New features in monetary and financial statistics

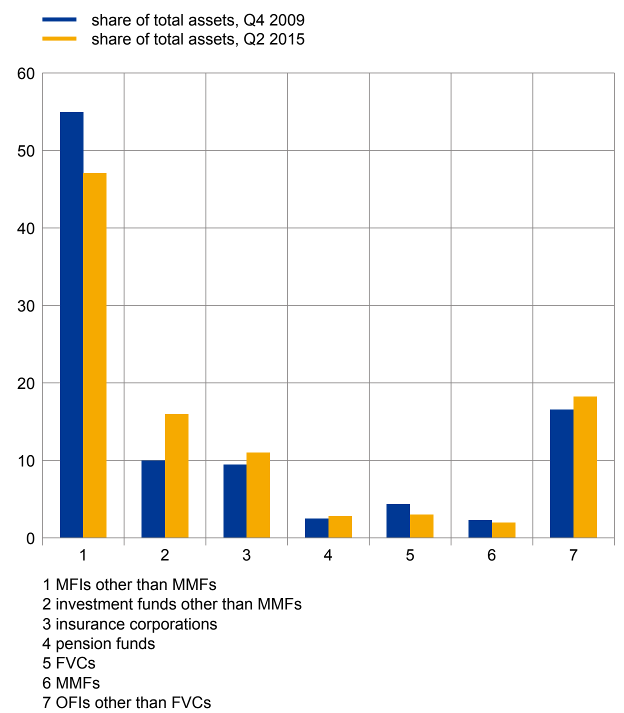
The ECB has recently published substantially enhanced monetary and financial statistics. The enhancements were triggered by two main factors. First, as financial innovation has changed the financial landscape in Europe, policy-makers have created additional demands for information. Second, new requirements have arisen from the adoption of the European System of Accounts 2010 (ESA 2010), an update of the statistical standards which constitute the methodological framework for the financial and non-financial sector accounts in Europe. This article gives some insights into the new features and provides examples of the practical relevance of the enhanced statistics.

1 Introduction

Chart 1

Euro area financial sectors' share of total assets

(percentages based on outstanding amounts)



Source: ECB.

Since it was established, the ECB has compiled monetary and financial statistics that accurately represent the most recent monetary and financial developments and changes in the financial system.[1] These statistics are compiled with the aim of acquiring a comprehensive and detailed picture of euro area financial sectors in order to support the ECB's monetary policy and macroprudential functions.

The structure of the financial system is evolving as a result of financial innovation and the arrival of new participants and products, so the definitions and collection of data are updated regularly. Chart 1 shows the change in relative importance of financial sectors in the euro area. While the share of monetary financial institutions (MFIs) has somewhat declined, they still accounted for approximately half of the balance sheet of the euro area financial sector at the end of June 2015. The importance of financial vehicle corporations (FVCs) has also declined, which is related to the lower level of activity in the securitisation market. By contrast, investment funds have gained in relative importance, representing one-sixth of the financial system.

[1] In most cases, the collection of monetary and financial statistics is based on ECB regulations addressed to the financial industry, namely Regulations ECB/2013/33 (statistical requirements for MFI balance sheet items), ECB/2013/34 (MFI interest rates), ECB/2013/38 (investment funds), ECB/2013/39 (post office giro institutions) and ECB/2013/40 (financial vehicle corporations).

The recent publication of enhanced monetary and financial statistics based on the ESA 2010 was an important milestone in this update process. The enhancement of these statistics, and in particular their reporting frameworks, is the result of a process that started in 2012, involving statisticians, policy-makers, analysts and the financial industry. The close involvement of the latter two groups meant that a balance was able to be reached between the benefits of a sound economic analysis for each dataset and the cost of reporting and managing additional information.

The article is organised according to the different types of monetary and financial statistics. It deals with MFI balance sheets (Section 2), bank interest rates (Section 3), investment funds (Section 4), financial vehicle corporations (Section 5) and securities issues (Section 6). Section 7 concludes.

2 MFI balance sheets

MFI balance sheet statistics contribute in several ways to supporting financial stability and monetary analysis. Monthly developments are comprehensively analysed owing to the relationship between monetary growth and inflation over the medium to long term. Since banks represent the most important source of financing for the non-financial private sector (including non-financial corporations and households) in the euro area, MFI balance sheet data provide timely information on potential changes in financing available to the real economy. Balance sheet data collected from banks and other financial institutions (OFIs) are also incorporated into the euro area quarterly financial accounts, which provide an overview of the financing, financial investment and balance sheet situation by institutional sector.

As of July 2015 the data released on MFI balance sheet statistics have been enhanced by including new breakdowns. All new breakdowns are reflected in the aggregated balance sheet of the euro area MFI sector.

The breakdown of balance sheet items by counterpart sector has been extended so that sectors are now consistently distinguished. These sectors include insurance corporations, pension funds, non-money market fund (MMF) investment funds, central banks, other deposit-taking corporations and other financial institutions. In turn, the shares/units issued by investment funds are identifiable within equity assets. These new breakdowns are fully aligned with the ESA 2010. Further breakdowns comprise the identification of MFI intra-group positions in deposits and loans, loans to general government and FVCs by original maturity, holdings of debt securities issued by general government with an original maturity of up to one year, and financial derivatives and accrued interest on loans and deposits if they are recorded within “remaining assets” and “remaining liabilities”. Table 1 summarises these new breakdowns.

Table 1
New MFI balance sheet items

Frequency	Item	Description	Counterpart sector
Monthly	Deposits and loans	Breakdown of counterparts by MFI sub-sector	Central bank Other deposit-taking corporations
		Identification of intra-group positions for other deposit-taking corporations	Other deposit-taking corporations
	Deposits, repurchase agreements and loans	Identification of non-MMF investment funds	Non-MMF investment funds Other financial institutions
		Separate identification of insurance corporations and pension funds	Insurance corporations Pension funds
	Loans to general government and FVCs	Breakdown by original maturity Up to one year Over one and up to five years Over five years	General government FVCs
	Holdings of government debt securities by original maturity	Identification of government debt securities with an original maturity of up to one year	General government
	Holdings of non-MMF investment fund shares/units and equities	Separate categories previously included in "shares and other equities"	Non-MMF investment funds MFIs Non-MFIs Non-euro area residents
	Loans adjusted for sales and securitisation (new method)	Outstanding amounts and financial transactions	General government Non-MMF investment funds Insurance corporations Pension funds Non-financial corporations Households
Quarterly	Deposits and loans	Sector breakdown of intra-euro area positions vis-à-vis each euro area country	General government Non-MMF investment funds Insurance corporations Pension funds Other financial institutions Non-financial corporations Households
	Holdings of debt securities	Identification of other financial institutions	Other financial institutions
		Identification of insurance corporations	Insurance corporations
	Holdings of equities	Identification of other financial institutions	Other financial institutions
		Identification of insurance corporations and pension funds	Insurance corporations Pension funds
	Financial derivatives	Identification of positions, if recorded within remaining assets/ liabilities	-
	Accrued interest on loans/deposits	Identification of positions, if recorded within remaining assets/ liabilities	-

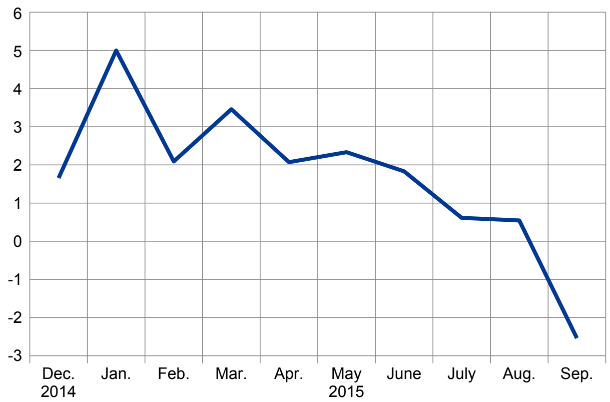
One prominent feature of the new statistics is that they facilitate a more comprehensive view of lending to the real economy originated by euro area banks. Specifically, this includes new data on positions and transactions (i.e. loan repayments by borrowers) for loans that have been derecognised from the balance sheets of MFIs owing to sales or securitisation. These data have been used to enhance the loan series adjusted for sales and securitisation, which in turn increases the comparability of growth rates across countries.[2]

[2] See the box entitled "New data on loans to the private sector adjusted for sales and securitisation", *Economic Bulletin*, Issue 7, ECB, November 2015.

Chart 2

Net purchases of euro area non-MMF investment fund shares by MFIs excluding the Eurosystem

(financial transactions; EUR billions)

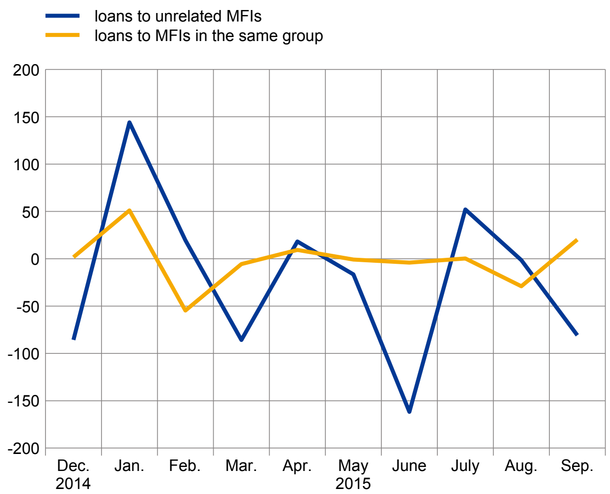


Source: ECB.

Chart 3

Loans by euro area MFIs to other euro area MFIs

(financial transactions; EUR billions)



Source: ECB.

A second prominent feature relates to the identification of investment fund shares (other than MMFs) within MFI assets. This means that the extent to which MFIs have diversified their portfolios in fund shares/units can be assessed. Chart 2 shows MFI purchases of resident investment fund shares. From December 2014 to August 2015 MFIs recorded systematic net purchases of investment fund shares, which were performed in the context of very low interest rates. This may indicate that MFIs diversified their portfolios in a search for higher yields and provide evidence of portfolio rebalancing as triggered by the Eurosystem's asset purchase programme (APP). In addition, this breakdown allows the separate monitoring of the deposits of investment funds, which are likely to be considerably affected by the APP.

A third prominent feature of the new statistics relates to intra-group positions of MFIs. From the assets/liabilities of MFIs (excluding the Eurosystem), it is now possible to identify positions in loans/deposits with MFIs belonging to the same corporate group. At the end of 2014 intra-MFI positions represented around half of the total loans/deposits of MFIs vis-à-vis other MFIs. From December 2014 to September 2015 cumulated transactions with MFIs belonging to the same group contributed €12 billion to a decrease in positions, while cumulated transactions with unrelated MFIs contributed €198 billion (see the corresponding monthly transactions in Chart 3). This new breakdown allows intra-group transactions and transactions with unrelated MFIs to be monitored separately; these may exhibit very different dynamics, especially in periods of stress. Consequently, the functioning of interbank markets and the pass-through of Eurosystem liquidity within banking groups can be analysed.

3 Bank interest rates

Bank interest rate statistics provide essential input to monetary analysis. They provide information on interest rates applied by banks to deposits and loans vis-à-vis households and corporations. In particular, the statistics on new business comprise information on interest rates laid down in new agreements between banks and their customers. They reflect the supply and demand conditions in the deposit and loan markets at the time of the agreement. These statistics enable an assessment of the pass-through of changes in policy rates to the lending and deposit rates faced by households and corporations. They also help with the identification of possible fragmentation in the bank lending and deposit markets, especially during crisis periods, thus allowing policy-makers to implement targeted measures to improve the functioning of monetary policy transmission. In addition, changes in bank interest rates affect the cost of capital, which influences households' and corporations' investment decisions and their substitution between current and future consumption. Bank interest rates on outstanding amounts complement the data collected under the MFI balance sheet statistics framework and support the analysis of income effects since changes in bank interest rates affect the interest paid or received by households and corporations, which has an impact on their disposable income. Bank interest rate statistics also allow deposit-loan margins to be monitored. Finally, these statistics provide information about the degree of integration of European financial markets, thereby allowing consumers to compare the rates charged and paid by banks across countries.

The provision as of reference period December 2014 of additional information on renegotiated loans enables an important gap to be closed in the understanding of interest rates applied to new business.[3] This has been achieved by introducing new indicators referring to the renegotiation of loans to households (broken down by purpose of the loan) and corporations. Together with the existing indicators on new business, these data allow the amount of the gross flow of new loans to households and corporations to be estimated.

Bank interest rate statistics on outstanding amounts have been enhanced to facilitate better analysis of the impact of policy changes on the interest income of banks and the interest payments of households and corporations. The new indicators provide detailed information on interest rates on loans, broken

Table 2
New indicators in bank interest rate statistics

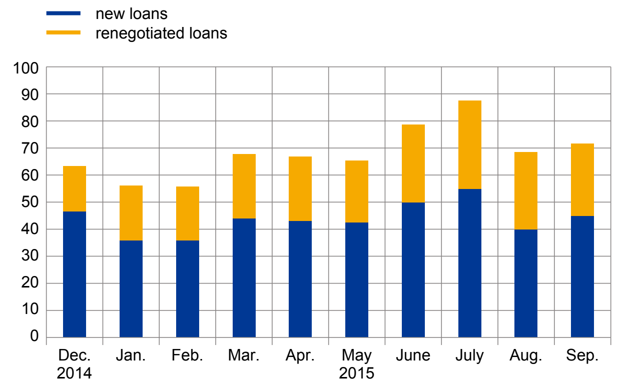
Item	Counterpart sector	Maturity breakdowns
Loans, interest rates on outstanding amounts	− Households − Corporations	With an original maturity of: − over one year − over one year and a residual maturity of up to one year − over one year, a residual maturity of over one year and an interest rate reset in the next 12 months − over two years − over two years and a residual maturity of up to two years − over two years, a residual maturity of over two years and an interest rate reset in the next 24 months
Item	**Counterpart sector**	**Breakdowns by purpose**
Renegotiated loans, business volumes and interest rates	− Households − Corporations	− Total (corporations) − For consumption (households) − For house purchase (households) − For other purposes (households)

3 For the purpose of bank interest rate statistics, "new business" is defined as any new agreement between the customer and the bank. New agreements comprise all financial contracts that specify for the first time the interest rate of the deposit or loan, and all renegotiations of existing deposit and loan contracts, where renegotiation refers to the active involvement of the customer in adjusting the terms and conditions of an existing loan or deposit contract. Thus, for instance, a rise or fall of a variable interest rate in the sense of an automatic adjustment of the interest rate performed by the bank is not a new agreement and would not therefore be recorded in bank interest rate statistics on new business.

Chart 4

New business loans to euro area households for house purchase

(new business volume; EUR billions)

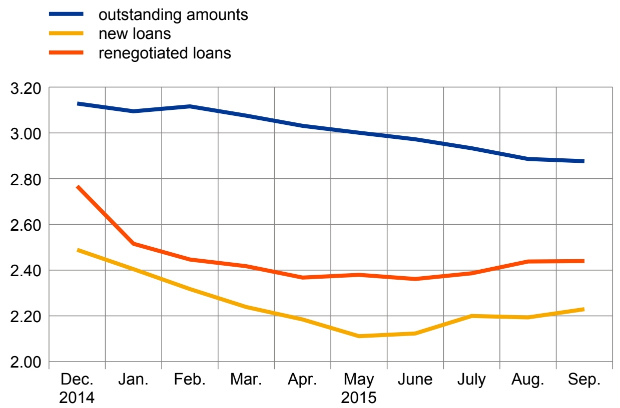


Source: ECB.

Chart 5

Interest rates on outstanding amounts and new business loans to euro area households for house purchase

(percentages per annum excluding charges)



Source: ECB.

down by original and residual maturity, as well as the next interest rate reset. These data complement the corresponding loan amounts collected under the MFI balance sheet statistics framework, providing information with which to measure the potential impact of monetary policy decisions on households' and firms' future income, as well as on the level of economic activity and inflation.

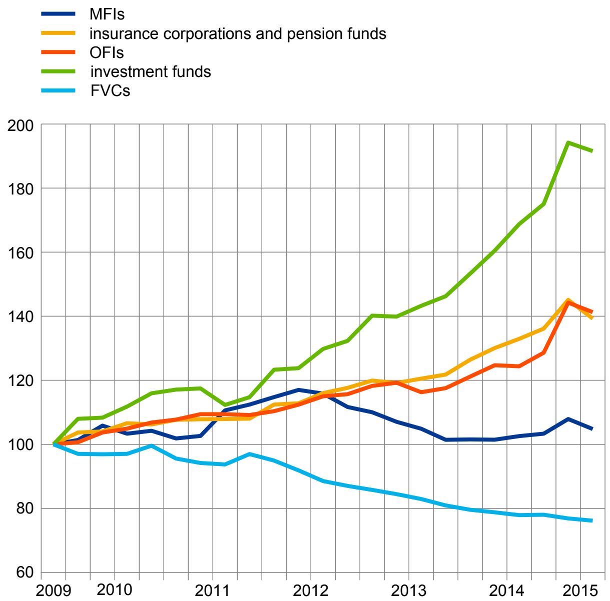
Between December 2014 and September 2015 interest rates on new loans were slightly lower than those on renegotiated loans. The separate identification of renegotiated loans allows them to be excluded from total new business, which gives an indication of the amount of new loans granted to households and corporations in euro area countries; this can then be used as a proxy for the development of new lending to the real economy. For instance, in the euro area over the period from December 2014 to September 2015, around one-third of new business loans to households for house purchase were actually renegotiations of existing loans (see Chart 4), whereas the remaining two-thirds were true new loans, i.e. new loans granted to households for house purchase. The interest rate on new loans granted to households for house purchase can be derived by applying this approach to the weighted average interest rates on new business. Between December 2014 and September 2015 there were slightly lower interest rates on true new loans than on renegotiations of existing loans (see Chart 5). Interest rates on both new and renegotiated loans in the euro area were significantly lower, on average, than interest rates on outstanding loans for house purchase.

4 Investment funds

The investment fund sector is growing rapidly, and with it its importance for economic analysis. With a share of approximately 16% in the second quarter of 2015, investment funds make up a significant part of the euro area financial system. The assets of investment funds domiciled in the euro area have almost doubled since 2009, standing at over €10 trillion in early 2015 (see Chart 6). Around one-third of this increase is due to economic transactions, while the remainder can be explained by the large increase in asset prices in recent years. Because of this

Chart 6
Growth of outstanding amounts in euro area financial sectors since the fourth quarter of 2009

(Q4 2009=100)



Source: ECB and ECB calculations.

increase and the role played by investment funds in the financial intermediation process, it is essential to have accurate and timely data for this sector. When investment funds buy shares and debt securities issued by the real economy they provide financing to firms even in times when banks are distressed. This makes them not only relevant for the ECB's monetary and economic analysis, but also an important factor in the assessment of the financial stability of the euro area.

The enhanced reporting of data on investment funds takes financial innovation into account. To keep the statistics on investment funds fit for use, data collected as of 2015 are aligned with the ESA 2010, as described above. Additional breakdowns specific to the investment fund sector have also been introduced. Most importantly, data on funds set up as exchange-traded funds (ETFs) are now collected as a sub-item of all funds. In addition, information on the issues and redemptions of investment fund shares/units is now available for all Member States. A detailed overview of the new breakdowns is shown in Table 3.

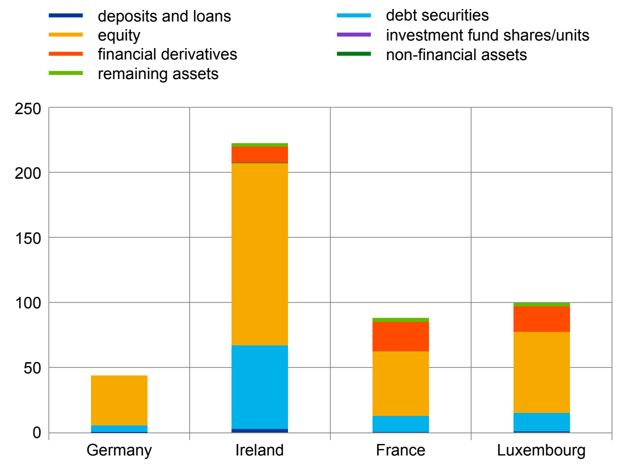
Table 3
New breakdown of investment fund balance sheet items

Frequency	Item	Description	Counterpart sector
Monthly	ETFs	Identification of ETFs as a sub-sector of total investment funds	Central bank Other deposit-taking corporations
	Loans to general government and FVCs	Breakdown by original maturity: Up to one year Over one and up to five years Over five years	General government FVCs
	Investment fund shares/units	Sale and redemption of investment fund shares/units	Total economy
Quarterly	Holdings of debt securities	Identification of counterpart sectors	Non-MMF investment funds Other financial institutions Insurance corporations Pension funds
	Holdings of equities	Identification of counterpart sectors Identification of listed shares	MFIs General government Non-MMF investment funds Other financial institutions Insurance corporations Pension funds Non-financial corporations Households
	Holdings of investment fund shares/units	Identification of securities lent out or sold under repurchase agreements	

Chart 7

ETF total assets by country, broken down by asset class

(EUR billions; August 2015)



Source: ECB.

Within the investment fund sector, ETFs have recently been the focus not only of investors, but also regulatory and supervisory authorities.[4] This sub-sector has seen rapid growth and brought about financial innovations. It is therefore important that the development of ETFs is monitored in the context of financial stability in the euro area. As the newly collected data show, ETFs currently make up approximately 4.6% of total assets of all investment funds. Although this is a small proportion, the importance of ETFs as a part of the investment fund sector has grown steadily in recent years: the new data allow this development to be monitored. The data also make it possible to assess the structure of ETF balance sheets. Chart 7 illustrates the absolute size and structure of the total assets of ETFs in euro area countries where ETFs have a significant presence.

5 Financial vehicle corporations

FVCs are an important component of the financial system owing to their role in securitisation transactions. This is despite the fact that they only represent 3% of the euro area financial sector by total assets (see Chart 1). Securitisation typically involves the transfer of illiquid assets (such as loans), or credit risk relating to a portfolio of assets, to an FVC in order to back its issuance of securities.

While there have been a number of recent initiatives by central banks and other authorities to revive securitisation as a market-based source of bank funding, securitisation activities are still dominated by retained deals. Before the financial crisis, securitisation was an important funding source for banks via an "originate and distribute" model: banks provided loans, and through securitisation they could pass on the credit risk to investors. However, since the beginning of the financial crisis securitisation has mainly been motivated by banks' need to create collateral for central bank refinancing operations: rather than the debt securities issued by FVCs being purchased by investors, they have instead been retained by the originating banks. In the second quarter of 2015 the outstanding amount of debt securities issued by euro area FVCs was €1.4 trillion, while euro area banks' holdings were €0.8 trillion.

The new data collected as a result of the update of Regulation ECB/2013/40 on financial vehicle corporations have shed more light on activities not directly related to euro area banks, including loans originated by other sectors or non-euro area entities. This is particularly relevant with respect to shadow banking (bank-like activities which take place outside the regular banking system) and the role that securitisation may play in supporting direct lending to the real economy.

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4 For example, the growing importance of ETFs was discussed by the Financial Stability Board in its publication "Potential financial stability issues arising from recent trends in Exchange-Traded Funds (ETFs)", 2011.

Table 4

New items introduced in statistics on FVCs

Item	New counterpart sector breakdowns
Deposits and loan claims	− Rest of world banks − Rest of world non-banks
Securitised loans (total)	− MFIs − General government − Non-MMF investment funds − Other financial institutions − Insurance corporations and pension funds − Non-financial corporations − Households − Rest of world
Securitised loans (originated by euro area MFIs)	− MFIs − Non-MMF investment funds − Other financial institutions
Item	**New maturity breakdowns**
Deposits and loan claims	− Up to one year − Over one year
Loans and deposits received	− Up to one year − Over one year

In addition, the scope of the data collection was expanded to include transactions in which there are transfers of insurance or reinsurance-type risks from the insurance sector to FVCs.[5] Two main features were added to statistics on FVCs, as summarised in Table 4: (i) new counterpart sector breakdowns, in particular for securitised loans transferred to FVCs; and (ii) new maturity breakdowns of deposits held by FVCs, or loans granted directly to or received from FVCs.

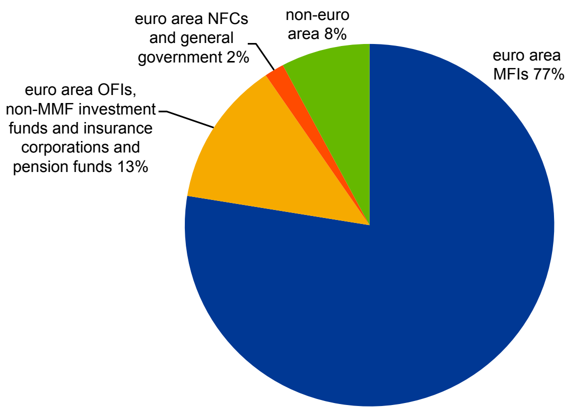
New counterpart breakdowns of securitised loans provide greater detail on the role of securitisation in supporting non-bank lending to the real economy. Previously, borrowing sector breakdowns were only available for loans originated by euro area MFIs. As shown in Chart 8, entities other than euro area MFIs originated 23% (€268 billion) of total securitised loans held by FVCs.

With regard to securitised loans not originated by euro area MFIs, FVCs held €91 billion and €64 billion of loans to euro area households and non-financial corporations respectively in the second quarter of 2015 (see Chart 9). While the amount of loans to non-euro area residents originated by euro area MFIs is small, other originators have securitised €72 billion using euro area FVCs. These are mainly located in jurisdictions where FVCs are linked more to international than domestic activities, i.e. Ireland, Luxembourg and the Netherlands. These three countries also make up a significant share of the deposits and loan claims of euro area FVCs on non-euro area banks (€23 billion in the second quarter of 2015) and non-banks (€8 billion).

Chart 8

Loans securitised by euro area FVCs in the second quarter of 2015 broken down by originating sector

(percentages)

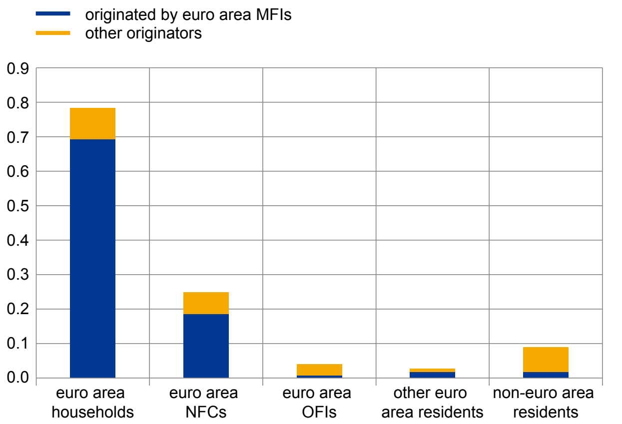


Source: ECB.

Chart 9

Loans securitised by euro area FVCs in the second quarter of 2015 broken down by borrowing sector

(EUR trillions)



Source: ECB.

5 These volumes are currently small and no separate breakdowns are released with respect to FVCs engaged in insurance-linked securitisation.

New breakdowns of maturities of deposits held by FVCs and of loans granted directly to or received from FVCs provide information on the liquidity and funding of MFIs. Approximately half of the deposits and loan claims of FVCs vis-à-vis other counterparties have a maturity of up to one year and are mainly concentrated in deposits with euro area banks. For deposits and loan claims received, around one-third are of short-term maturity.

6 Securities issues

Securities issues statistics provide information on capital inflows to and outflows from the financial markets. The monthly statistics on securities issues cover data on outstanding amounts, issues, redemptions, and growth rates in debt securities and listed shares. These series are broken down by issuer country and sector, instrument type, original maturity, coupon type, and currency of denomination. Together with MFI balance sheet and bank interest rate data, as well as financial market prices, these data allow substitution between bank-based financing (bank lending channel) and market-based financing (securities issuance) to be analysed.

The enhanced data on securities issues were first collected in January 2015 with reference to November 2014. The data collected before January 2015 have been maintained and are used to produce long time series.

The update introduces several new institutional sectors and rearranges the classification of some institutional units within sectors.[6, 7] Chart 10 shows the impact of these changes on the outstanding amounts of debt securities issued by the main sectors included in the published data. For the new sectors, which are aligned with the ESA 2010, back data are available from December 2012.

In addition, the update serves to harmonise the reporting of data on zero coupon bonds. Valuation rules which apply to zero coupon bonds are explicitly included in the legal requirements. These new data are currently subject to an internal quality review as several changes had to be introduced in the reporting and compilation systems. The new series on zero coupon bonds are expected to be published in the course of 2016.

Furthermore, the new legal requirements include for the first time the provision of data on securities issued by FVCs engaged in securitisation transactions. As this is not an official sub-sector under the ESA 2010, the data on securities issued by FVCs are also presented as part of the other financial institutions sector. The new information will include breakdowns by maturity and interest rate type and is expected to be published in 2016.

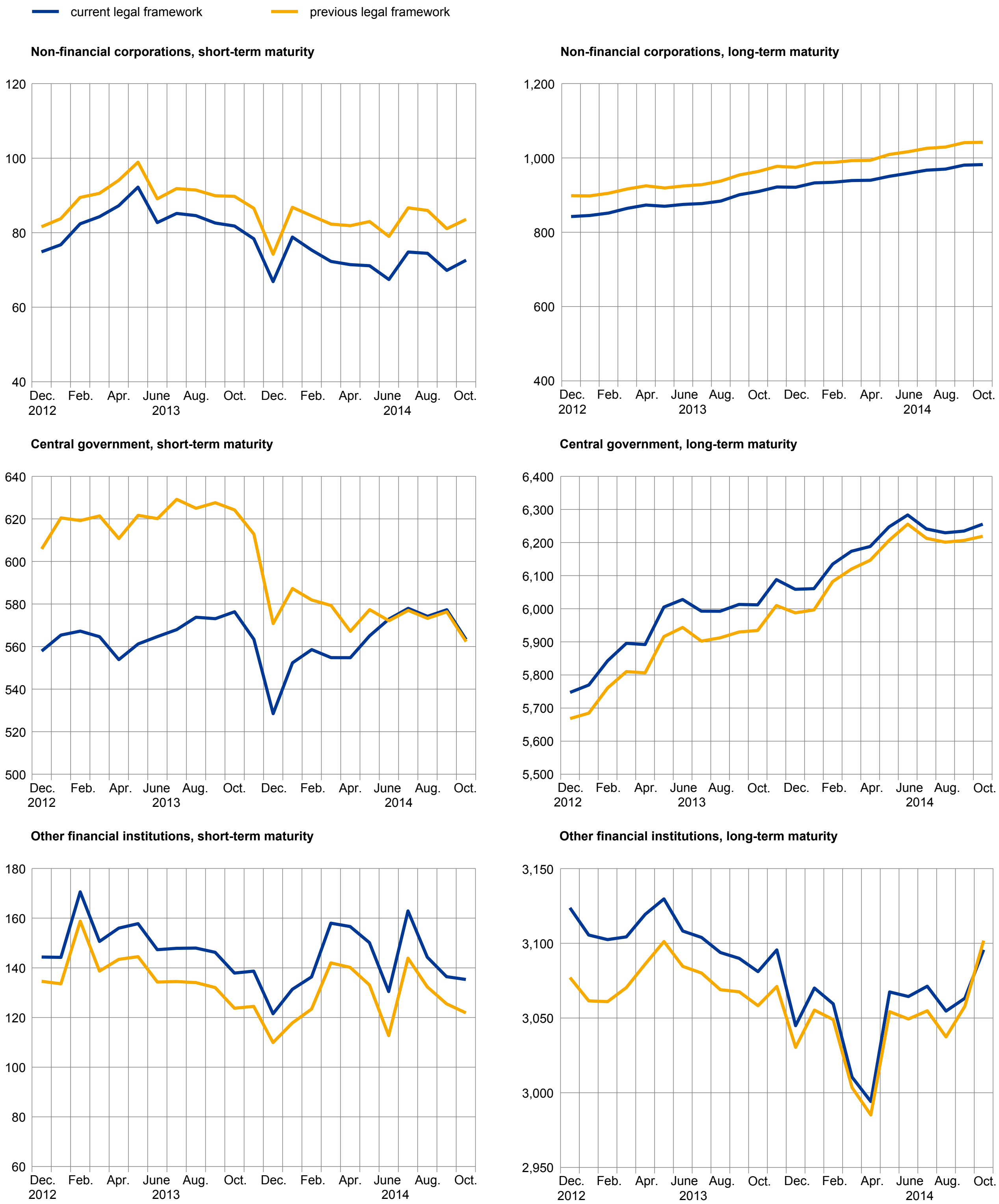
6 For more detailed information on the changes to securities issues statistics, see the "User guide to the update of securities issues statistics under the amended Guideline ECB/2014/15", available at http://www.ecb.europa.eu/stats/pdf/users_guide_sec_issues_statistics_2014_15.pdf

7 For details on the update of international standards, see the article entitled "New international standards in statistics – enhancements to methodology and data availability", *Monthly Bulletin*, ECB, August 2014.

Chart 10

Outstanding amounts of debt securities compiled under the previous and current legal framework

(EUR billions)



Source: ECB and ECB calculations.

7 Conclusions

In the course of 2015 the ECB has made several enhanced datasets of monetary and financial statistics available. These include statistics on MFI balance sheet items, bank interest rates, investment funds, FVCs and securities issues.

More detailed breakdowns by counterpart sector and financial instrument can now be made for MFI balance sheet items. These breakdowns are aligned with the ESA 2010. They include intra-group positions in deposits and loans, which may prove helpful for analysing episodes of financial stress. Moreover, the adjustment for sales and securitisation of MFI loans to the private sector has been enhanced in order to take into account positions and repayments of derecognised loans.

Bank interest rate statistics allow volumes and rates of true new lending to be derived. This is done by separately identifying renegotiated loans to households (broken down by the purpose of the loan) and corporations. Moreover, the new data include interest rates on loans broken down by original and residual maturity as well as the date of the next interest rate reset, thus improving the understanding of the impact of monetary policy decisions on banks' interest income and interest rates paid by households and corporations.

Several enhancements have been made to investment fund statistics. Data collected as of 2015 have been aligned with the ESA 2010 framework. In addition, data on funds set up as ETFs are now collected as a sub-item of all funds and data on issues and redemptions of investment fund shares/units are now available for all euro area countries.

New features have been added to statistics on FVCs. This enhances the information that is available on securitised loans not originated by euro area banks, short and long-term breakdowns of deposits held by FVCs, and loans granted directly to or received from FVCs.

Finally, based on the ESA 2010, several new institutional sectors, including FVCs, are now identified in securities issues statistics. The classification of some institutional units within sectors has also been realigned. New harmonised series on zero coupon bonds are expected to be published in due course.

Looking ahead, in 2016 the ECB statistical framework will be enriched in two domains. First, the ECB will start collecting daily statistics on money market transactions on the secured, unsecured, foreign exchange swap and overnight index swap market segments. Those data, to be collected on a transaction-by-transaction basis from the largest euro area MFIs, will provide further information on the transmission mechanism of monetary policy decisions. Second, statistics on euro area insurance corporations will become harmonised through the reuse, to a large extent, of the supervisory reports under Solvency II. This should keep the reporting burden to a minimum. The collection of statistical information on insurance corporations will further strengthen monetary and financial analysis.