9	6.6	7.0	7.7	7.2	13.9
Finland	4.9	4.4	5.0	6.1	7.0	5.4	5.7

Sources: MFI balance sheet items (BSI), ECB structural financial indicators, Latvijas Banka, Eesti Pank and ECB calculations.
1) Due to confidentiality reasons, data for Malta combines branches of credit institutions from EU countries and branches and subsidiaries of credit institutions from the rest of the world.

Table 6.3

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

(percentages)

Subsidiaries of credit institutions from rest of the world

	2008	2009	2010	2011	2012	2013	2014
Belgium	0.4	3.1	3.5	4.6	6.3	6.4	4.7
Germany	1.1	0.7	0.8	0.6	0.7	0.8	0.8
Estonia	-	0.0	1.7	0.0	4.1	4.6	5.2
Ireland	8.3	6.8	6.9	10.0	10.3	11.2	10.4
Greece	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
France	0.9	0.8	0.7	0.7	0.8	0.8	0.8
Italy	0.2	0.4	0.5	0.5	0.4	0.4	0.4
Cyprus	0.0	0.0	0.0	9.1	11.8	10.3	10.2
Latvia	-	14.7	16.5	16.1	18.4	15.3	14.7
Lithuania	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Luxembourg	8.5	5.9	8.2	10.1	11.1	13.0	15.5
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0
Netherlands	1.8	1.8	1.8	1.7	1.6	1.7	1.6
Austria	4.7	4.7	4.8	5.5	6.2	6.4	6.9
Portugal	1.0	0.9	0.9	0.5	0.4	0.3	0.3
Slovenia	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
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Branches of credit institutions from rest of the world

	2008	2009	2010	2011	2012	2013	2014
Belgium	4.9	4.0	4.4	6.2	7.2	8.2	9.1
Germany	0.5	0.4	0.5	0.6	0.6	0.6	0.7
Estonia	-	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
Greece	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Spain	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
Italy	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Cyprus	4.7	3.8	4.7	4.8	5.6	5.7	5.9
Latvia	-	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
Luxembourg	4.5	2.4	2.1	4.5	3.6	4.6	5.9
Malta[1]	-	44.1	44.3	45.0	46.5	50.2	54.0
Netherlands	0.1	0.1	0.1	0.1	0.2	0.1	0.2
Austria	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
Slovenia	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
Finland	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Sources: MFI balance sheet items (BSI), ECB structural financial indicators, Latvijas Banka, Eesti Pank and ECB calculations.
1) Due to confidentiality reasons, data for Malta combines branches of credit institutions from EU countries and branches and subsidiaries of credit institutions from the rest of the world.

Table 7
Population per credit institution and per local branch

Population per credit institution

	2008	2009	2010	2011	2012	2013	2014
Belgium	101,971	103,750	102,670	101,648	107,320	107,816	108,320
Germany	41,287	42,030	42,383	43,087	43,829	44,573	45,552
Estonia	78,729	74,206	74,072	78,218	82,825	42,587	35,562
Ireland	8,974	9,115	9,325	9,536	9,725	10,048	10,347
Greece	169,492	169,502	179,895	191,780	213,323	275,691	274,820
Spain	127,025	131,726	138,168	139,511	148,938	160,666	205,593
France	88,357	90,808	94,714	98,930	102,653	105,748	133,405
Italy	72,423	74,380	76,902	79,655	84,509	87,387	90,739
Cyprus	4,826	5,213	5,457	6,035	6,306	8,534	14,956
Latvia	64,051	57,892	53,777	66,414	70,126	31,949	33,816
Lithuania	38,074	37,211	35,601	32,914	31,785	32,502	32,909
Luxembourg	3,197	3,389	3,476	3,684	3,770	3,710	3,772
Malta	17,799	17,933	15,941	16,010	14,986	15,650	15,819
Netherlands	54,437	56,020	57,283	58,164	62,977	66,403	77,358
Austria	10,363	10,559	10,719	10,951	11,220	11,597	12,085
Portugal	60,333	63,664	66,082	68,114	69,176	69,254	69,341
Slovenia	80,879	81,666	81,953	82,114	89,425	89,546	85,908
Slovakia	207,918	208,375	187,240	174,133	193,080	193,322	193,520
Finland	14,883	15,298	15,868	16,478	17,297	17,950	20,155
euro area	47,898	49,863	50,928	52,455	54,239	55,644	60,046

Population per local branch

	2008	2009	2010	2011	2012	2013	2014
Belgium	2,481	2,568	2,739	2,829	2,894	2,971	3,093
Germany	2,077	2,107	2,070	2,160	2,260	2,271	2,334
Estonia	5,208	6,271	6,600	7,470	8,130	9,430	10,785
Ireland	5,024	3,696	3,924	4,165	4,310	4,494	4,643
Greece	2,730	2,743	2,785	2,891	3,057	3,547	4,090
Spain	998	1,044	1,079	1,165	1,226	1,382	1,452
France	1,630	1,688	1,675	1,699	1,710	1,740	1,759
Italy	1,734	1,751	1,779	1,790	1,836	1,910	1,979
Cyprus	852	869	910	943	1,016	1,264	1,386
Latvia	3,310	3,433	3,573	3,750	5,084	5,868	6,254
Lithuania	3,287	3,254	3,257	4,479	4,336	4,509	4,801
Luxembourg	2,127	2,204	2,246	2,288	2,618	2,560	2,573
Malta	3,688	3,618	3,668	3,890	3,921	3,841	3,883
Netherlands	4,806	5,268	5,800	6,292	6,793	7,760	9,096
Austria	1,961	2,002	2,005	1,893	1,889	1,948	2,012
Portugal	1,645	1,618	1,605	1,624	1,680	1,747	1,752
Slovenia	2,897	2,892	2,952	2,988	2,959	3,269	3,483
Slovakia	4,297	4,405	4,436	5,221	5,095	4,310	4,243
Finland	3,178	3,471	3,636	3,726	3,856	4,184	4,598
euro area	1,731	1,791	1,808	1,877	1,939	2,033	2,111

Sources: ECB structural financial indicators, Eurostat and ECB calculations.

Table 8

Population per bank employee and assets per bank employee

(EUR thousands)

Population per bank employee

	2008	2009	2010	2011	2012	2013	2014
Belgium	162	169	176	179	184	191	197
Germany	120	122	122	123	124	125	127
Estonia	218	235	243	241	238	272	271
Ireland	111	119	125	129	144	154	160
Greece	169	170	176	186	195	215	241
Spain	166	173	178	190	200	216	230
France	152	155	157	153	156	158	161
Italy	175	184	186	190	195	198	203
Cyprus	63	65	66	66	67	77	78
Latvia	157	173	182	184	192	201	213
Lithuania	289	290	310	348	345	352	327
Luxembourg	18	19	19	19	20	21	22
Malta	106	108	106	103	105	101	96
Netherlands	142	150	154	158	162	174	179
Austria	106	108	107	107	109	112	115
Portugal	169	172	172	176	183	187	193
Slovenia	165	168	171	174	179	184	193
Slovakia	262	289	298	293	290	292	290
Finland	207	215	230	232	241	243	248
euro area	141	148	150	153	156	161	166

Assets per bank employee

	2008	2009	2010	2011	2012	2013	2014
Belgium	19,258	18,133	18,313	19,550	18,052	17,524	19,450
Germany	11,488	11,023	12,419	12,634	12,470	11,477	12,048
Estonia	3,598	3,748	3,700	3,448	3,536	4,104	4,415
Ireland	34,863	34,669	32,055	28,808	27,466	24,826	23,748
Greece	6,986	7,473	8,103	7,942	7,743	7,937	8,696
Spain	12,229	12,840	13,248	14,690	15,255	14,555	14,708
France	17,019	17,169	17,953	18,833	18,302	18,155	19,179
Italy	10,752	11,412	11,707	12,754	13,607	13,171	13,399
Cyprus	9,411	11,138	10,675	10,264	9,969	8,103	8,320
Latvia	2,319	2,420	2,657	2,621	2,683	2,917	3,292
Lithuania	2,395	2,401	2,569	2,836	2,814	2,864	2,847
Luxembourg	34,239	30,189	29,299	29,841	27,800	27,291	28,630
Malta	10,920	10,731	12,749	12,700	13,304	11,940	12,801
Netherlands	19,216	20,132	20,917	23,006	24,024	23,312	26,055
Austria	13,414	13,300	12,500	12,919	12,586	12,022	11,872
Portugal	7,729	8,445	9,086	9,568	9,691	9,185	8,657
Slovenia	3,988	4,380	4,419	4,436	4,415	4,125	4,074
Slovakia	3,101	2,905	3,092	3,124	3,193	3,287	3,439
Finland	14,939	15,581	20,131	27,296	26,524	23,296	26,153
euro area	13,419	13,477	14,184	14,972	14,927	14,269	14,932

Sources: ECB structural financial indicators and ECB calculations.

Table 9

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

Herfindahl index for credit institutions[1]

(index ranging from 0 to 10,000)

	2008	2009	2010	2011	2012	2013	2014
Belgium	1,881	1,622	1,439	1,294	1,061	979	982
Germany	191	206	298	317	307	266	301
Estonia	3,120	3,090	2,929	2,613	2,493	2,483	2,445
Ireland	661	714	700	647	632	674	677
Greece	1,172	1,183	1,214	1,278	1,487	2,136	2,195
Spain	497	507	528	596	654	719	839
France	681	605	610	600	545	568	584
Italy	307	298	410	407	410	406	424
Cyprus	1,019	1,089	1,124	1,027	996	1,472	1,303
Latvia	1,205	1,181	1,005	929	1,027	1,037	1,001
Lithuania	1,714	1,693	1,545	1,871	1,749	1,892	1,818
Luxembourg	309	310	343	346	345	357	329
Malta	1,236	1,250	1,181	1,203	1,313	1,458	1,648
Netherlands	2,167	2,034	2,049	2,067	2,026	2,105	2,131
Austria	454	414	383	423	395	405	412
Portugal	1,114	1,150	1,207	1,206	1,191	1,197	1,164
Slovenia	1,268	1,256	1,160	1,142	1,115	1,045	1,026
Slovakia	1,197	1,273	1,239	1,268	1,221	1,215	1,221
Finland	3,160	3,120	3,550	3,700	3,010	3,080	3,310
euro area	675	648	687	711	679	691	731
EU	648	628	669	686	663	675	693

Share of total assets of five largest credit institutions[2]

(share of the five largest credit institutions in percentages)

	2008	2009	2010	2011	2012	2013	2014
Belgium	81	77	75	71	66	64	66
Germany	23	25	33	34	33	31	32
Estonia	95	93	92	91	90	90	90
Ireland	50	53	50	47	46	48	48
Greece	70	69	71	72	79	94	94
Spain	42	43	44	48	51	54	58
France	51	47	47	48	45	47	48
Italy	31	31	40	39	40	40	41
Cyprus	64	65	64	61	63	62	63
Latvia	70	69	60	60	64	64	64
Lithuania	81	80	79	85	84	87	86
Luxembourg	30	29	31	31	33	34	32
Malta	73	73	71	72	74	76	82
Netherlands	87	85	84	84	82	84	85
Austria	39	37	36	38	36	37	37
Portugal	69	70	71	71	70	70	69
Slovenia	59	60	59	59	58	57	56
Slovakia	72	72	72	72	71	70	71
Finland	83	83	84	81	79	84	80
euro area	44	44	47	47	47	47	48
EU	44	44	47	47	47	47	47

Source: ECB structural financial indicators 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 reported 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 10

Total assets of other euro area insurance corporations and pension funds

(EUR billions)

Assets of insurance corporations

	2008	2009	2010	2011	2012	2013	2014
Belgium	215.5	236.0	248.6	255.5	283.9	284.8	317.3
Germany	1,416.5	1,452.2	1,513.1	1,542.9	1,651.1	1,694.6	1,835.3
Estonia	-	0.7	0.8	0.8	0.8	0.8	0.9
Ireland	-	-	-	-	-	-	-
Greece	13.0	13.8	14.0	13.3	14.0	14.9	14.9
Spain	232.9	245.7	244.5	254.3	263.5	276.5	288.2
France	1,590.8	1,760.3	1,893.9	1,875.4	2,076.9	2,180.9	2,387.5
Italy	462.3	519.0	508.2	503.0	542.4	588.9	678.2
Cyprus	-	-	-	-	-	-	-
Latvia	0.6	0.7	0.8	1.1	1.1	1.1	0.9
Lithuania	1.2	1.2	1.0	1.0	1.0	1.0	1.2
Luxembourg	81.3	1,01.2	120.9	122.1	134.0	142.7	162.6
Malta	-	-	-	-	-	-	-
Netherlands	356.1	373.9	403.5	428.2	458.2	442.6	505.7
Austria	103.8	110.5	116.0	116.8	126.2	125.7	133.2
Portugal	56.7	63.3	65.8	59.5	59.2	59.5	62.9
Slovenia	4.5	4.9	5.3	5.1	6.1	6.4	7.0
Slovakia	-	5.9	6.2	6.2	6.6	6.6	7.0
Finland	41.5	47.2	51.8	51.8	55.9	59.2	65.3
euro area	4,762	5,143	5,425	5,462	5,909	6,114	6,734

Assets of pension funds

	2008	2009	2010	2011	2012	2013	2014
Belgium	10.4	12.7	14.1	14.3	15.8	18.2	20.2
Germany	298.3	327.4	387.4	404.9	444.6	469.5	511.4
Estonia	-	1.0	1.2	1.2	1.6	1.9	2.3
Ireland	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-
Spain	96.6	103.5	105.3	103.9	108.3	115.2	125.0
France	-	-	-	-	-	-	-
Italy	44.0	44.9	41.5	43.4	47.8	51.1	60.2
Cyprus	-	-	-	-	-	-	-
Latvia	0.8	1.1	1.3	1.4	1.7	1.9	2.3
Lithuania	0.7	1.0	1.2	1.2	1.4	1.6	1.9
Luxembourg	0.4	0.8	0.9	1.0	1.1	1.2	1.2
Malta	-	-	-	-	-	-	-
Netherlands	693.7	730.1	792.6	865.7	997.2	1,015.7	1,248.8
Austria	11.7	13.6	14.9	14.7	16.2	17.2	19.0
Portugal	19.6	21.1	18.7	14.8	13.8	14.2	15.7
Slovenia	1.4	1.7	2.0	2.2	2.0	2.1	2.5
Slovakia	-	3.9	4.9	5.8	6.8	7.2	7.9
Finland	4.3	4.8	4.7	5.9	4.7	5.1	6.3
euro area	1,247	1,341	1,469	1,556	1,742	1,803	2,122

Source: Statistics on euro area insurance corporations and pension funds.

Table 11

Total assets of other euro area non-bank financial entities

(EUR billions, 2014)

	MMFs	Equity funds	Bond funds	Mixed funds	Real estate funds	Hedge funds	Other funds	FVCs	Remaining OFIs
Belgium	0.9	33.4	16.1	59.7	-	-	14.7	85.3	644.3
Germany	3.9	224.2	407.1	753.1	166.7	2.3	98.6	43.5	723.9
Estonia	-	0.3	0.1	-	0.1	0.0	-	-	5.8
Ireland	394.1	522.6	579.4	184.1	10.7	268.6	68.7	402.2	663.1
Greece	0.8	1.3	1.0	0.7	2.6	-	0.4	-	15.1
Spain	7.3	21.1	93.8	38.2	1.7	1.8	71.3	257.0	400.7
France	294.3	326.9	277.2	359.9	53.1	3.2	191.0	221.3	654.4
Italy	7.4	32.2	116.9	84.9	58.3	7.5	-	315.9	626.5
Cyprus	-	1.9	0.0	0.4	-	0.0	0.3	-	57.6
Latvia	0.0	0.1	0.1	0.0	0.0	-	0.0	-	4.0
Lithuania	-	0.1	0.0	0.0	0.1	0.0	0.0	-	5.1
Luxembourg	223.8	1,033.7	1,276.2	806.6	48.0	32.2	98.0	141.2	3,617.0
Malta	0.2	1.4	1.2	1.2	0.1	3.2	1.6	2.0	161.1
Netherlands	2.1	273.2	259.7	16.3	102.9	23.2	74.6	343.7	4,498.6
Austria	0.2	22.5	70.9	64.7	5.4	0.4	-	-	230.1
Portugal	2.5	1.3	6.2	1.3	16.1	0.0	3.7	36.5	144.6
Slovenia	0.1	0.4	1.6	1.2	0.9	-	1.2	-	8.0
Slovakia	0.1	0.4	1.6	1.2	0.9	-	1.2	-	8.0
Finland	3.4	35.8	44.0	5.3	5.7	2.2	-	-	39.4
euro area	941	2,533	3,153	2,379	473	345	625	1,849	12,507

Sources: ECB MFI balance sheet items (BSI), investment funds balance sheet statistics, ECB financial vehicle corporation assets and liabilities statistics, quarterly sector accounts, ECB calculations
Note: "Remaining OFIs" excludes FVCs from the OFI sector accounts series S12O.

Table 12.1

Total assets of other euro area non-bank financial entities

(EUR billions)

Euro area money market funds (MMFs)

	2008	2009	2010	2011	2012	2013	2014
Belgium	5.6	1.9	1.9	4.4	1.0	1.0	0.9
Germany	17.3	12.1	10.4	6.6	7.8	4.5	3.9
Estonia	-	-	-	-	-	-	-
Ireland	319.3	310.4	359.0	287.6	297.3	276.3	394.1
Greece	2.5	1.8	1.2	0.7	0.8	0.7	0.8
Spain	28.3	13.5	8.2	8.1	7.0	8.4	7.3
France	485.4	501.3	413.6	369.3	370.2	324.2	294.3
Italy	59.4	55.8	39.4	28.0	9.5	9.9	7.4
Cyprus	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	0.1	0.0
Lithuania	-	-	-	-	-	-	-
Luxembourg	340.2	319.4	284.6	302.7	224.3	198.8	223.8
Malta	0.2	0.3	0.3	0.2	0.2	0.2	0.2
Netherlands	2.5	2.5	1.8	1.8	2.0	2.0	2.1
Austria	3.8	2.8	2.5	1.3	0.5	0.2	0.2
Portugal	0.0	0.0	0.0	0.1	1.3	2.4	2.5
Slovenia	1.6	1.8	1.8	0.4	0.2	0.1	0.1
Slovakia	1.6	1.8	1.8	0.4	0.2	0.1	0.1
Finland	12.3	11.8	10.3	11.4	3.2	3.4	3.4
euro area	1,280	1,237	1,137	1,023	925	832	941

Euro area investment funds (excl. MMFs)

	2008	2009	2010	2011	2012	2013	2014
Belgium	86.1	93.9	93.9	78.6	87.0	103.7	124.0
Germany	934.5	1060.0	1,172.3	1,179.5	1,350.4	1,461.2	1,652.0
Estonia	0.5	0.6	0.6	0.5	0.5	0.6	0.6
Ireland	349.9	458.6	645.6	818.6	1,018.8	1,181.4	1,634.2
Greece	7.1	7.6	7.2	5.1	5.4	5.7	5.9
Spain	184.7	193.5	171.8	154.5	148.2	184.0	227.8
France	878.8	1,013.0	1,089.8	987.6	1,067.8	1,118.7	1,211.4
Italy	227.9	225.1	227.5	201.6	216.3	236.0	299.8
Cyprus	1.3	1.4	1.5	1.6	2.1	2.7	2.5
Latvia	-	0.1	0.2	0.2	0.2	0.3	0.2
Lithuania	0.1	0.1	0.2	0.1	0.2	0.2	0.3
Luxembourg	1,403.2	1,693.6	2,138.1	2,063.0	2,434.4	2,731.1	3,294.7
Malta	8.2	6.5	8.1	7.8	14.5	8.7	8.6
Netherlands	189.3	455.7	502.2	515.5	590.0	648.5	749.8
Austria	129.2	141.1	149.8	138.7	149.6	151.2	164.3
Portugal	29.4	33.3	30.9	27.5	27.7	27.2	28.7
Slovenia	1.7	1.7	2.0	2.9	3.6	4.6	5.4
Slovakia	1.7	1.7	2.0	2.9	3.6	4.6	5.4
Finland	29.8	43.3	53.5	45.7	66.8	75.5	93.0
euro area	4,464	5,431	6,297	6,232	7,187	7,946	9,509

Sources: ECB statistics on balance sheet items (BSI), investment funds balance sheet statistics, ECB calculations.

Table 12.2

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
Belgium	-	76.5	87.4	99.1	100.7	94.3	85.3
Germany	-	83.9	72.6	63.7	48.5	46.4	43.5
Estonia	-	-	-	-	-	-	-
Ireland	-	538.2	576.1	499.6	441.9	418.5	402.2
Greece	-	-	-	-	-	-	-
Spain	-	487.9	496.4	457.3	356.1	279.7	257.0
France	-	151.4	155.2	209.5	203.8	213.2	221.3
Italy	-	386.5	339.1	354.4	341.2	329.3	315.9
Cyprus	-	-	-	-	-	-	-
Latvia	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-
Luxembourg	-	110.9	108.0	116.9	120.2	129.4	141.2
Malta	-	-	-	-	0.4	0.9	2.0
Netherlands	-	479.8	459.3	431.6	402.5	362.6	343.7
Austria	-	3.5	3.3	3.1	2.9	2.7	-
Portugal	-	50.4	61.9	62.4	43.6	41.2	36.5
Slovenia	-	-	-	-	-	-	-
Slovakia	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-
euro area	-	2,369	2,359	2,298	2,062	1,918	1,849

Remaining OFIs

	2008	2009	2010	2011	2012	2013	2014
Belgium	622.0	654.0	635.4	701.4	665.9	662.7	644.3
Germany	669.8	649.4	711.7	751.2	826.1	664.4	723.9
Estonia	-	-	3.6	3.5	4.2	6.2	5.8
Ireland	-	-	-	-	585.2	601.6	663.1
Greece	-	-	-	-	19.2	16.3	15.1
Spain	879.4	436.4	455.5	395.1	414.9	385.4	400.7
France	805.8	642.9	687.6	613.2	632.6	657.0	654.4
Italy	-	-	-	-	591.6	576.5	626.5
Cyprus	-	-	-	-	52.5	58.3	57.6
Latvia	5.1	4.5	3.5	3.3	3.6	4.0	4.0
Lithuania	5.0	3.8	3.4	3.9	3.6	3.5	5.1
Luxembourg	1,452.7	1,475.2	1,703.7	2,301.8	2,972.6	3,219.1	3,617.0
Malta	-	114.2	123.6	138.4	146.4	154.0	161.1
Netherlands	-	-	3493.3	3824.9	4145.7	4216.8	4498.6
Austria	207.4	218.6	205.7	203.1	229.7	225.5	230.1
Portugal	215.0	183.6	193.7	147.2	141.1	146.9	144.6
Slovenia	-	-	-	-	6.9	7.5	8.0
Slovakia	-	-	-	-	6.9	7.5	8.0
Finland	16.3	15.5	25.2	22.5	27.8	33.8	39.4
euro area	4,879	4,398	8,246	9,109	11,477	11,647	12,507

Sources: ECB Financial Vehicle Assets and Liabilities Statistics, Quarterly Sector Accounts, 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

BSR	Banking Structures Report	IFSU	investment fund shares/units
BSI	balance sheet item	IMF	International Monetary Fund
CDS	credit default swap	M&A	merger and acquisition
CI	credit institution	MFI	monetary financial institution
CRD IV	Capital Requirements Directive	MMF	money market fund
CRR	Capital Requirements Regulation	MUNFI	monitoring universe of non-bank financial intermediation
dCoES	delta-conditional expected shortfall	NCB	national central bank
ECB	European Central Bank	NFC	non-financial corporation
EEA	European Economic Area	non-MMF	non-money market investment fund
EIOPA	European Insurance and Occupational Pensions Authority	NPL	non-performing loan
ESCB	European System of Central Banks	OFI	other financial intermediary
EU	European Union	QSA	Quarterly Sector Accounts
FSB	Financial Stability Board	RFS	Report on Financial Structures
FSC	Financial Stability Committee	ROA	return on assets
FSR	Financial Stability Review	ROE	return on equity
FVC	financial vehicle corporation	RWA	risk-weighted asset
ICPFs	insurance corporations and pension funds	SFI	special financial institution
IFRS	International Financial Reporting Standards	SFT	securities financing transaction
IFS	International Financial Statistics	SSM	Single Supervisory Mechanism

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