



ESRB

European Systemic Risk Board

European System of Financial Supervision



EUROPEAN CENTRAL BANK

EUROSYSTEM

ESRB RISK DASHBOARD

September 2015

**DISCLAIMER: The risk dashboard is a set of quantitative indicators and not an early-warning system.
Users may not rely on the indicators as a basis for any mechanical form of inference.**

Table of contents

1. Interlinkages and composite measures of systemic risk	3
1.1 Composite indicator of systemic stress	3
1.2 Probability of a simultaneous default	3
1.3 Individual institutions' contributions to overall systemic risk	4
1.4 Cross-border claims of banks	5
1.5 MFI credits by counterpart sector	6
1.6 MFI deposits by counterpart sector	6
1.7 MFI credits to general government	7
1.8 MFI loans for house purchase	7
2. Macro risk	8
2.1 Current and forecast real GDP growth	8
2.2 Domestic credit-to-GDP gap	8
2.3 Current account balance-to-GDP ratio	9
2.4 Unemployment rate	9
2.5 Aggregate debt-to-GDP ratio	10
2.6 General government debt-to-GDP ratio	11
2.7 General government deficit-to-GDP ratio	11
2.8 CDS premia on sovereign debt	12
2.9 Sovereign debt redemptions	12
2.10 Household debt-to-gross disposable income ratio	13
2.11 NFC debt-to-GDP ratio	13
3. Credit risk	14
3.1 Annual growth rates of MFIs loans to households	14
3.2 Annual growth rates of MFI loans to NFCs	14
3.3 Cost of borrowing from MFIs for households (for house purchase)	15
3.4 Cost of borrowing from MFIs for NFCs	15
3.5 Lending margins of MFIs - loans to households (for house purchase)	16
3.6 Lending margins of MFIs - loans to NFCs	16
3.7 Changes in credit standards for loans to households (for house purchase)	17
3.8 Changes in credit standards for loans to NFCs	17
3.9 Option-adjusted spreads on euro area corporate bonds	18
3.10 Expected default frequency of the corporate sector	18
3.11 Foreign currency loans	19
3.12 Over/undervaluation of residential property prices	20
3.13 Change in nominal residential property prices	20
4. Funding and liquidity	21
4.1 Interbank interest rate spreads	21
4.2 Financial market liquidity indicator	21
4.3 EUR/USD cross-currency basis swap spreads	21
4.4 Banks' funding by central banks	22
4.5 Money markets and the Eurosystem's standing facilities	22
4.6 Maturity profile of Banks' outstanding debt securities	23
4.7 Banks' long-term debt securities issuance	23
4.8 Loan-to-deposit ratio	24
5. Market risk	25
5.1 Global risk aversion indicator	25
5.2 Price/earnings ratio of equity indices	25
5.3 Equity indices	26
5.4 Short-term interest rates - implied volatility	27
5.5 Long-term interest rates - implied volatility	27
5.6 Exchange rate volatility	28
6. Profitability and solvency	29
6.1 Banking groups' profitability indicators	29
6.2 Banking groups' solvency indicators	30
6.3 CDS spread between senior and subordinated debt	30
6.4 Insurance groups' profitability indicators	31
6.5 Insurance groups' solvency indicators	32
6.6 Insurance groups' Retention ratio	32
Samples of large EU banking groups and large EU insurance groups	33

General notes

The ESRB risk dashboard is a set of quantitative and qualitative indicators of systemic risk in the EU financial system. The composition and the presentation of the ESRB risk dashboard have been reviewed in the first quarter of 2015. Unless otherwise indicated, all EU indicators relate to the 28 Member States of the EU (the EU28). In January 2015 Lithuania joined the euro area, bringing the number of euro area countries to 19. Unless otherwise indicated, all data series including observations for 2015 relate to the Euro 19 (i.e. the euro area including Lithuania) for the whole time series. For statistics based on the balance sheet of the MFI sector, as well as statistics on financial markets and interest rates, the series relate to the composition of the EU/euro area in the period covered (changing composition). Statistics based on the balance sheet of the MFI sector are unconsolidated.

Methodological note

Macroeconomic indicators related to national accounts and the current account are compiled respectively according to the European System of Accounts (ESA) 2010 and the sixth edition of the IMF's Balance of Payments and International Investment Position Manual (BPM6). More detailed information is available in the November 2014 issue of the Monthly Bulletin.

List of countries and aggregates

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

List of acronyms

BIS	Bank for International Settlements	IMF	International Monetary Fund
CDS	Credit Default Swap	MFI	Monetary and Financial Institutions
CISS	Composite Indicator of Systemic Stress	NFC	Non-Financial Corporations
COREP	Common Solvency Ratio Reporting	ITS	Implementing Technical Standards
EBA	European Banking Authority	SovCISS	Sovereign Composite Indicator of Systemic Stress
ECB	European Central Bank		
EIOPA	European Insurance and Occupational Pensions Authority		
EONIA	Euro OverNight Index Average		
ESCB	European System of Central Banks		
FINREP	Financial Reporting		

Cut-off date

Data available to the ECB by Tuesday, 15 September 2015 were taken into account in these statistics.

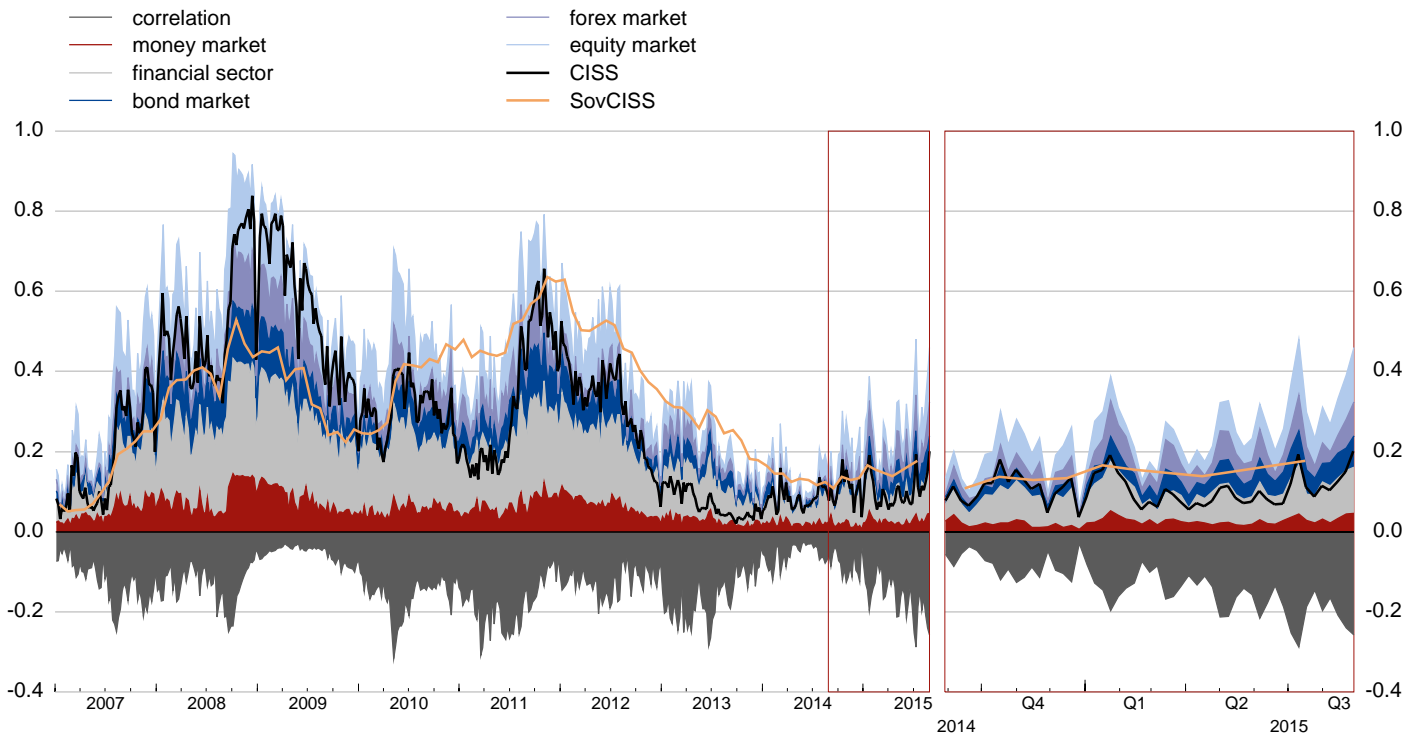
Contact

For enquiries regarding the risk dashboard and its contents, please contact: statistics@ecb.europa.eu

1. Interlinkages and composite measures of systemic risk

1.1 Composite indicator of systemic stress

(Last observation: 28 Aug. 2015)

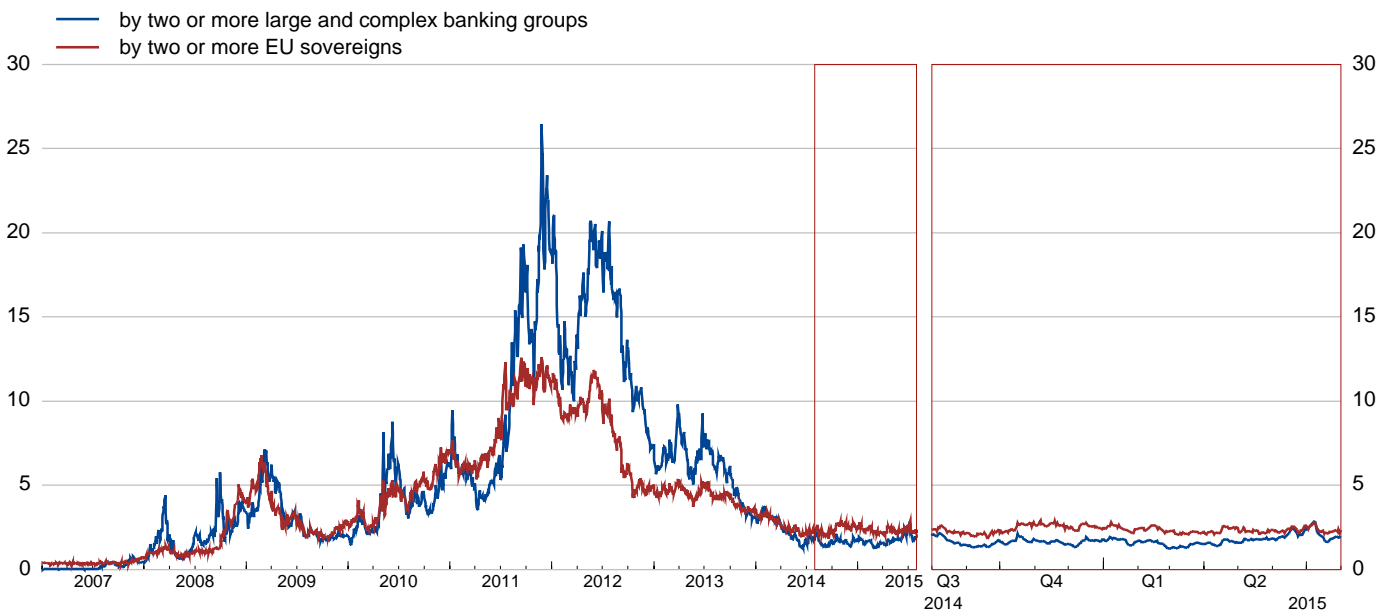


Sources: Thomson Reuters, ECB and ECB calculations.

Notes: The CISS is unit-free and constrained to lie within the interval (0, 1). See Hollo, D., Kremer, M. and Lo Duca, M., "CISS - a composite indicator of systemic stress in the financial system", Working Paper Series, No 1426, ECB, March 2012. The Sovereign CISS applies the same methodological concept of the CISS.

1.2 Probability of a simultaneous default

(Percentages; last observation: 2 Sep. 2015)



Sources: Bloomberg, Thomson Reuters and ECB calculations.

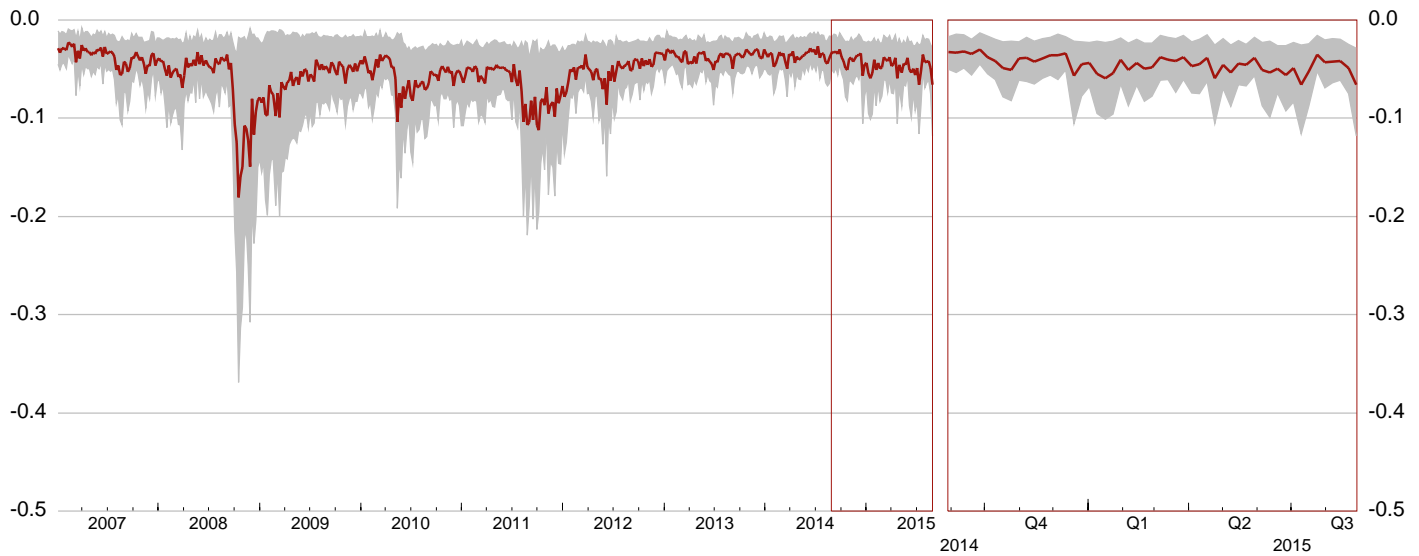
Note: See Box 8, Financial Stability Review, ECB, June 2012.

1. Interlinkages and composite measures of systemic risk

1.3 Individual institutions' contributions to overall systemic risk

a. Banking sector

(EU; mean, 5th and 95th percentiles; last observation: 28 Aug. 2015)

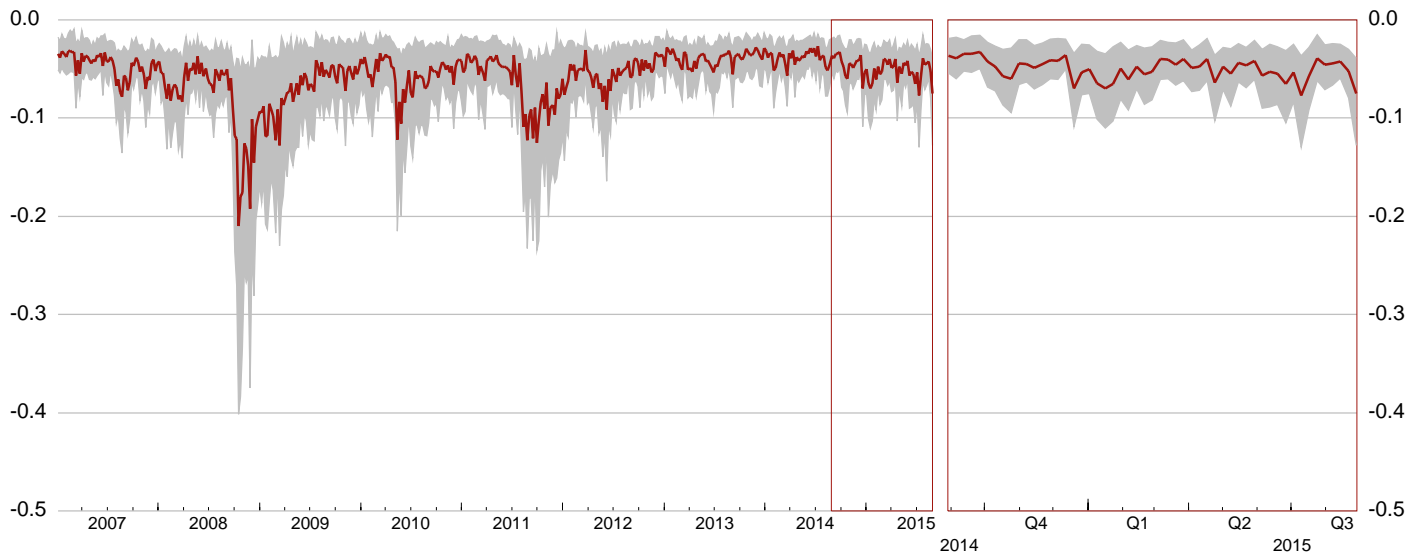


Source: Bloomberg.

Notes: Contribution to overall systemic risk using CoVaR (value at risk of the financial system conditional on institutions being in distress). The sample includes 52 European banks listed in the STOXX Europe 600. See Adrian, T. and Brunnermeier, M.K., "CoVaR", Federal Reserve Bank of New York Staff Reports, No 348, September 2011.

b. Insurance sector

(EU; mean, 5th and 95th percentiles; last observation: 28 Aug. 2015)



Source: Bloomberg.

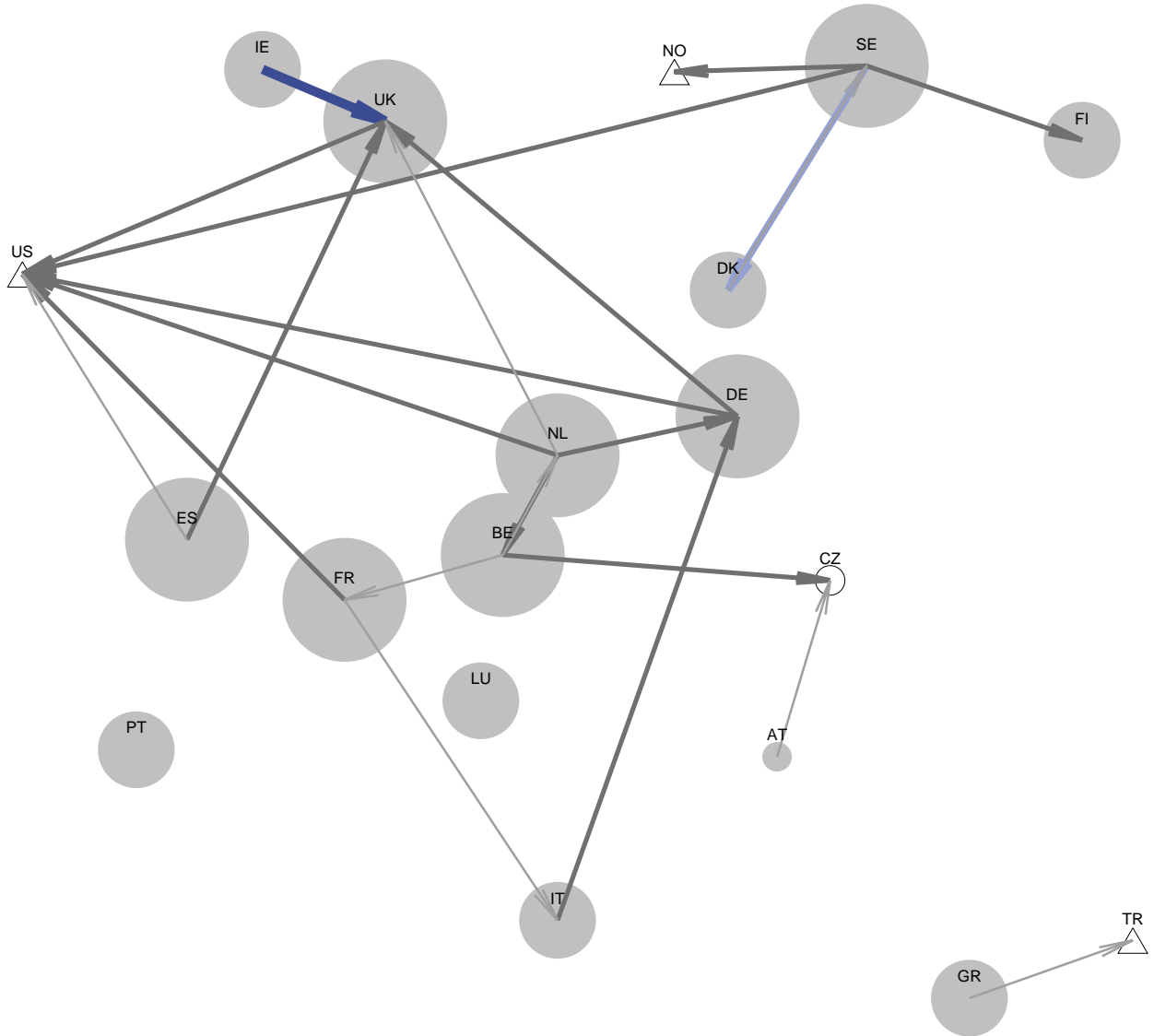
Notes: Contribution to overall systemic risk using CoVaR (value at risk of the financial system conditional on institutions being in distress). The sample includes 34 European insurance companies listed in the STOXX Europe 600. See Adrian, T. and Brunnermeier, M.K., "CoVaR", Federal Reserve Bank of New York Staff Reports, No 348, September 2011.

1. Interlinkages and composite measures of systemic risk

1.4 Cross-border claims of banks

(Sample of EU countries; percentages; last observation: Q1 2015 for foreign claims, Q2 2014 for total consolidated capital)

- EU lenders and borrowers
 - other EU countries
 - △ non-EU countries
- (75%, 100%]
 (100%, 200%]
 (200%, 300%]
 above 300%



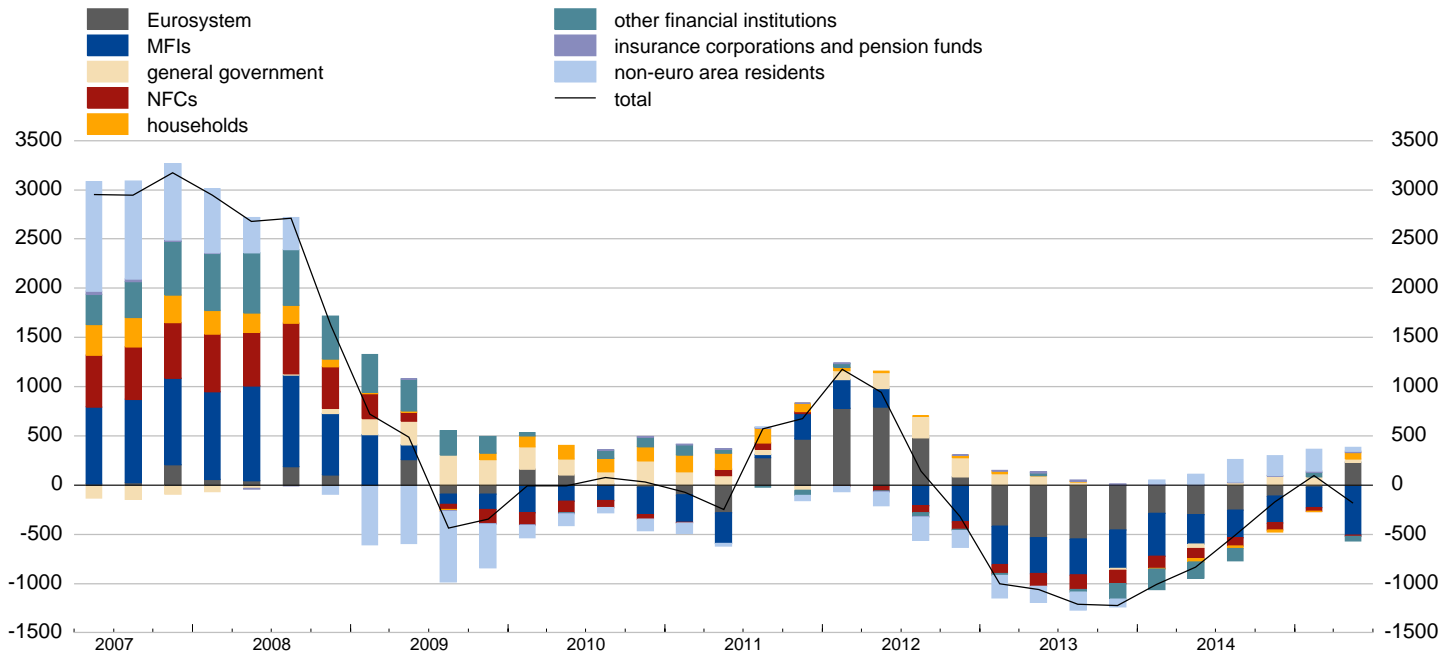
Sources: BIS, ECB and ECB calculations.

Notes: Data for foreign claims refer to claims on an immediate borrower basis. See Guidelines to the international consolidated banking statistics, available at <http://www.bis.org>. The size of the bubbles corresponds to the share of total foreign claims in the total equity of a country's consolidated banking sector. The thickness of the arrows depends on the share of bilateral foreign claims (i.e. claims of banks in country A on borrowers in country B) in the total equity of the banking sector extending the loans. Arrows extend only from EU countries reporting to the BIS and where the share of bilateral foreign claims in total equity is more than 75%.

1. Interlinkages and composite measures of systemic risk

1.5 MFI credits by counterpart sector

(euro area; EUR billions; four-quarter cumulated flows; last observation: Q2 2015)

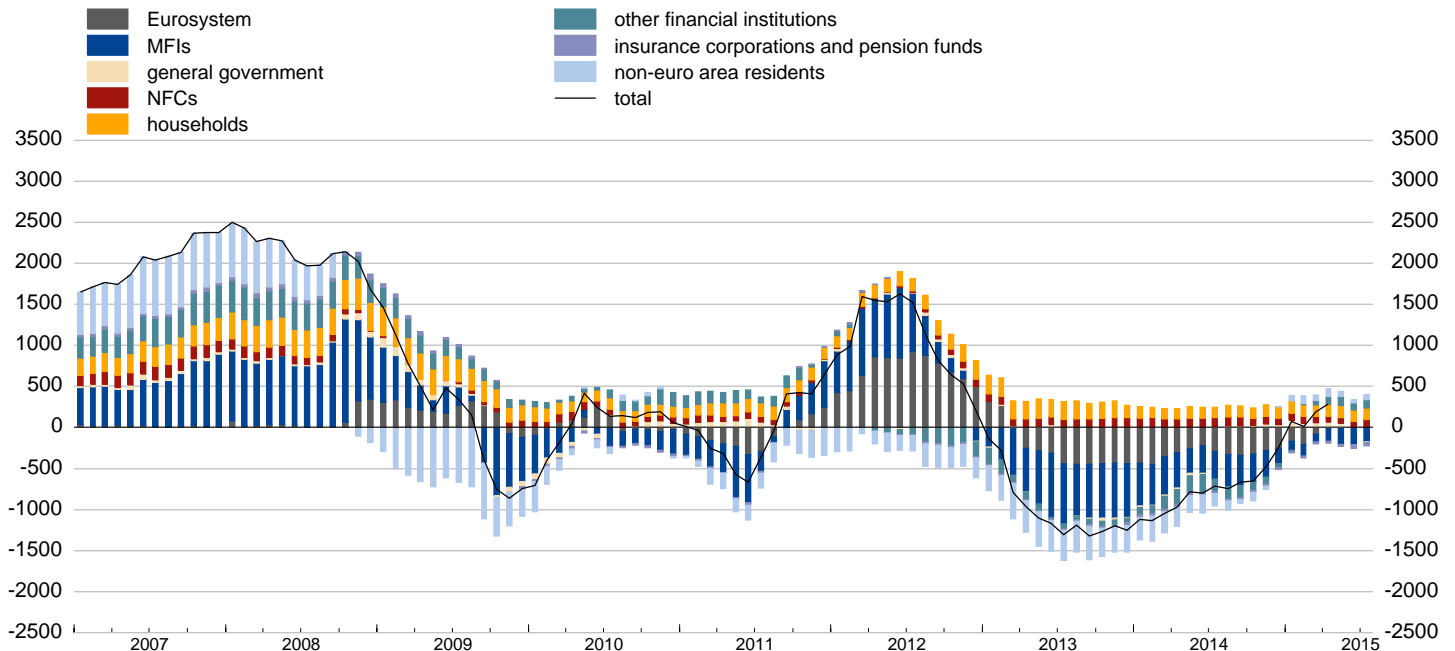


Source: ECB.

Notes: MFIs excluding the Eurosystem. Credit comprises loans and holdings of securities. Eurosystem credit comprise only loans. Households include non-profit institutions serving households.

1.6 MFI deposits by counterpart sector

(euro area; EUR billions; 12-month cumulated flows; last observation: Jul. 2015)



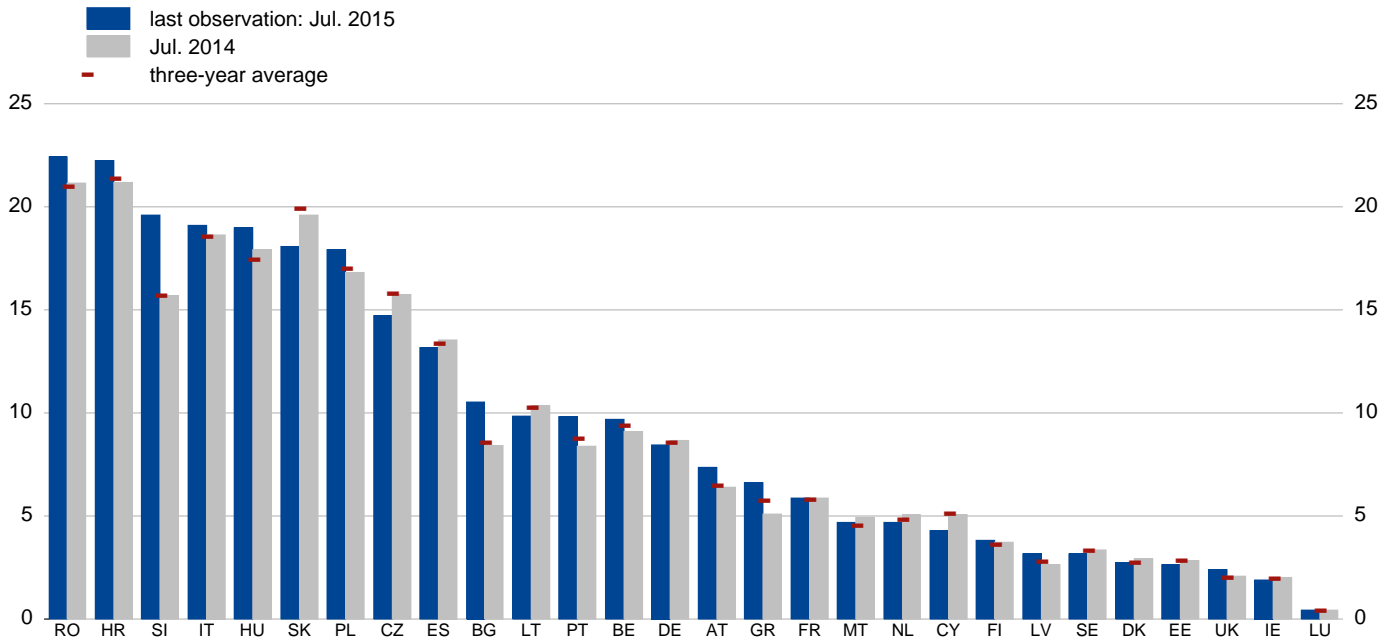
Source: ECB.

Notes: MFIs excluding the Eurosystem. Households include non-profit institutions serving households.

1. Interlinkages and composite measures of systemic risk

1.7 MFI credits to general government

(EU; share of total assets; percentages)

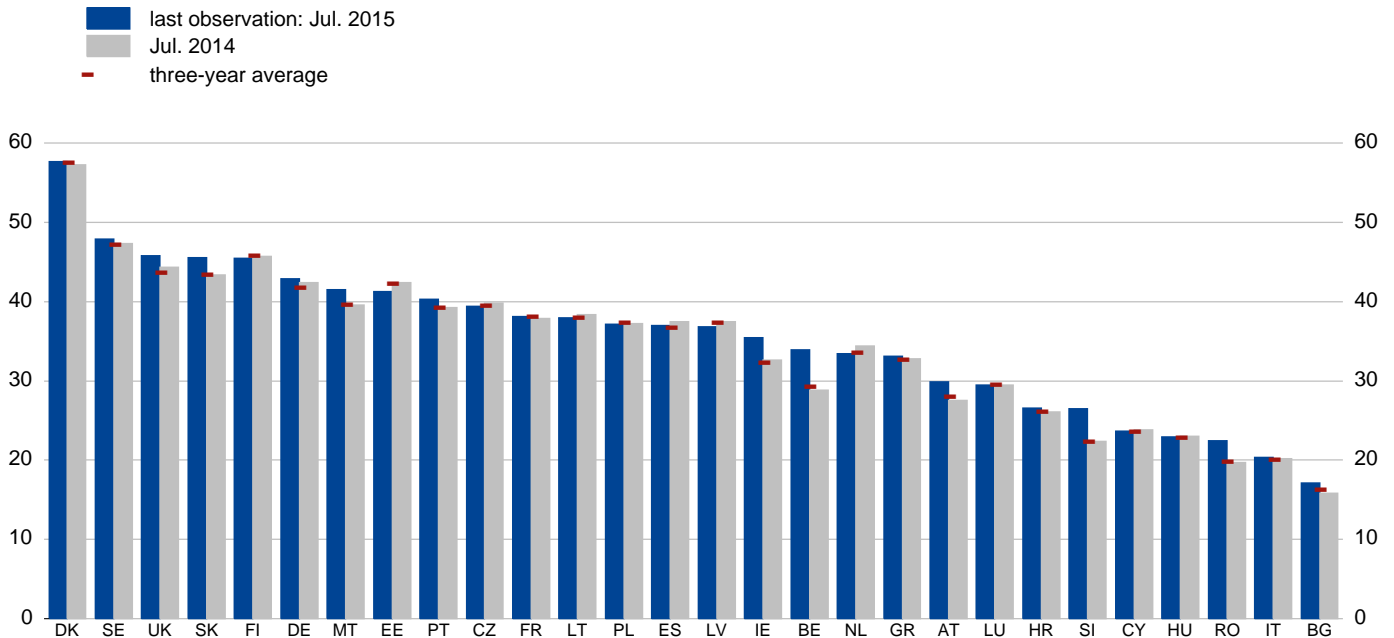


Source: ECB.

Notes: Credit extended by MFIs excluding the ESCB to domestic general government. Credit comprises granted loans and holdings of debt securities issued. Total assets excludes remaining assets. For some countries, such as Italy and France, government-owned agencies mandated to finance primarily public administrations are listed as MFIs.

1.8 MFI loans for house purchase

(EU; share of credit to domestic non-MFIs; percentages)



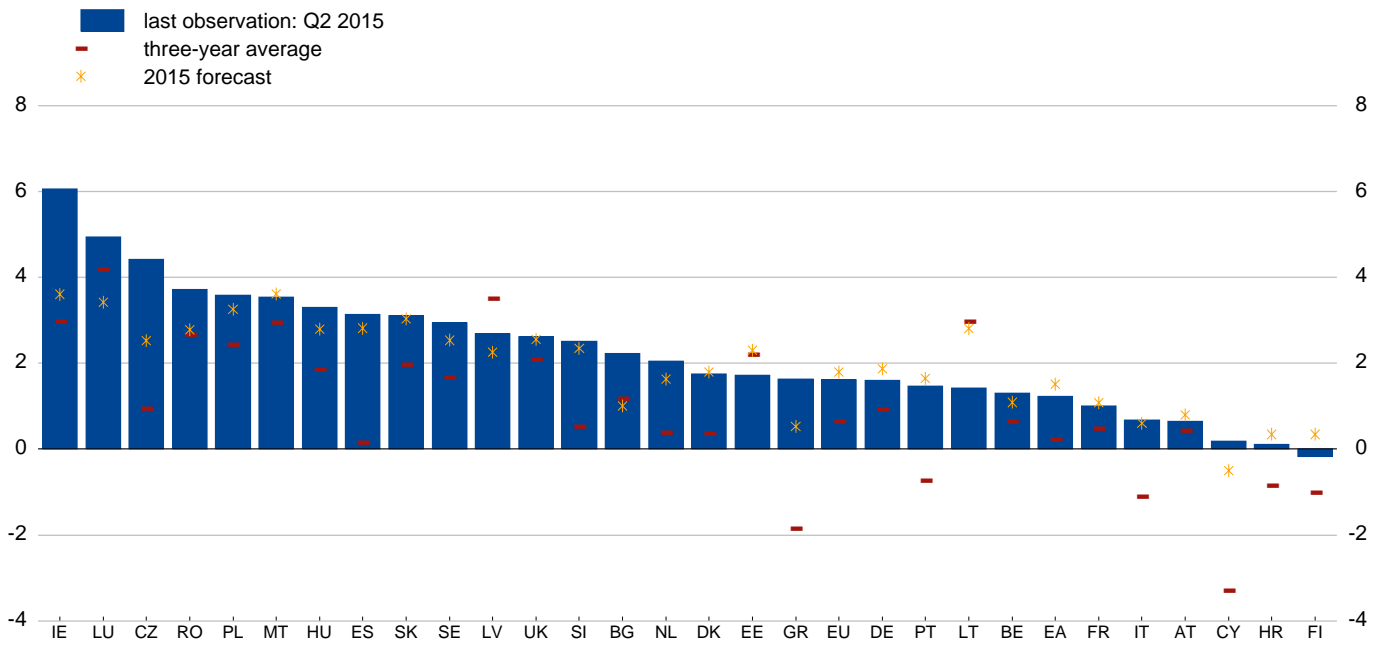
Source: ECB.

Notes: MFIs excluding the ESCB. Data refer to loans granted to domestic households for house purchase purpose. Credit comprises loans and holdings of debt securities.

2. Macro risk

2.1 Current and forecast real GDP growth

(EU; percentage changes; year-on-year growth)

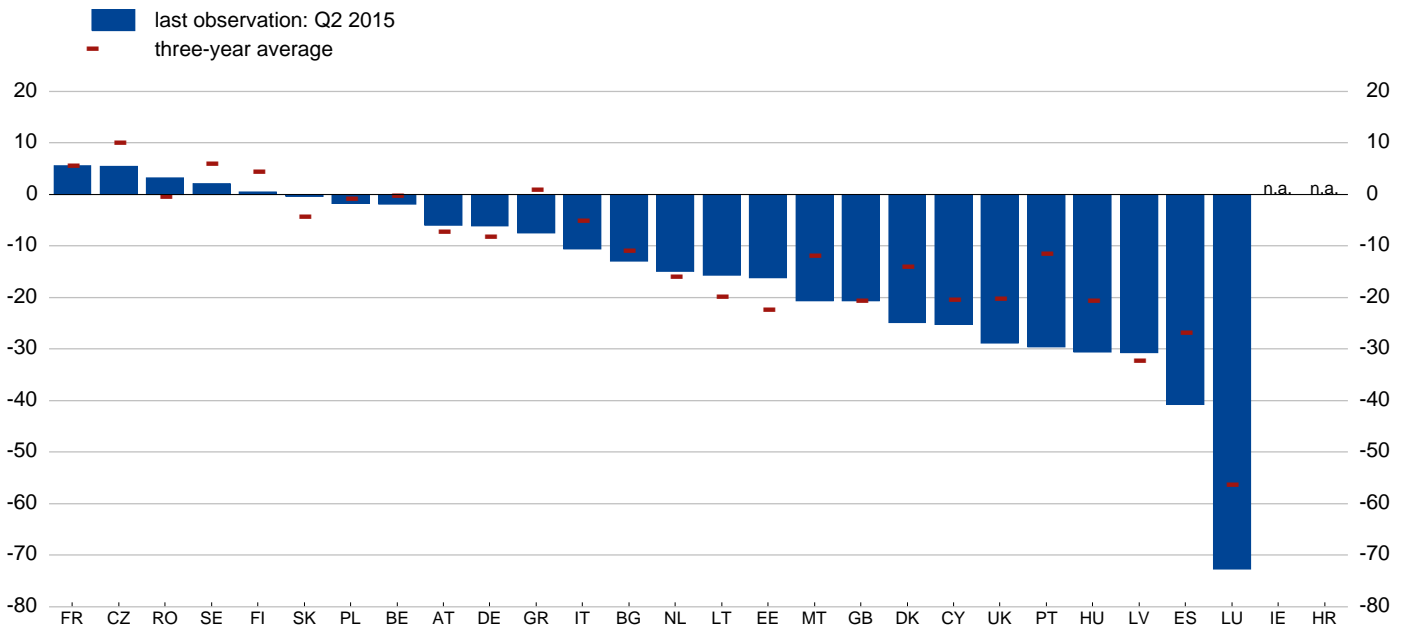


Sources: European Commission and the European Commission Spring 2015 forecast.

Notes: The three-year historical average is the average of the year-on-year growth rates over the last 12 quarters. For EE, IE, HR, CY, LU, HU, MT and FI, "last observation" refers to Q1 2015.

2.2 Domestic credit-to-GDP gap

(EU; percentages)



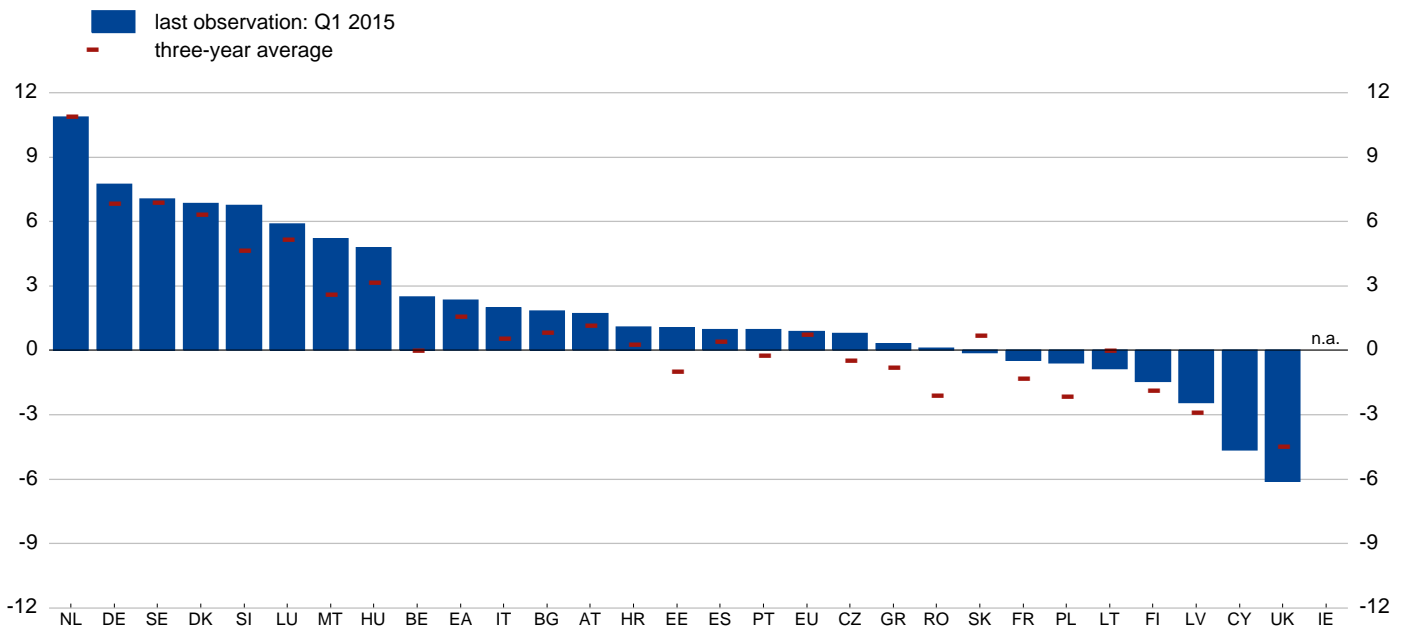
Sources: European Commission, BIS, ECB and ECB calculations.

Notes: See ESRB recommendation of 18 June 2014 on guidance for setting countercyclical buffer rates (ESRB/2014/1). Owing to recent changes to national accounts classification (see methodological note on page 2) these data are subject to revisions.

2. Macro risk

2.3 Current account balance-to-GDP ratio

(EU; percentages)

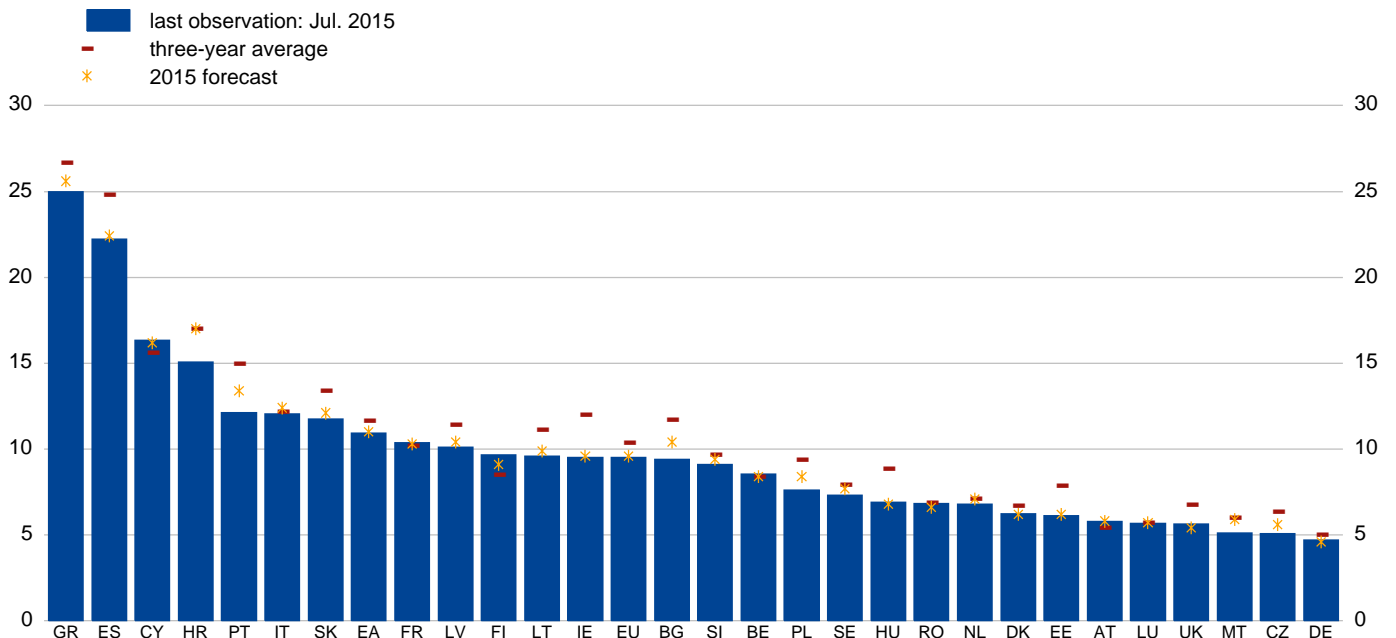


Sources: European Commission, ECB and Banque de France.

Notes: Quarterly data represent the sum of the four quarters up to and including the quarter of reference. The three-year average is compiled on the basis of the annualised ratio of the last 12 quarters. Three year averages are not available for CY and IE.

2.4 Unemployment rate

(EU; percentage of labour force; seasonally adjusted)



Sources: European Commission and the European Commission Spring 2015 forecast.

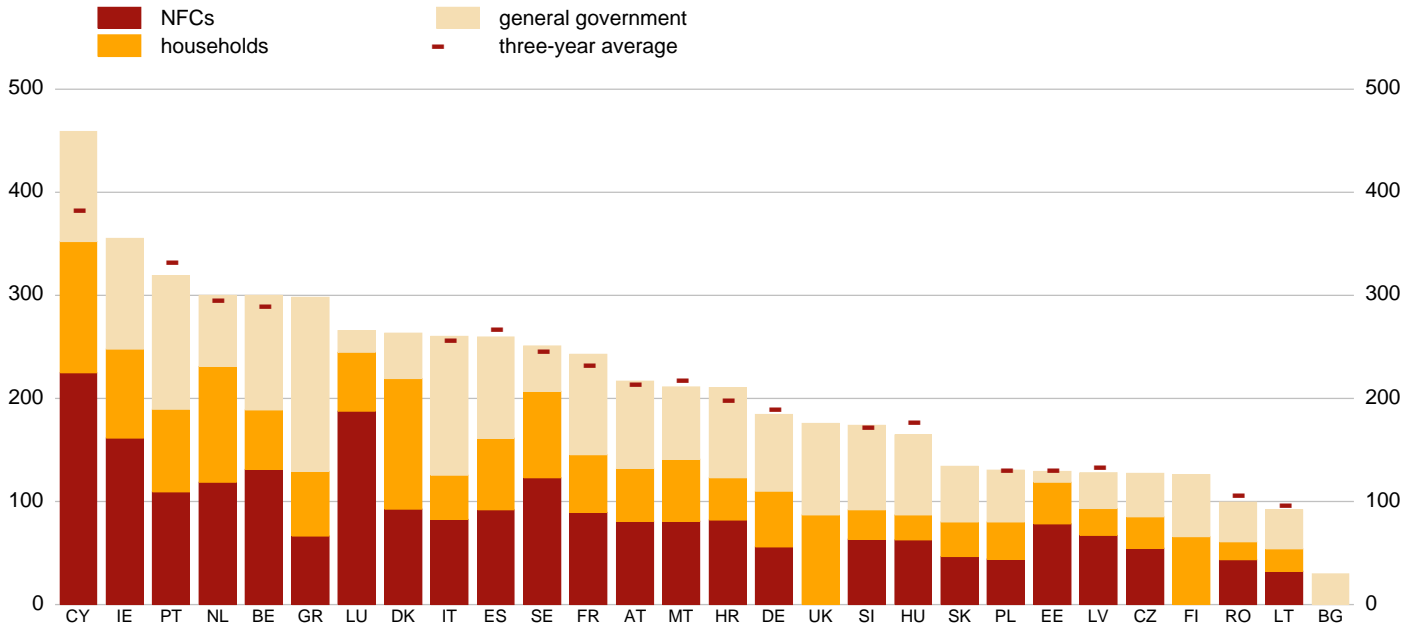
Notes: For EE and HU, "last observation" refers to June 2015; for GR and UK, "last observation" refers to May 2015.

2. Macro risk

2.5 Aggregate debt-to-GDP ratio

a. Level

(EU; percentages; last observation: Q1 2015)



Sources: ECB and European Commission.

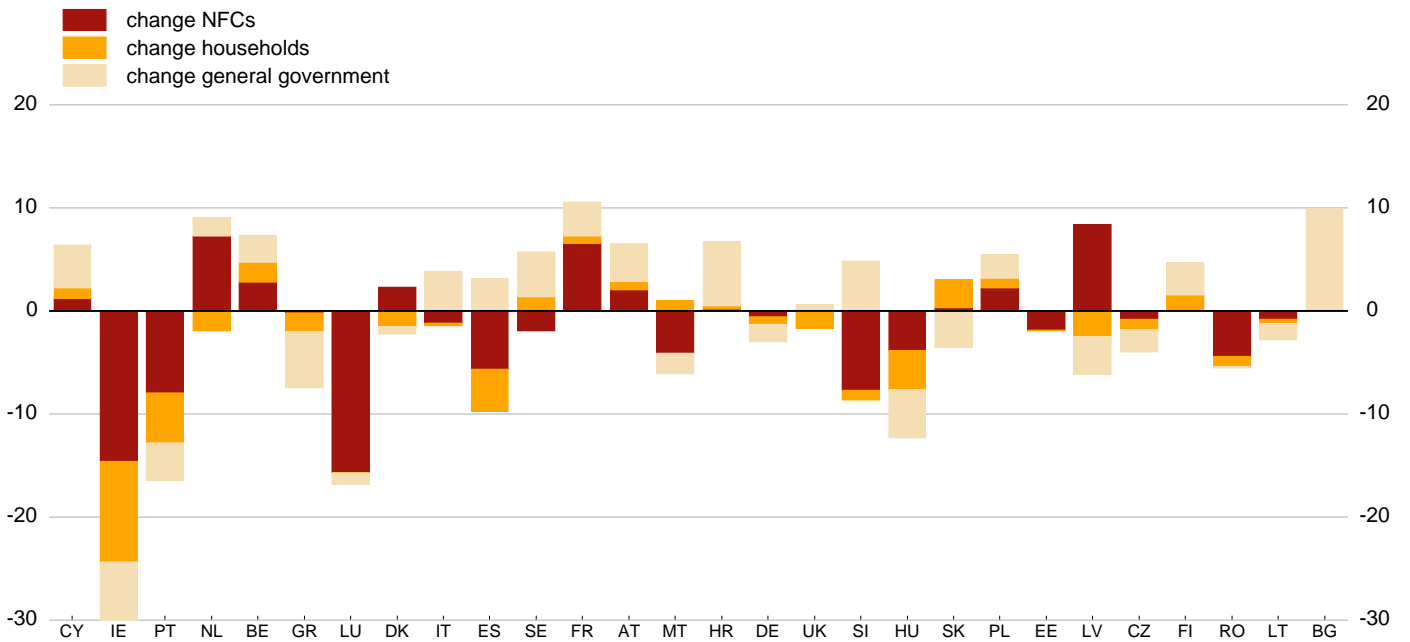
Notes: Debt-to-GDP ratios for NFCs are based on consolidated debt figures.

Private sector debt not available for BG owing to national confidentiality constraints. Non-financial corporations' debt not available for FI and UK.

Data for IE are based on values for Q4 2014. Three year averages are not available for BG, CZ, DK, FI, GR, IE, LU, RO, SK and UK.

b. Year-on-year change

(EU; percentage points; year-on-year changes; last observation: Q1 2015)



Sources: ECB and European Commission.

Notes: Debt-to-GDP ratios for NFCs are based on consolidated debt figures.

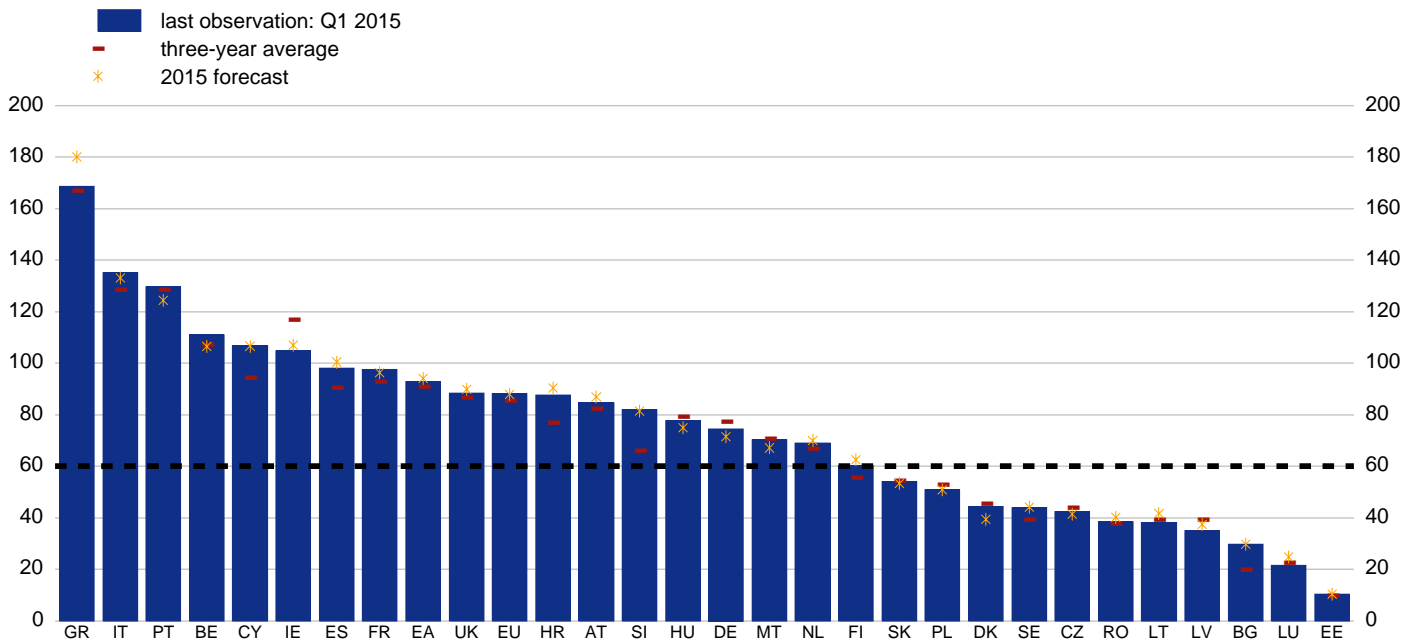
Data on changes of private sector debt are not available for BG owing to national confidentiality constraints.

Data on changes of non-financial corporations' debt are not available for FI and UK. Data for IE are based on values up to Q4 2014.

2. Macro risk

2.6 General government debt-to-GDP ratio

(EU; percentages)

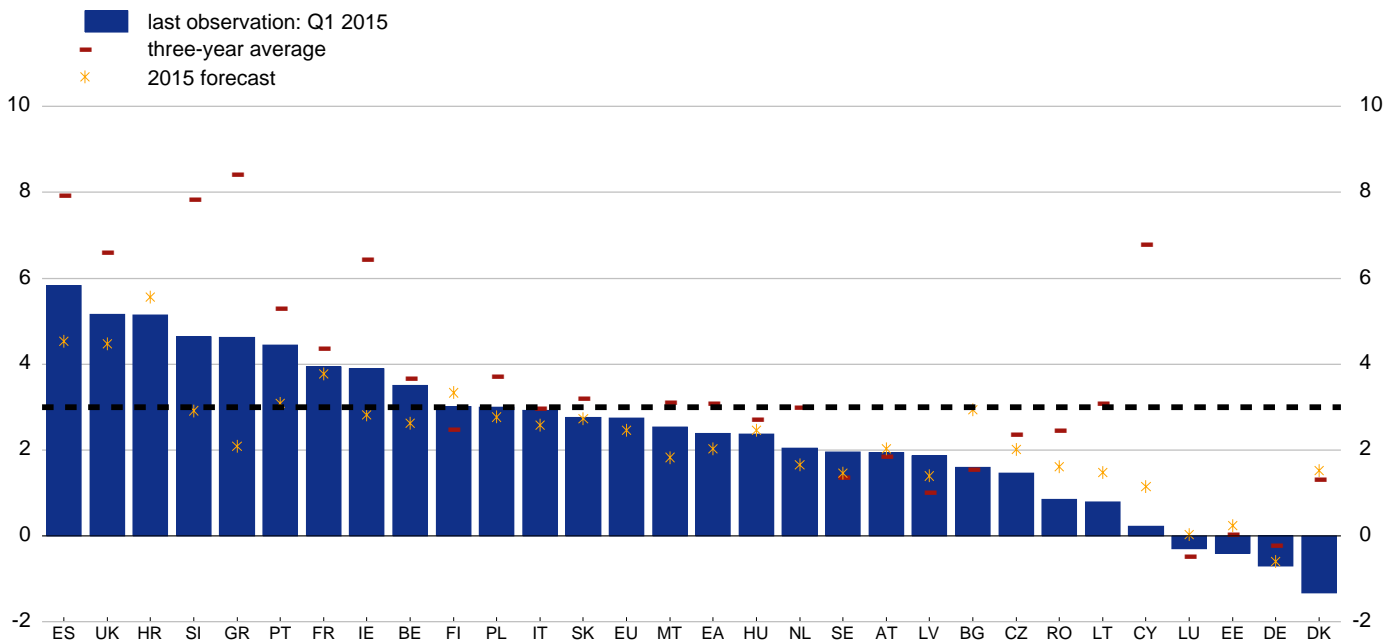


Sources: European Commission and the European Commission Spring 2015 forecast.

Notes: Intra-general government transactions are consolidated. The black dashed line represents the threshold of 60% for the government debt-to-GDP ratio under the Stability and Growth Pact.

2.7 General government deficit-to-GDP ratio

(EU; four-quarter moving sum; percentages)



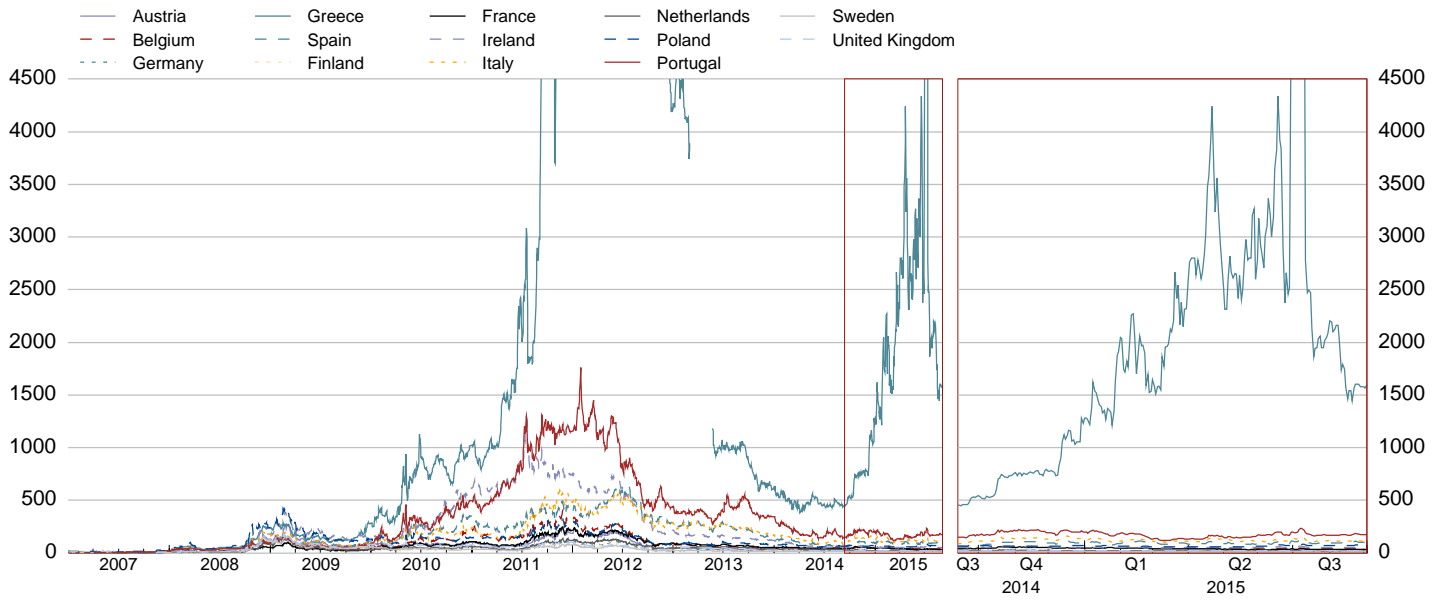
Sources: European Commission and the European Commission Spring 2015 forecast.

Notes: The black dashed line represents the threshold of 3% for the budget deficit under the Stability and Growth Pact. For a number of countries, the figures include bank recapitalisation costs. Excluding these factors would in most cases lower the deficits.

2. Macro risk

2.8 CDS premia on sovereign debt

(Sample of EU countries; basis points; five-year maturities; last observation: 2 Sep. 2015)

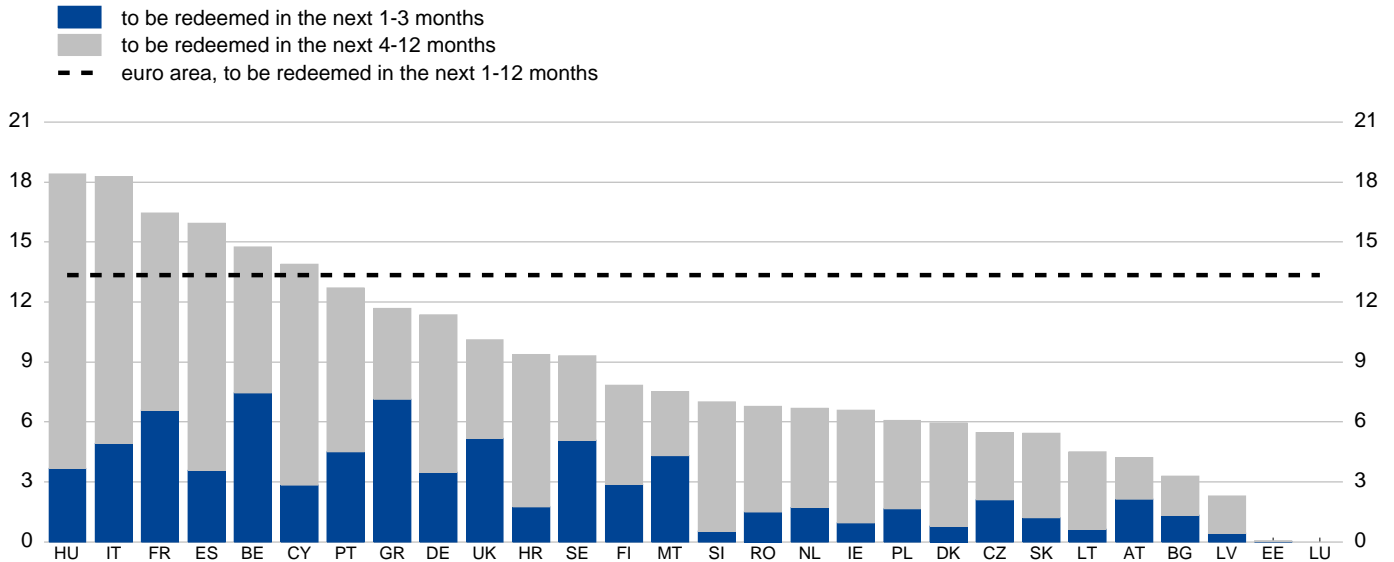


Sources: Thomson Reuters Datastream and CMA.

Notes: Greek sovereign CDS were not traded between 9 March 2012 and 11 April 2012 following the decision by the ISDA that a credit event had occurred. Due to the lack of contributors, data were also not available between 1 March and 21 May 2013. For presentational reasons, this chart has been truncated.

2.9 Sovereign debt redemptions

(EU; percentage of 2015 GDP; as scheduled at end of Jul. 2015)



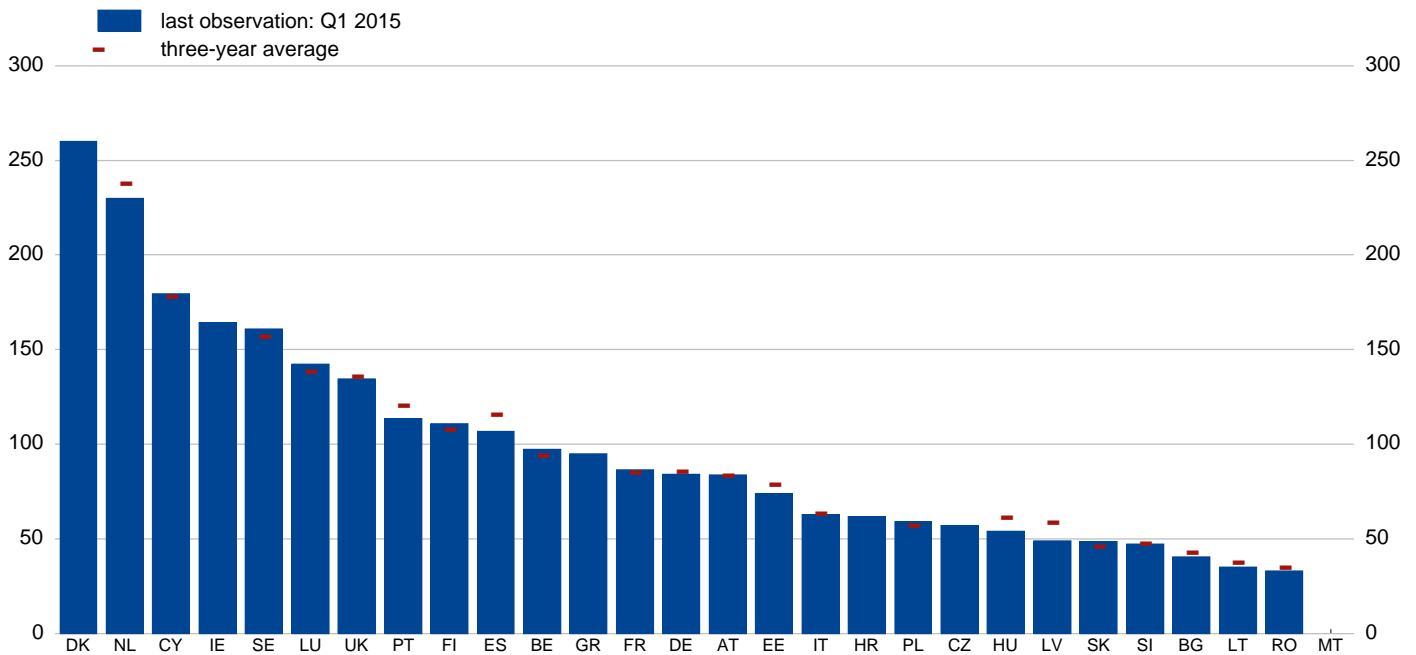
Sources: ECB and ECB calculations; European Commission forecast for GDP.

Notes: Redemption schedules refer to tradable debt securities only, including debt issued in a currency other than the domestic one. Debt redemptions denominated in currencies other than euro are converted into euro at current exchange rates.

2. Macro risk

2.10 Household debt-to-gross disposable income ratio

(EU; percentages)



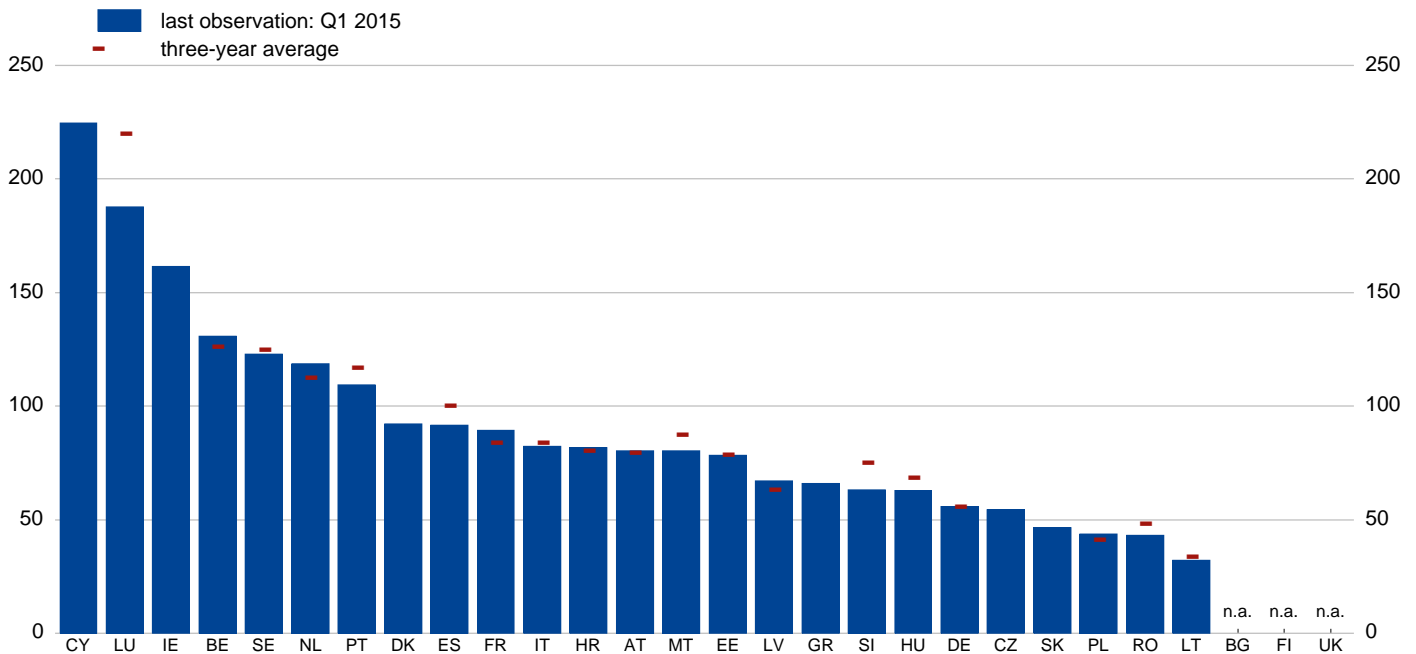
Sources: ECB and European Commission.

Notes: Data for CY,EE,LT,LV,MT and SK are based on annual ESA2010 series for 2013. Data for BG,HU,LU are based on annual ESA95 series for 2012.

Three year averages are not available for CZ,DK,GR,HR and IE.

2.11 NFC debt-to-GDP ratio

(EU; percentages)



Sources: ECB and European Commission.

Notes: Debt-to-GDP ratios for NFCs are based on consolidated debt figures.

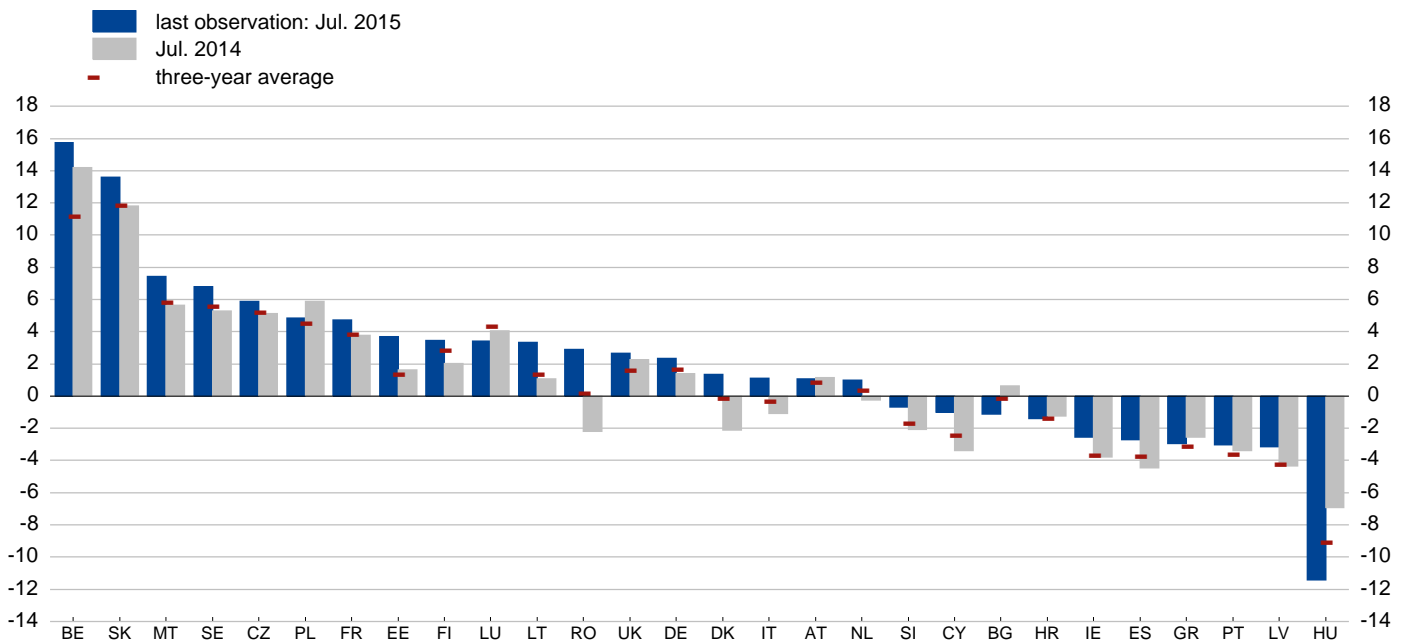
NL data are consolidated at the level of the resident enterprise group. Data on NFC debt for BG are not available owing to national confidentiality constraints.

Data on NFC debt for FI and UK are not available. Data for IE refer to series up to Q4 2014. Three year averages are not available for BG,CY,CZ,DK,FI,GR,IE,SK and UK.

3. Credit risk

3.1 Annual growth rates of MFIs loans to households

(EU; percentages)

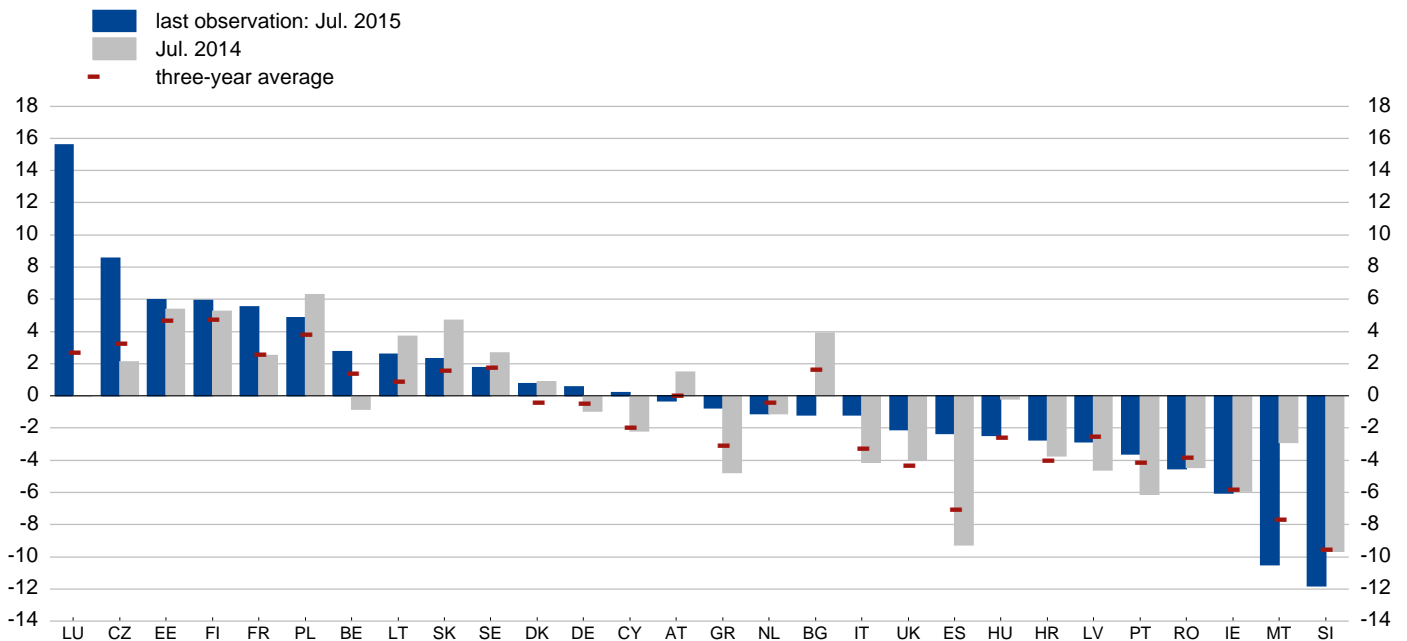


Source: ECB.

Notes: Loans extended by MFIs excluding the ESCB. Data for euro area Member States refer to loans granted to euro area households, while for non-euro area Member States to loans to domestic households. Euro area Member States data are adjusted for the derecognition of loans from the MFI statistical balance sheet due to their sale or securitisation (data for Belgium and Italy are not adjusted for this effect).

3.2 Annual growth rates of MFI loans to NFCs

(EU; percentages)



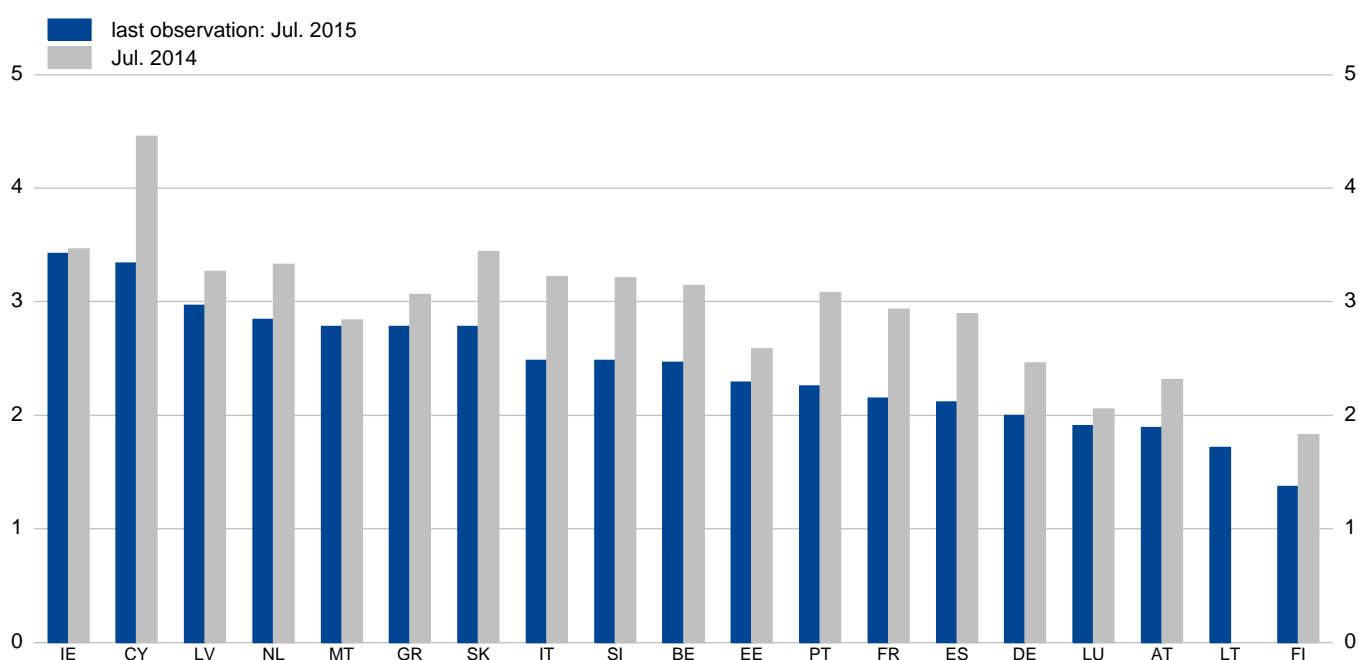
Source: ECB.

Notes: Loans extended by MFIs excluding the ESCB. Data for euro area Member States refer to loans granted to euro area NFCs, while for non-euro area Member States to loans to domestic NFCs. Euro area Member States data are adjusted for the derecognition of loans from the MFI statistical balance sheet due to their sale or securitisation (data for Belgium and Italy are not adjusted for this effect).

3. Credit risk

3.3 Cost of borrowing from MFIs for households (for house purchase)

(euro area; percentage points)

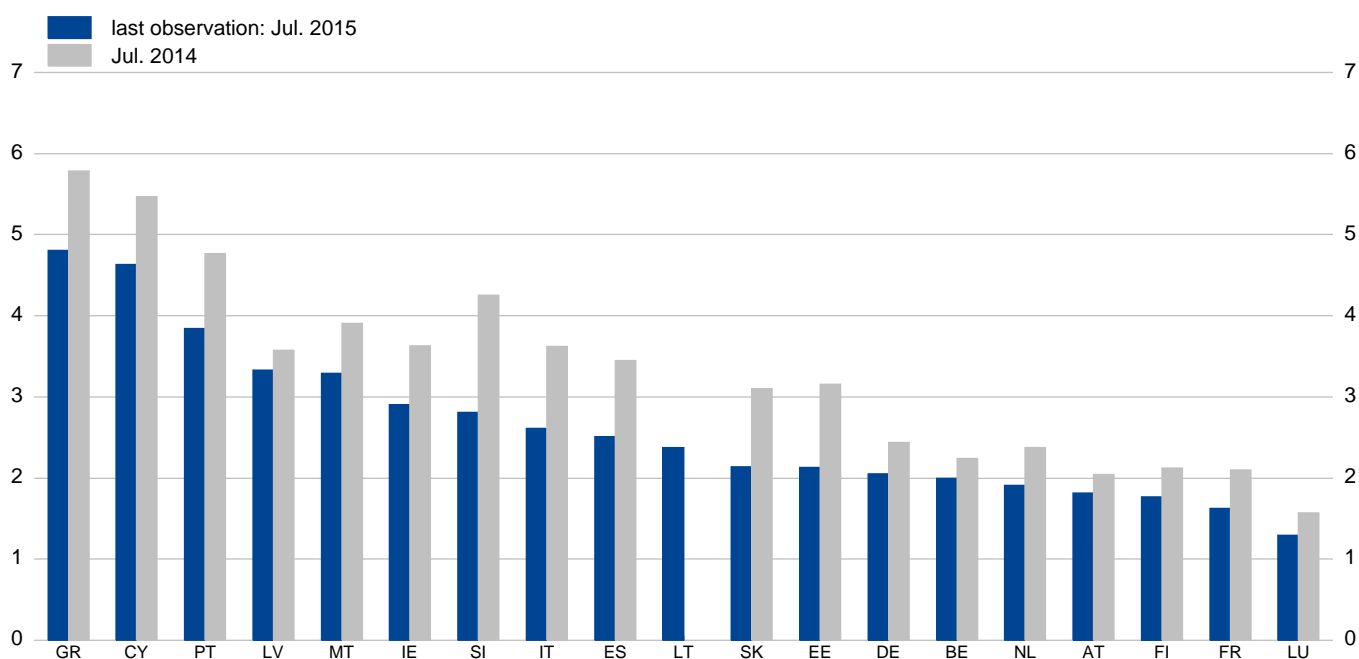


Source: ECB.

Notes: MFIs excluding ESCB. The cost of borrowing from MFIs is calculated as the weighted average of rates on short-term (i.e. initial period of interest rate fixation up to one year) and long-term (i.e. initial period of interest rate fixation over one year) MFI loans, weighted by the volumes of new business (smoothed by the moving average of the previous two years).

3.4 Cost of borrowing from MFIs for NFCs

(euro area; percentage points)



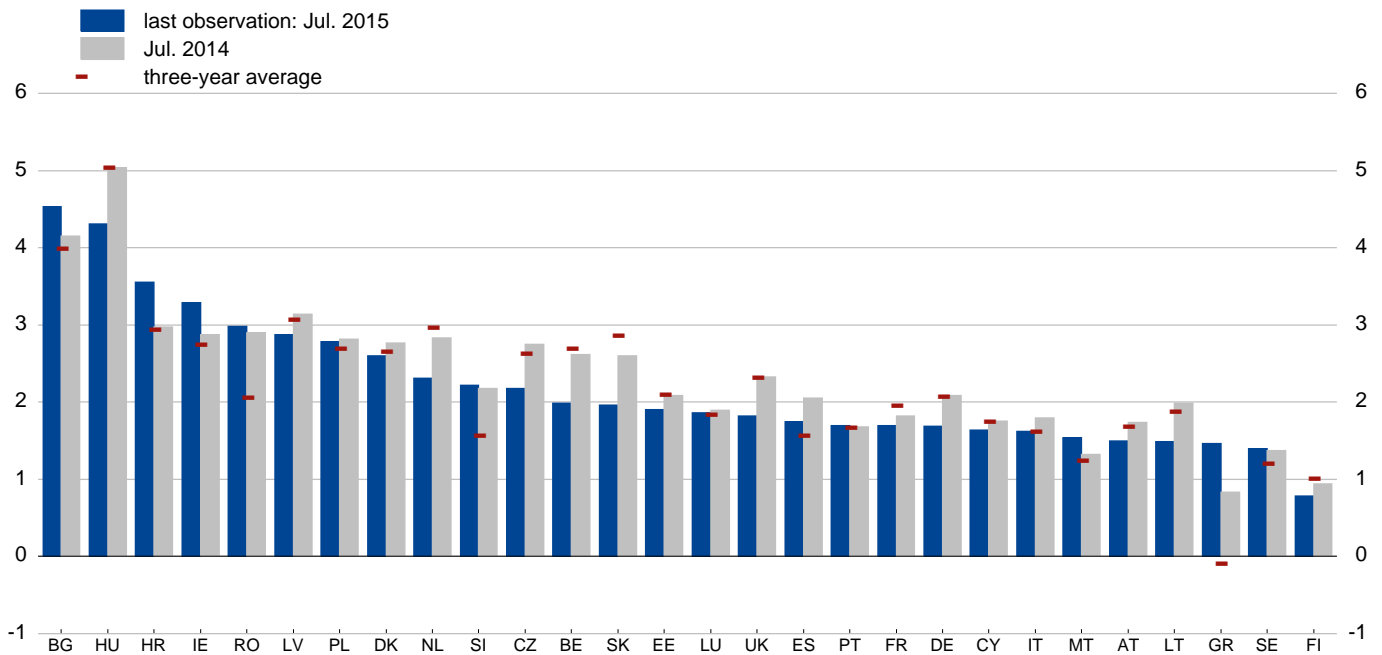
Source: ECB.

Notes: MFIs excluding ESCB. The cost of borrowing from MFIs is calculated as the weighted average of rates on short-term (i.e. initial period of interest rate fixation up to one year) and long-term (i.e. initial period of interest rate fixation over one year) MFI loans, weighted by the volumes of new business (smoothed by the moving average of the previous two years).

3. Credit risk

3.5 Lending margins of MFIs - loans to households (for house purchase)

(EU; percentage points)

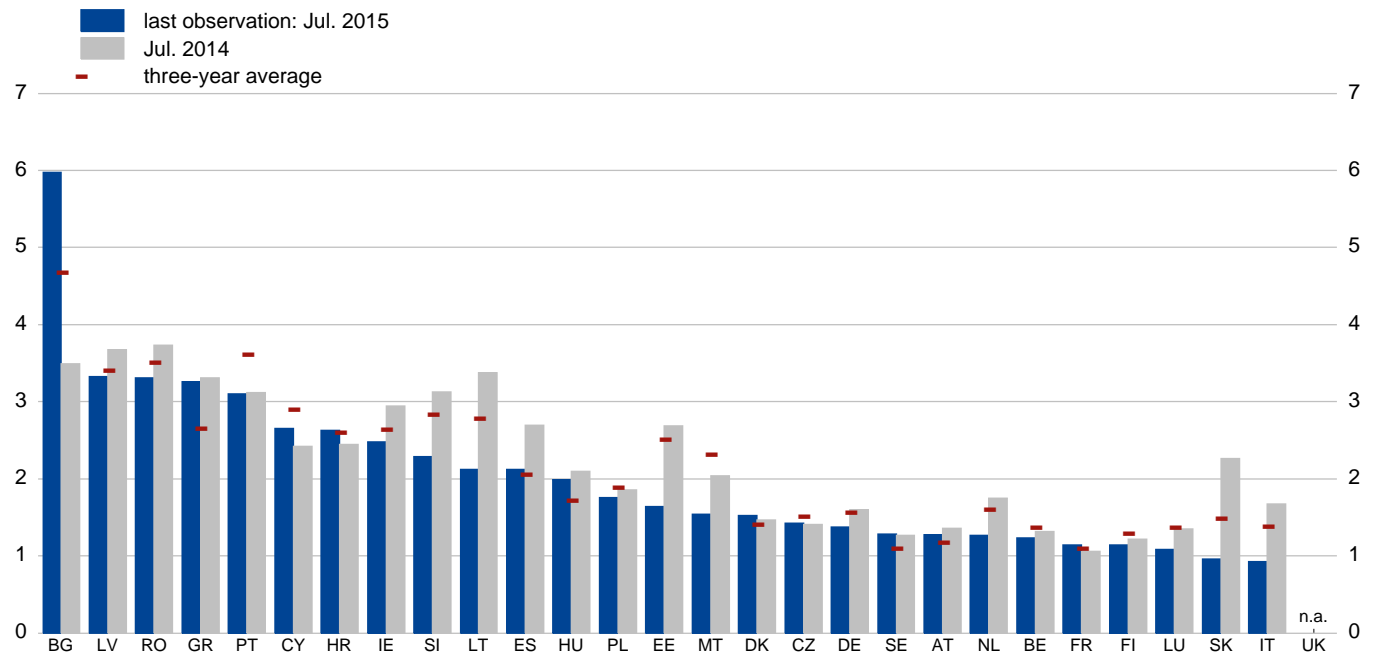


Source: ECB.

Notes: Lending margins are measured as the difference between MFIs' interest rates for new business loans and a weighted average rate of new deposits from households and NFCs. For non-euro area countries, rates for loans and deposits in both euro and the national currency are taken into account. For euro area countries, rates refer to loans granted to euro area residents, whereas for non-euro area countries rates refer to loans granted to domestic residents.

3.6 Lending margins of MFIs - loans to NFCs

(EU; percentage points)



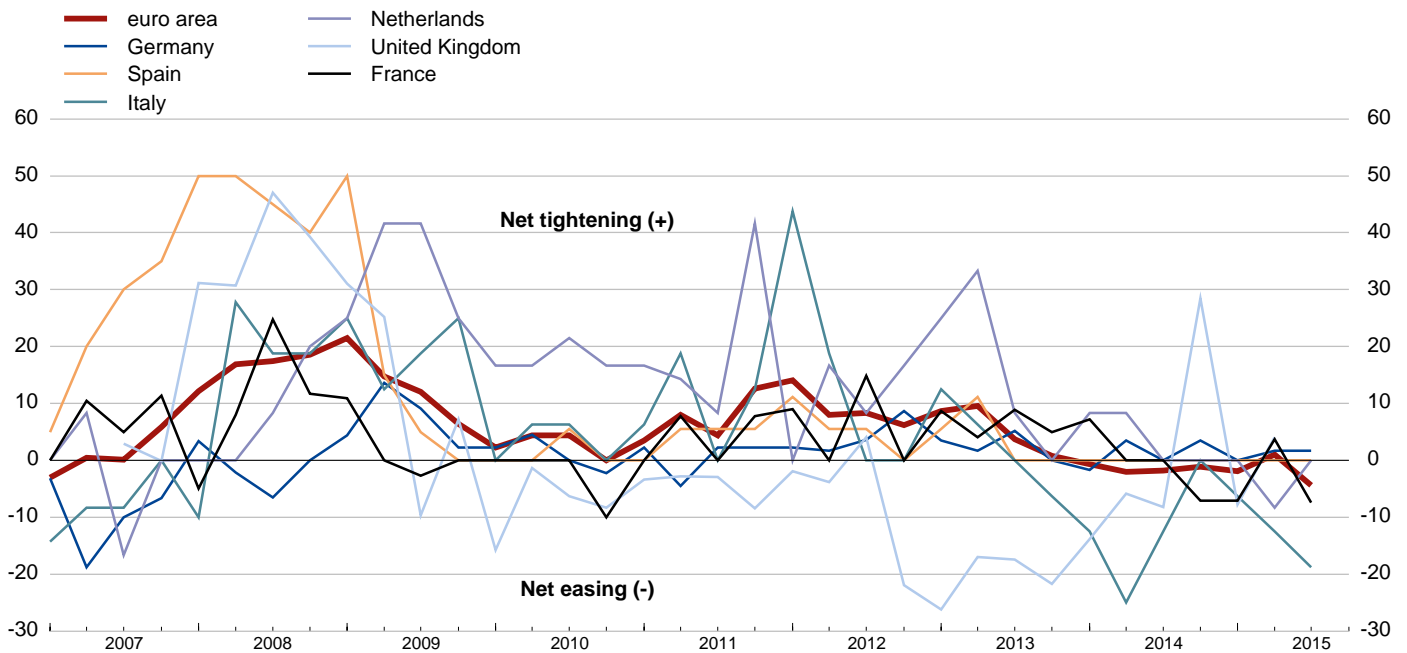
Source: ECB.

Notes: Lending margins are measured as the difference between MFIs' interest rates for new business loans and a weighted average rate of new deposits from households and NFCs. For non-euro area countries, rates for loans and deposits in both euro and the national currency are taken into account. For euro area countries, rates refer to loans granted to euro area residents, whereas for non-euro area countries rates refer to loans granted to domestic residents.

3. Credit risk

3.7 Changes in credit standards for loans to households (for house purchase)

(Sample of EU countries; weighted net percentages; last observation: Q3 2015)

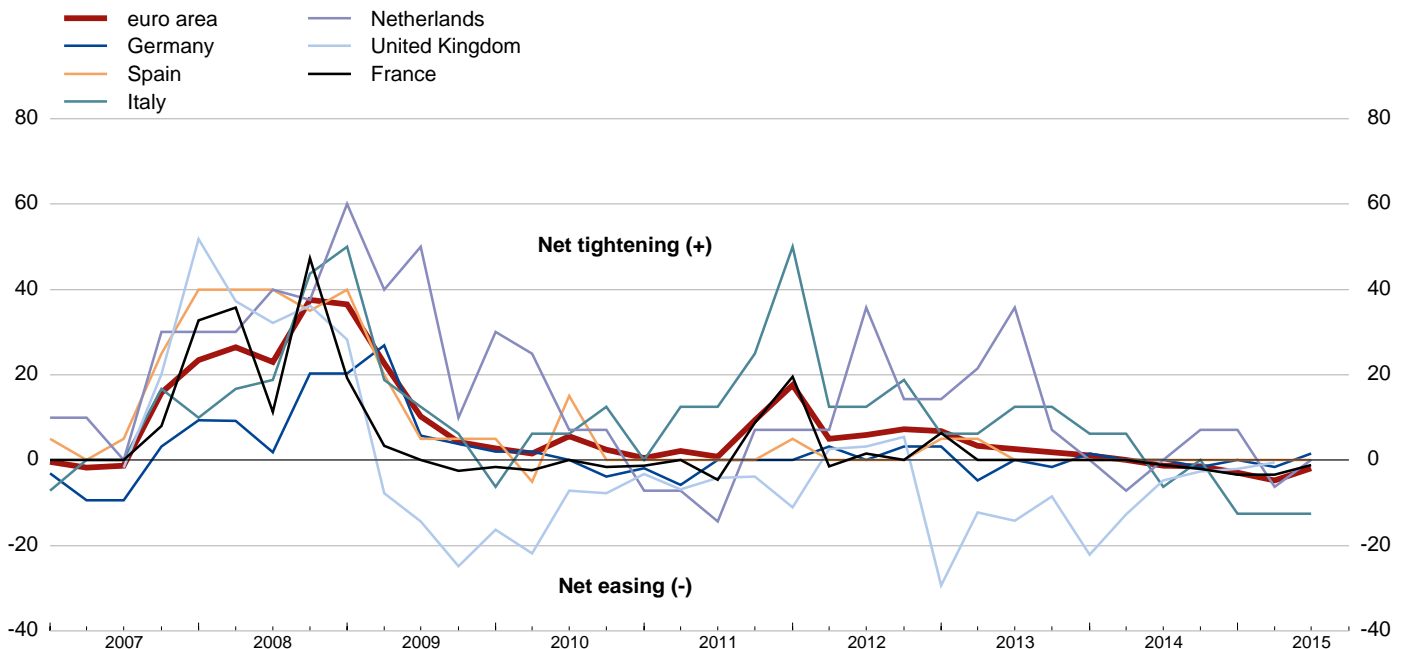


Sources: ECB and Bank of England.

Notes: Weighted net percentages of banks contributing to the tightening of standards over the previous three months. For the United Kingdom, data are only available from the second quarter of 2007 and are weighted according to the market share of the participating lenders. The net percentage balances on secured credit availability to households in the United Kingdom have been inverted.

3.8 Changes in credit standards for loans to NFCs

(Sample of EU countries; weighted net percentages; last observation: Q3 2015)



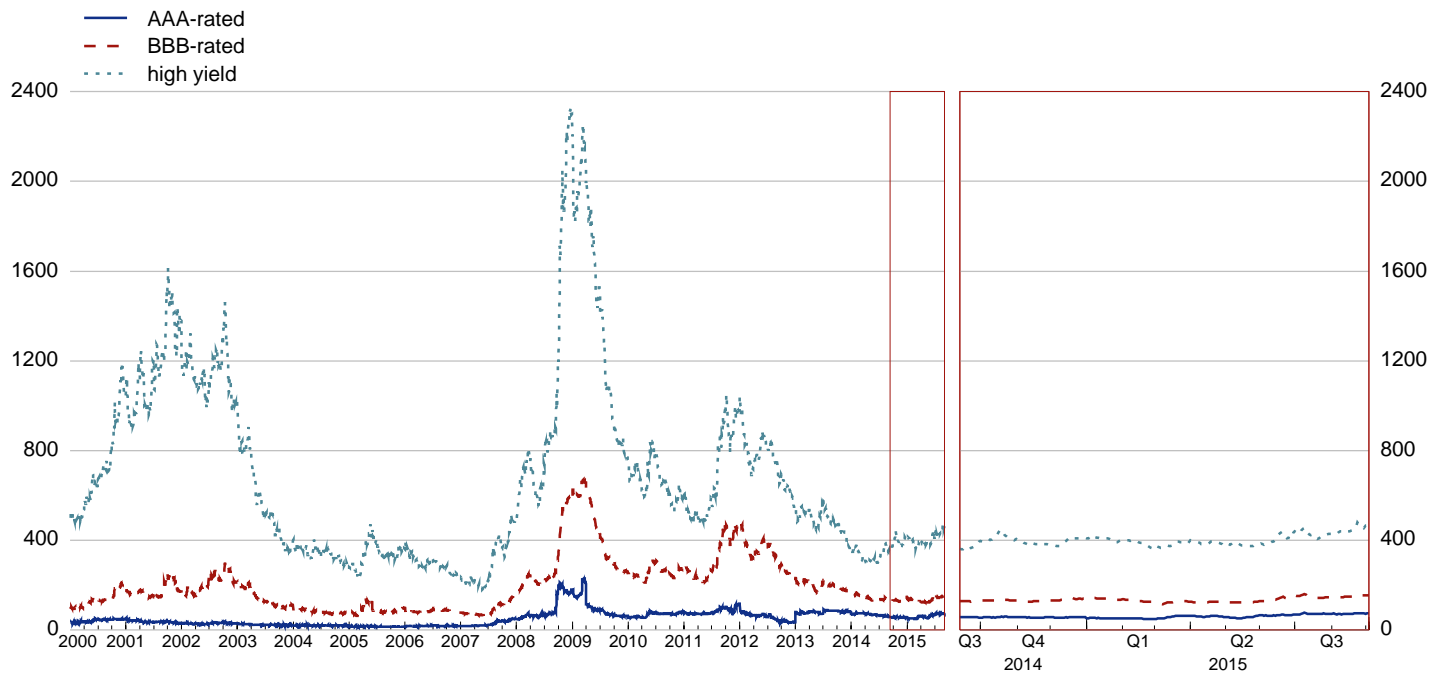
Sources: ECB and Bank of England.

Notes: Weighted net percentages of banks contributing to the tightening of standards over the previous three months. For the United Kingdom, data refer to large and medium-sized enterprises and are only available from the second quarter of 2007. They are weighted according to the market share of the participating lenders. The net percentage balances on corporate credit availability in the United Kingdom have been inverted.

3. Credit risk

3.9 Option-adjusted spreads on euro area corporate bonds

(euro area; percentages; last observation: 2 Sep. 2015)

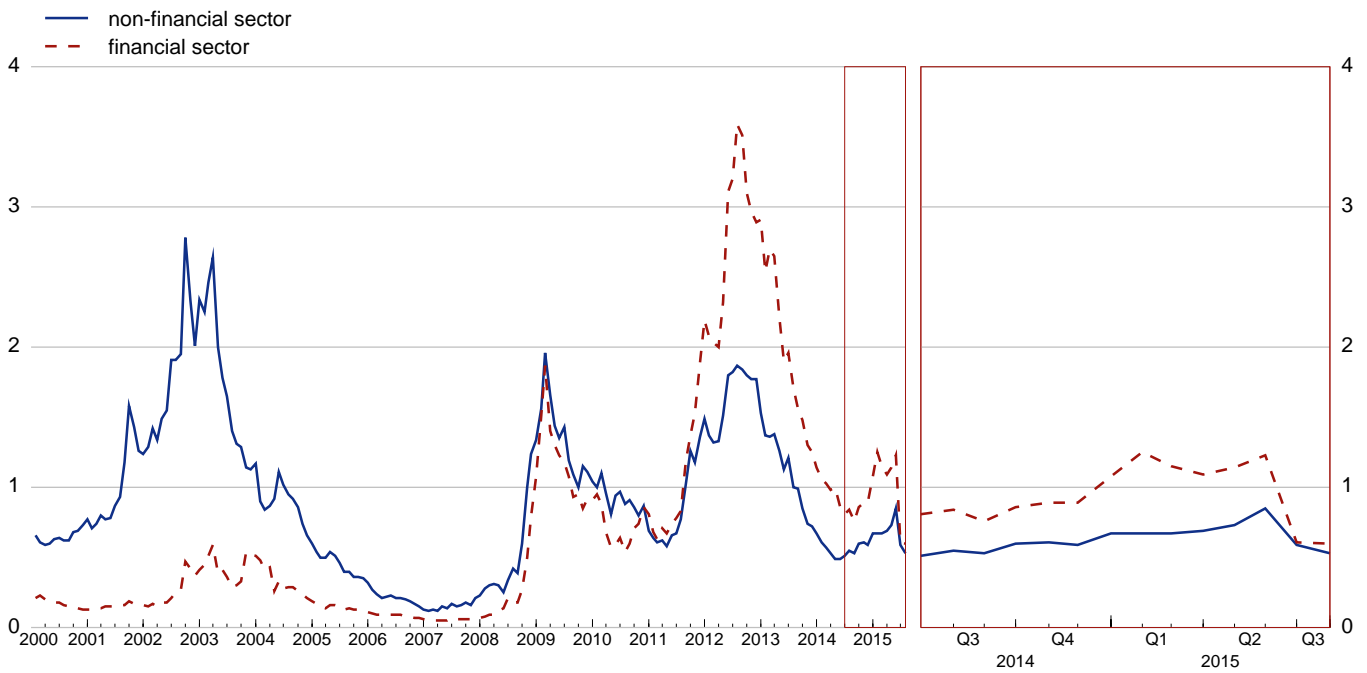


Source: Bank of America Merrill Lynch.

Note: Spreads (in basis points) over German government bonds for both plain vanilla bonds and bonds with embedded options (for which the value of the option is stripped using proprietary models).

3.10 Expected default frequency of the corporate sector

(EU; percentages; weighted average; last observation: Jul. 2015)



Sources: Moody's KMV and ECB calculations.

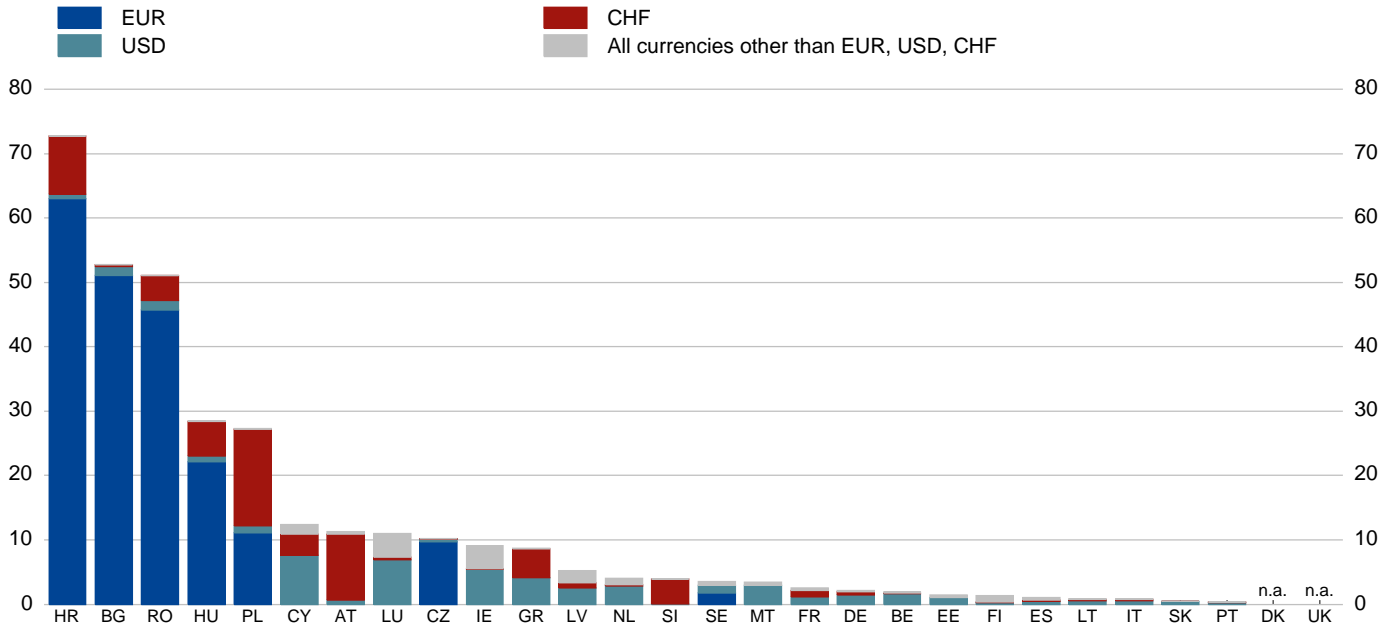
Note: The weighted average is based on the amounts of non-equity liabilities. Model changed into EDF9 as of 1 June 2015.

3. Credit risk

3.11 Foreign currency loans

a. By currency

(EU; percentages; last observation: Q2 2015)

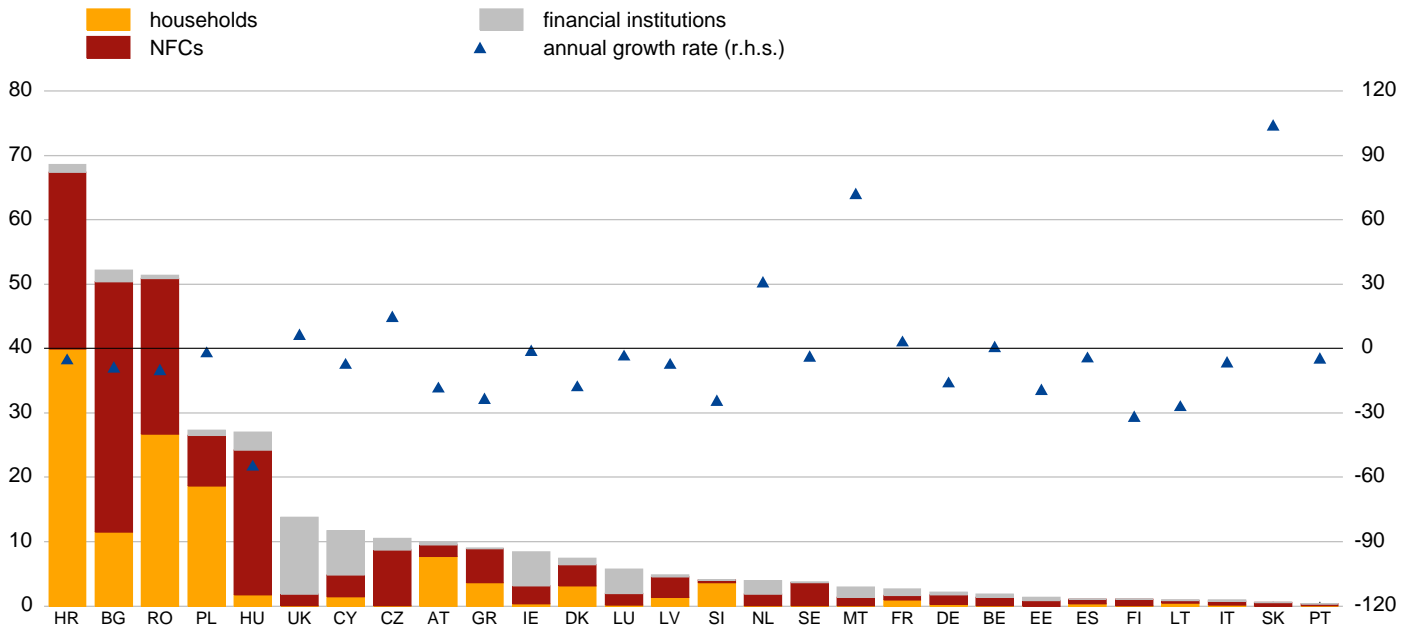


Source: ECB.

Notes: Loans extended by MFIs excluding the ESCB to domestic non-MFIs. BG and DK have a regime of fixed exchange rates vis-à-vis the euro.

b. By sector

(EU; percentages; last observation: Jul. 2015)



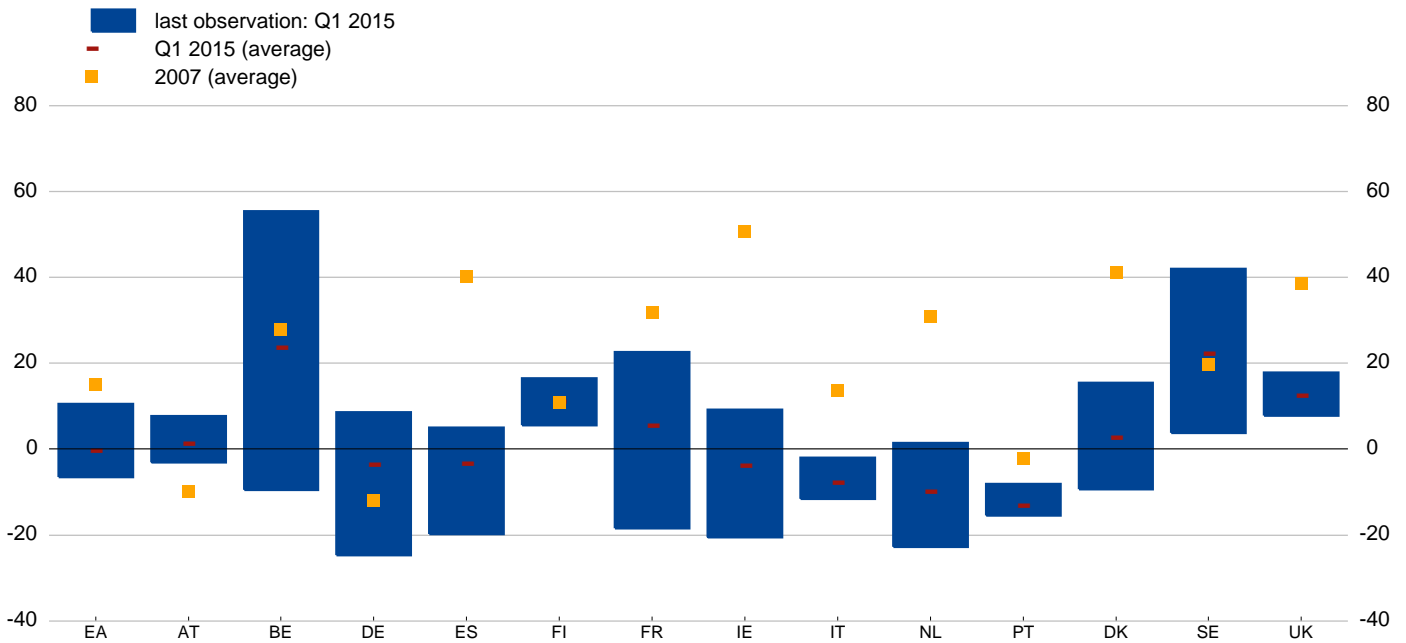
Source: ECB.

Note: BG and DK have a regime of fixed exchange rates vis-à-vis the euro.

3. Credit risk

3.12 Over/undervaluation of residential property prices

(Sample of EU countries; percentages; distribution of estimates and average)

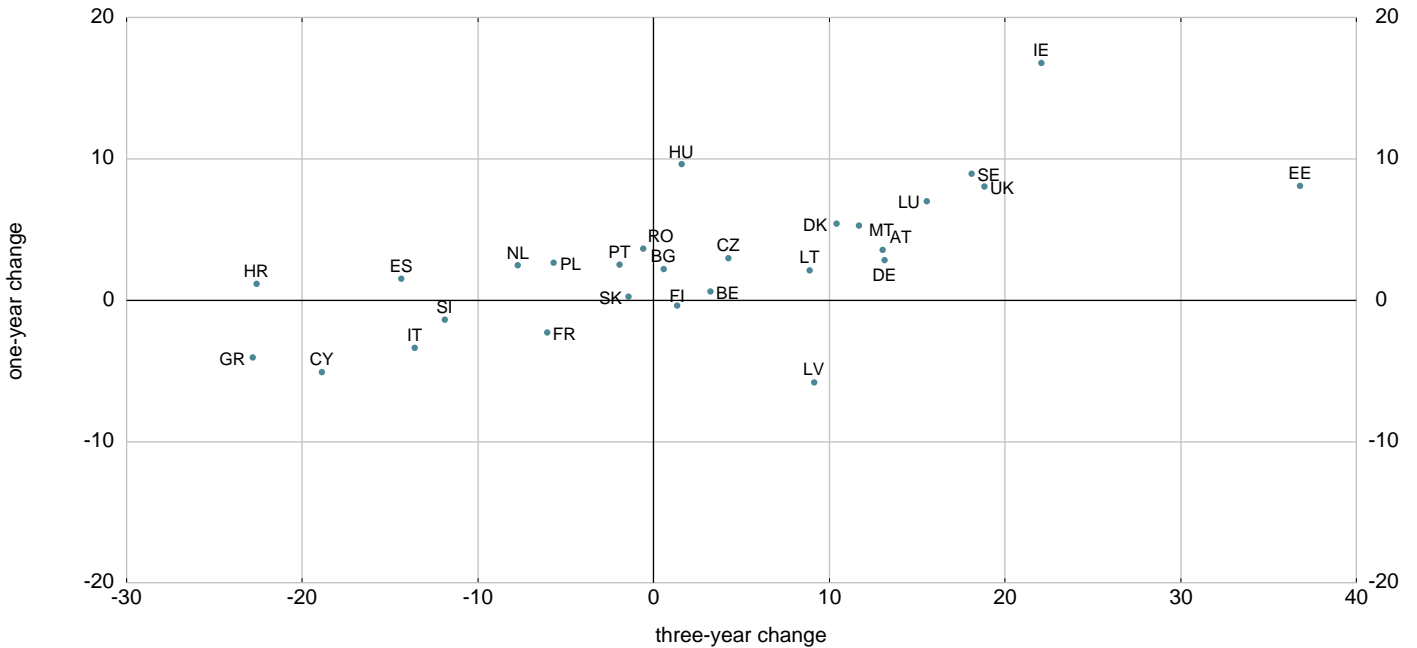


Sources: ECB and ECB calculations.

Notes: Estimates based on four different valuation methods: price-to-rent ratio, price-to-income ratio and two model-based methods. See Box 3, Financial Stability Review, ECB, June 2011. For each country, the blue bars represent the range of estimates calculated as the interval between the minimum and maximum. Latest data for BE and FI refer to 2014 Q4.

3.13 Change in nominal residential property prices

(EU; percentages; last observation: Q1 2015)



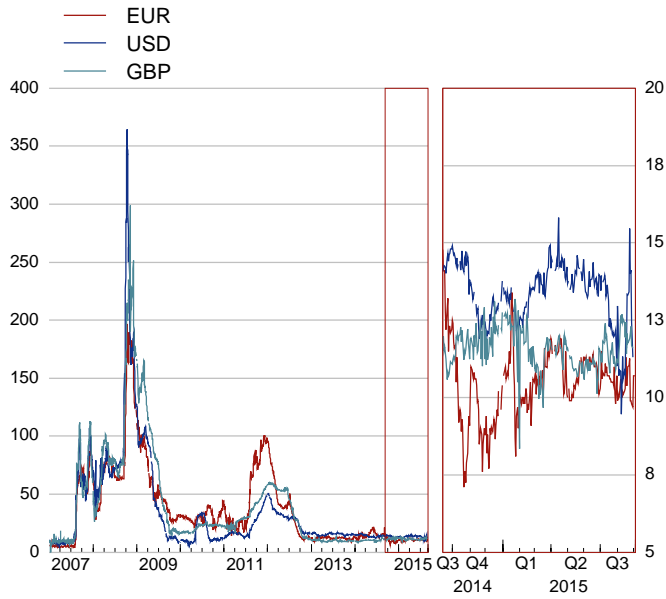
Sources: ECB, national sources and ECB calculations.

Notes: For BE and SK "last observation" refers to Q4 2014.

4. Funding and liquidity

4.1 Interbank interest rate spreads

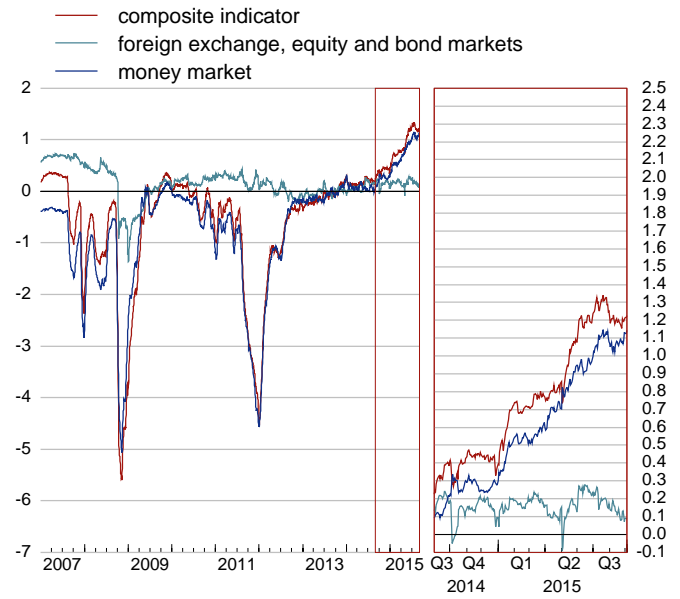
(basis points; three-month maturities; last observation: 2 Sep. 2015)



Sources: Thomson Reuters, Bloomberg and ECB calculations.
 Note: Difference between interbank interest rates and overnight indexed swap.

4.2 Financial market liquidity indicator

(euro area; last observation: 2 Sep. 2015)



Sources: ECB, Bank of England, Bloomberg, JPMorgan Chase & Co., Moody's KMV and ECB calculations.
 Note: See Box 9, Financial Stability Review, ECB, June 2007.

4.3 EUR/USD cross-currency basis swap spreads

(basis points; last observation: 3 Sep. 2015)

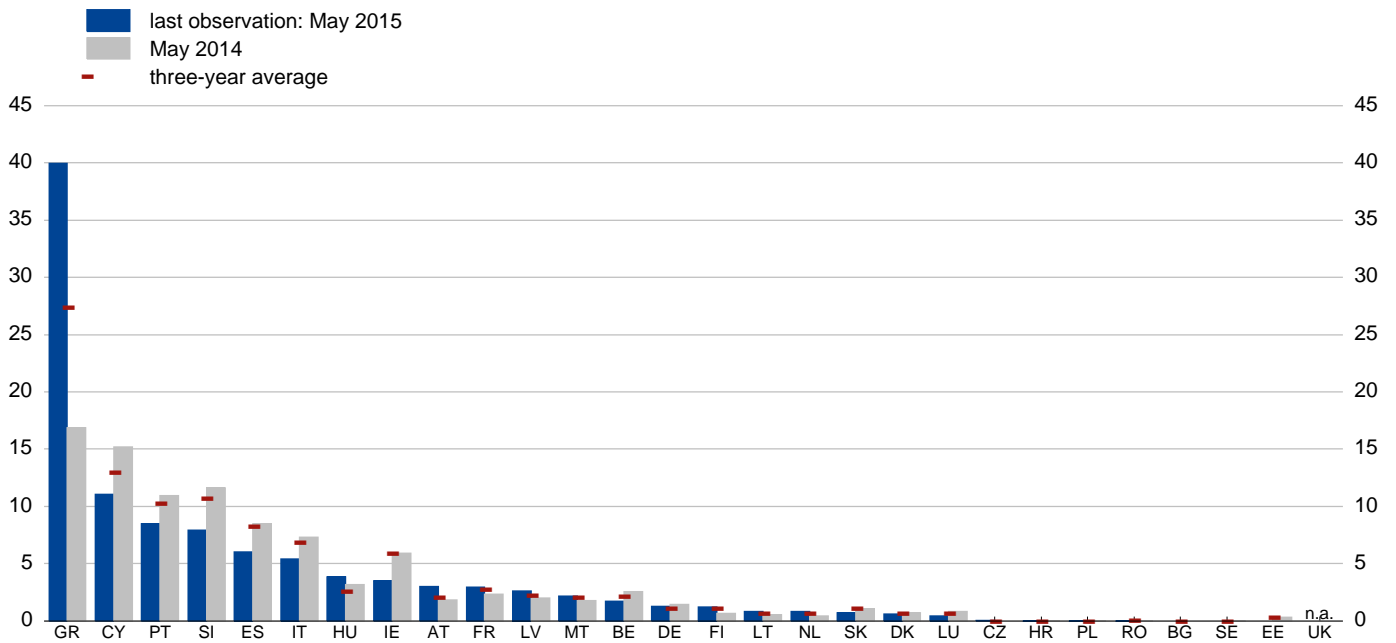


Source: Bloomberg.
 Note: Data available since January 2008.

4. Funding and liquidity

4.4 Banks' funding by central banks

(EU; share of total liabilities; percentages)

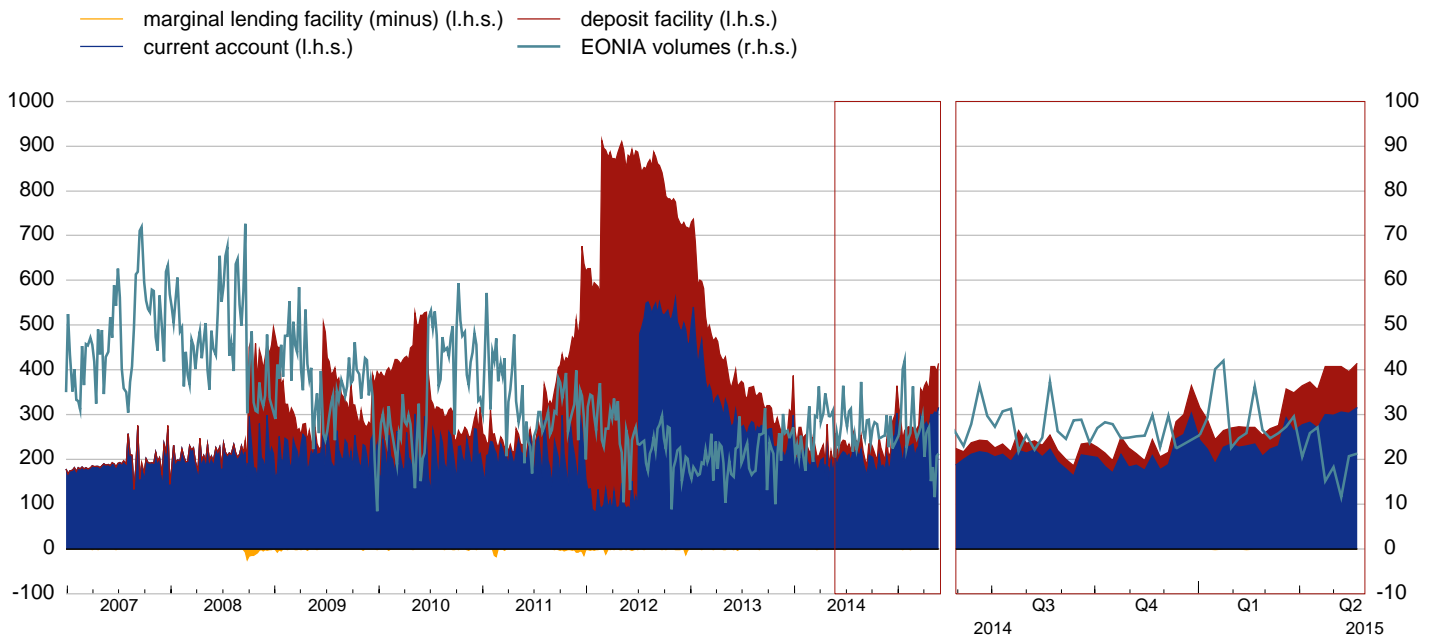


Sources: ECB, IMF and ECB calculations.

Notes: MFIs excluding the ESCB and Money Market Funds. Banks' funding by central banks comprises all loans granted by the ESCB. Total liabilities exclude capital and reserves as well as remaining liabilities.

4.5 Money markets and the Eurosystem's standing facilities

(euro area; EUR billions; last observation: 27 Aug. 2015)



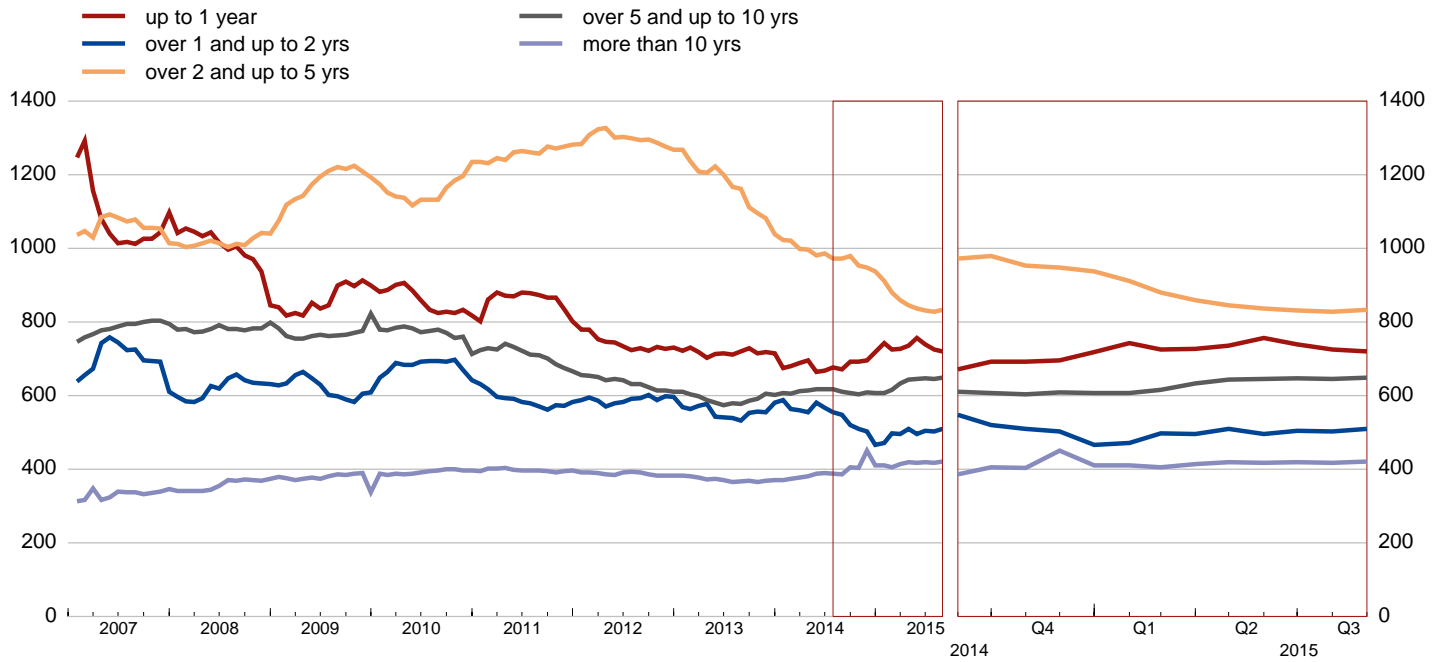
Sources: ECB and Bloomberg.

Note: Eurosystem's current account includes minimum reserves.

4. Funding and liquidity

4.6 Maturity profile of Banks' outstanding debt securities

(EU; EUR billions; last observation: Aug. 2015)

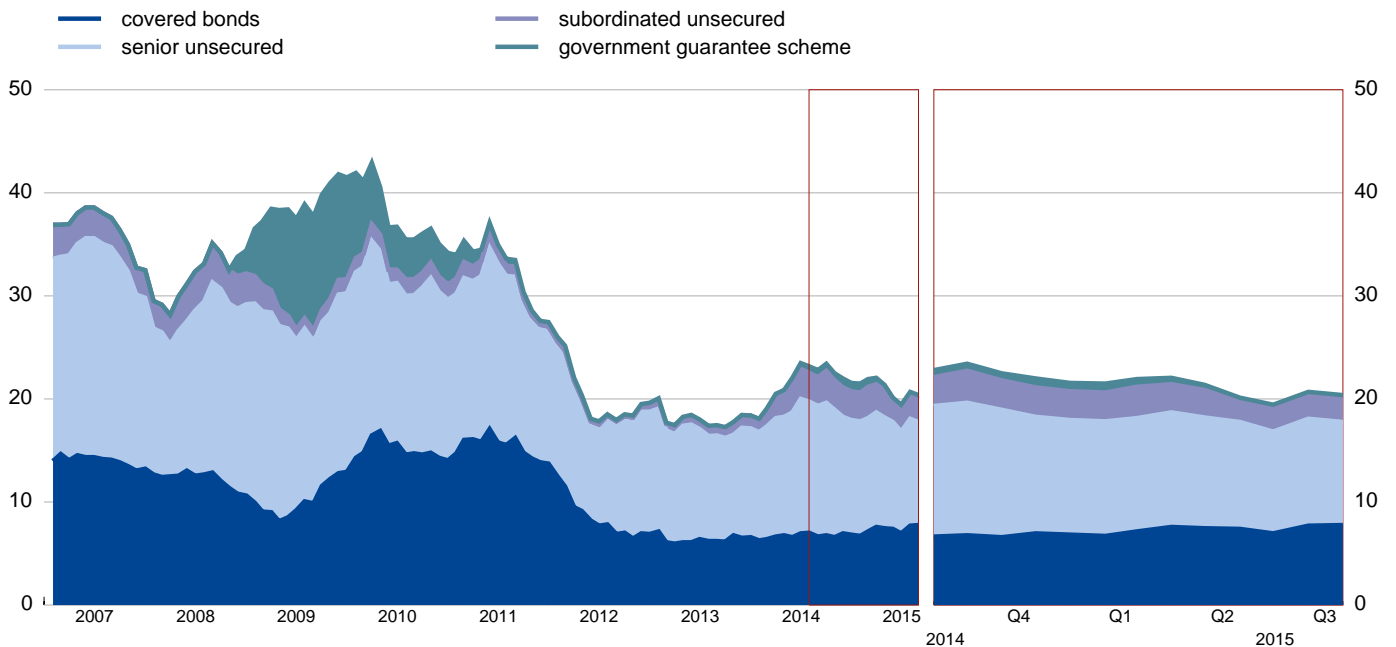


Sources: Dealogic DCM Analytics, Dealogic CPWare and ECB calculations.

Notes: The maturity profile refers to the residual maturity of long-term and short-term debt securities issued by European banks. Banks' long-term debt includes corporate bonds, medium-term notes, covered bonds, asset-backed securities and mortgage-backed securities with a maturity of more than 12 months. Banks' short-term debt includes commercial papers certificates of deposits and short-term notes with a maximum maturity of 12 months. Data are based on amounts outstanding at the end of the corresponding year or month.

4.7 Banks' long-term debt securities issuance

(EU; EUR billions; last observation: Aug. 2015)



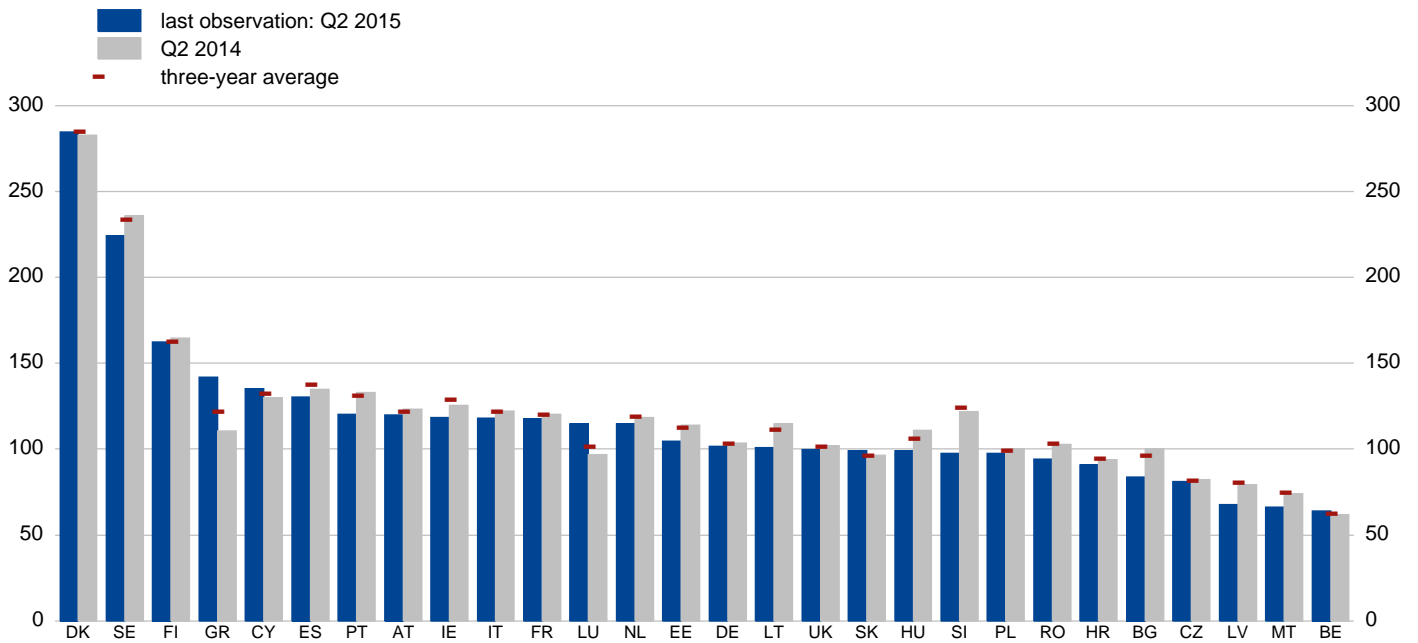
Source: Dealogic DCM Analytics.

Note: Debt issuance by EU public and private sector banks, excluding issuance of short term debt (i.e. with original maturity of below one year) and excluding ABS, MBS and agency related issuances.

4. Funding and liquidity

4.8 Loan-to-deposit ratio

(EU; percentages)



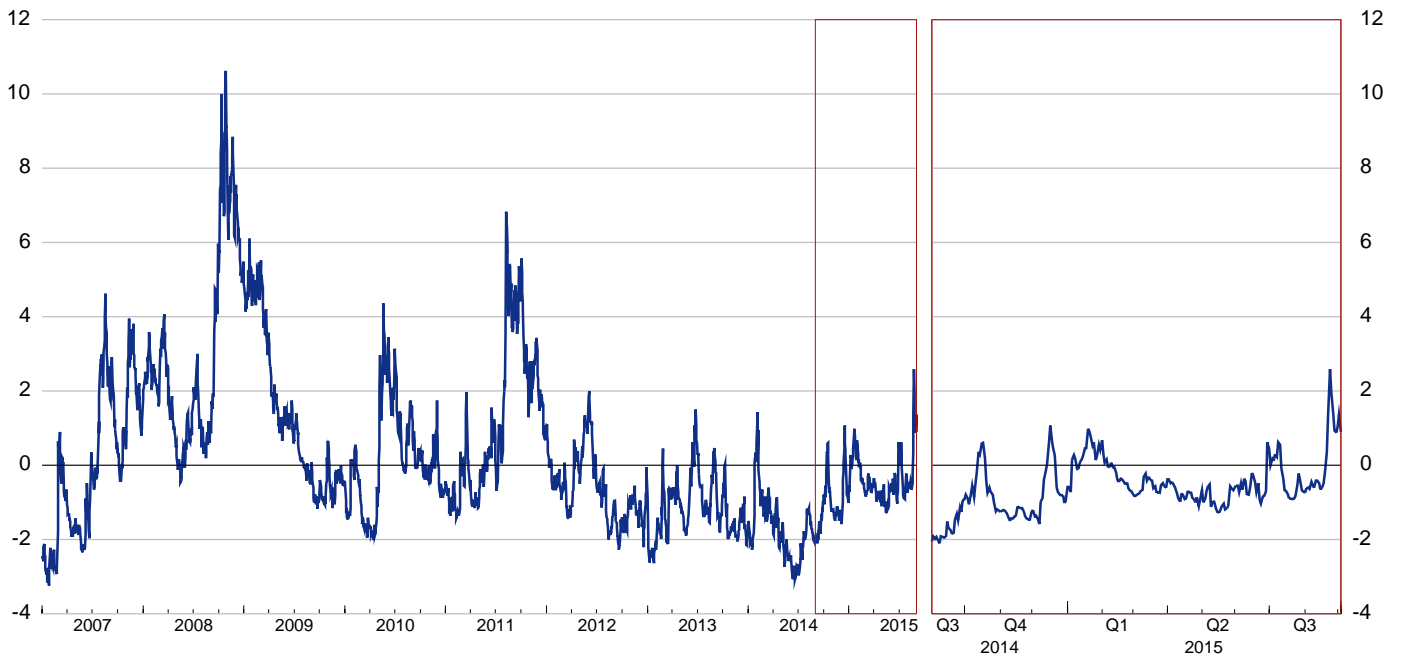
Source: ECB.

Notes: MFIs sector excluding the ESCB. Data refers to the ratio between total loans and total deposits vis-à-vis the domestic and euro area households, NFCs and non-MFI residents excluding the general government. Mortgage banks in Denmark, which represent around 55% of total MFI loans to domestic NFCs, are not allowed to take deposits owing to regulations, but must fund their lending through issuance of covered bonds only. Excluding mortgage banks from the indicator, the loan-to-deposit ratio for DK is equal to 0.83 for Q2 2015 and 0.84 for Q2 2014.

5. Market risk

5.1 Global risk aversion indicator

(Last observation: 2 Sep. 2015)

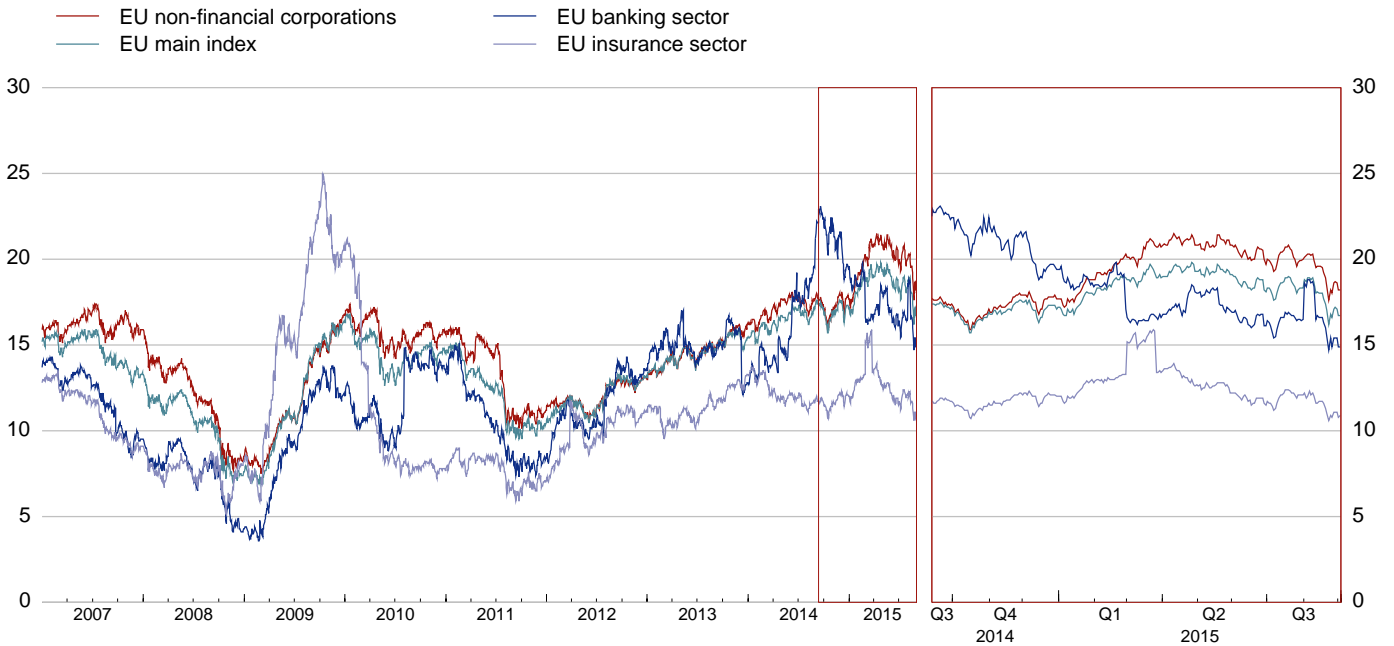


Sources: Bloomberg, Bank of America Merrill Lynch (BoA ML), UBS, Commerzbank and ECB calculations.

Notes: Constructed as the first principal component of five currently available risk aversion indicators, namely Commerzbank Global Risk Perception, UBS FX Risk Index, Westpac's Risk Appetite Index, BoA ML Risk Aversion Indicator and Credit Suisse Risk Appetite Index. A rise in the indicator denotes an increase in risk aversion.

5.2 Price/earnings ratio of equity indices

(EU; last observation: 2 Sep. 2015)



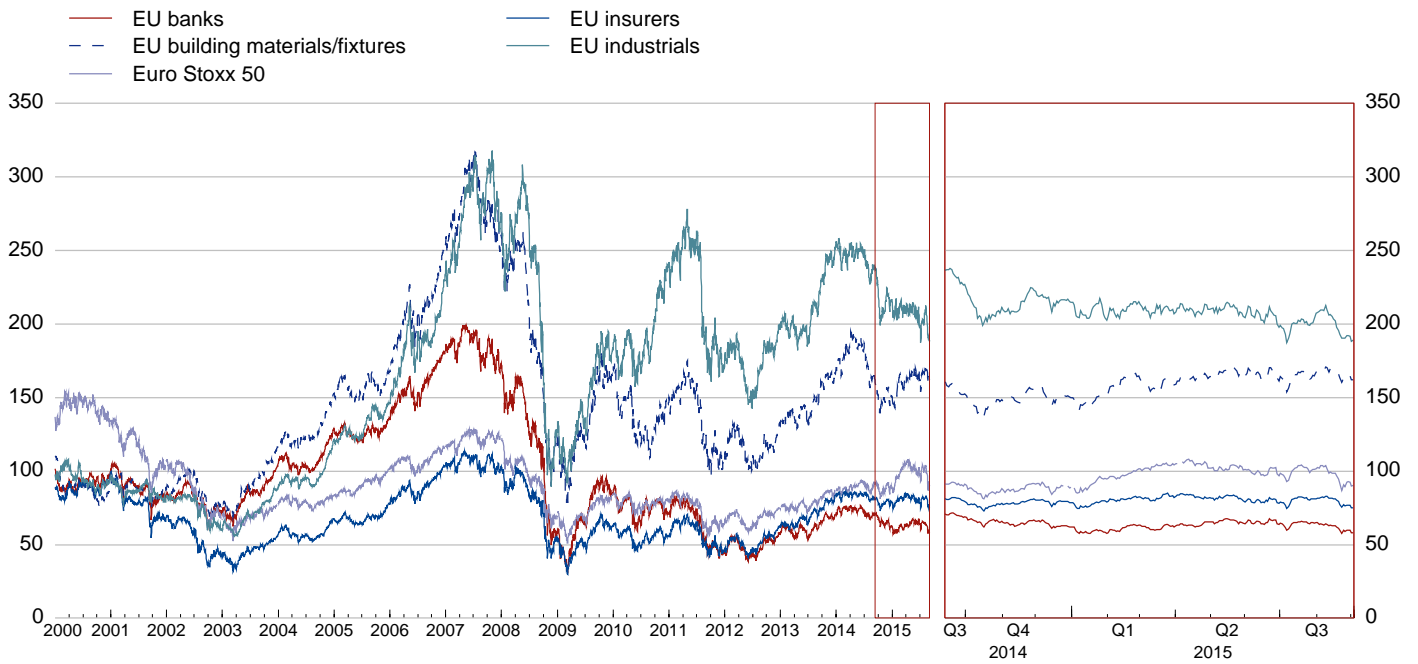
Source: Thomson Reuters Datastream.

5. Market risk

5.3 Equity indices

a. By sector

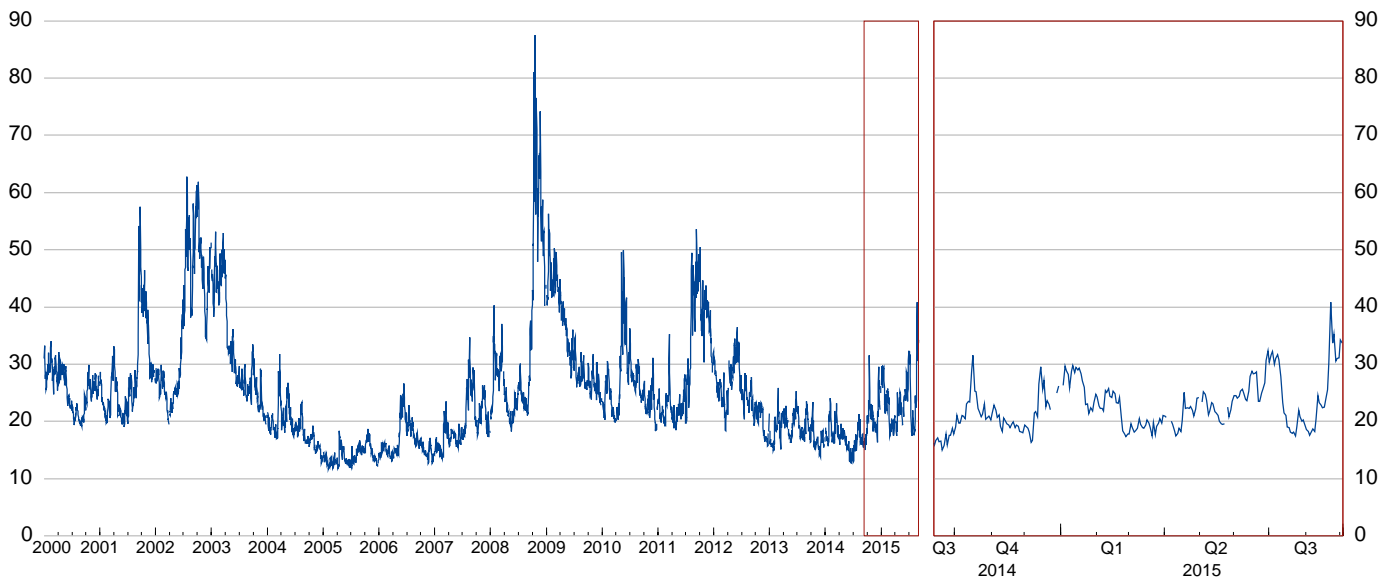
(EU, index: 4 Jan. 1999 = 100; last observation: 2 Sep. 2015)



Sources: Bloomberg (Euro Stoxx 50) and Thomson Reuters Datastream (others).

b. Implied volatility

(Euro Stoxx 50 index; last observation: 2 Sep. 2015)



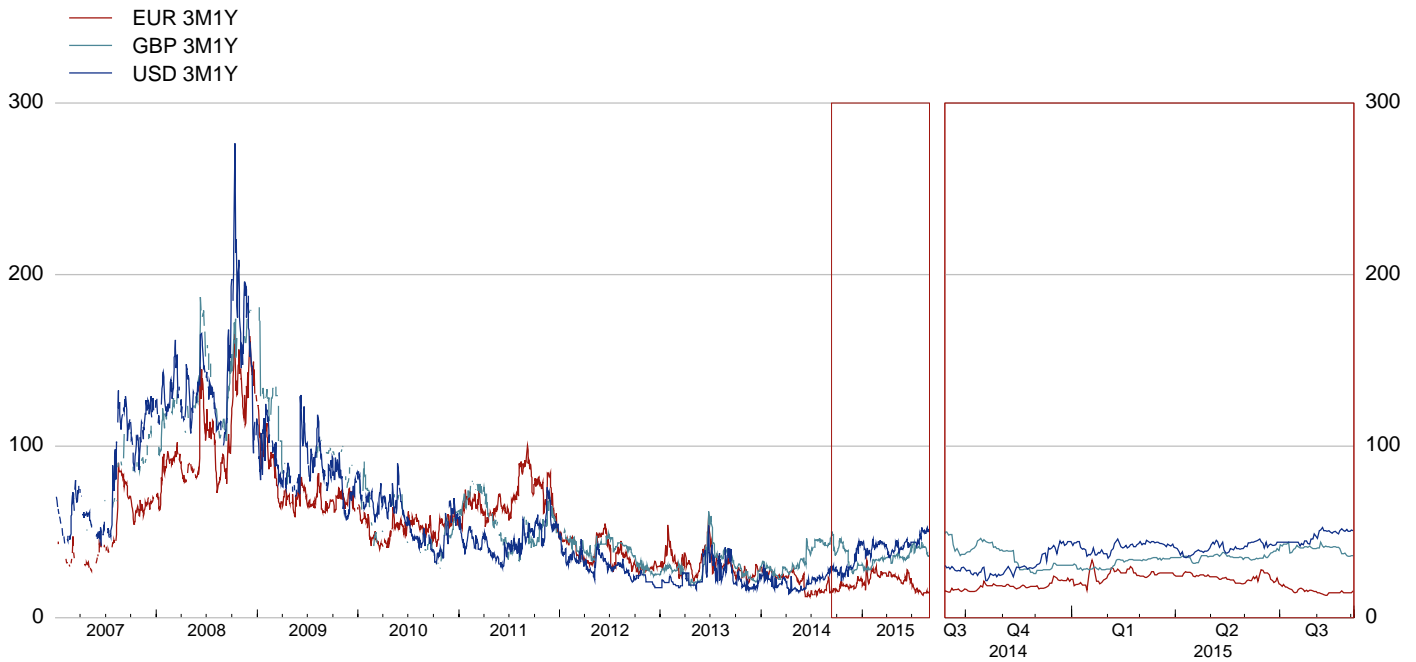
Source: Bloomberg.

Notes: Volatility is implied by at-the-money options observed in the market. The implied volatility is based on EURO STOXX 50 Volatility Index (VSTOXX) traded on Eurex. It measures implied volatility on options across all maturities. The blank spots in the plot of the index come from a lack of data series during public holidays when the financial markets are closed.

5. Market risk

5.4 Short-term interest rates - implied volatility

(three months - one year; last observation: 2 Sep. 2015)

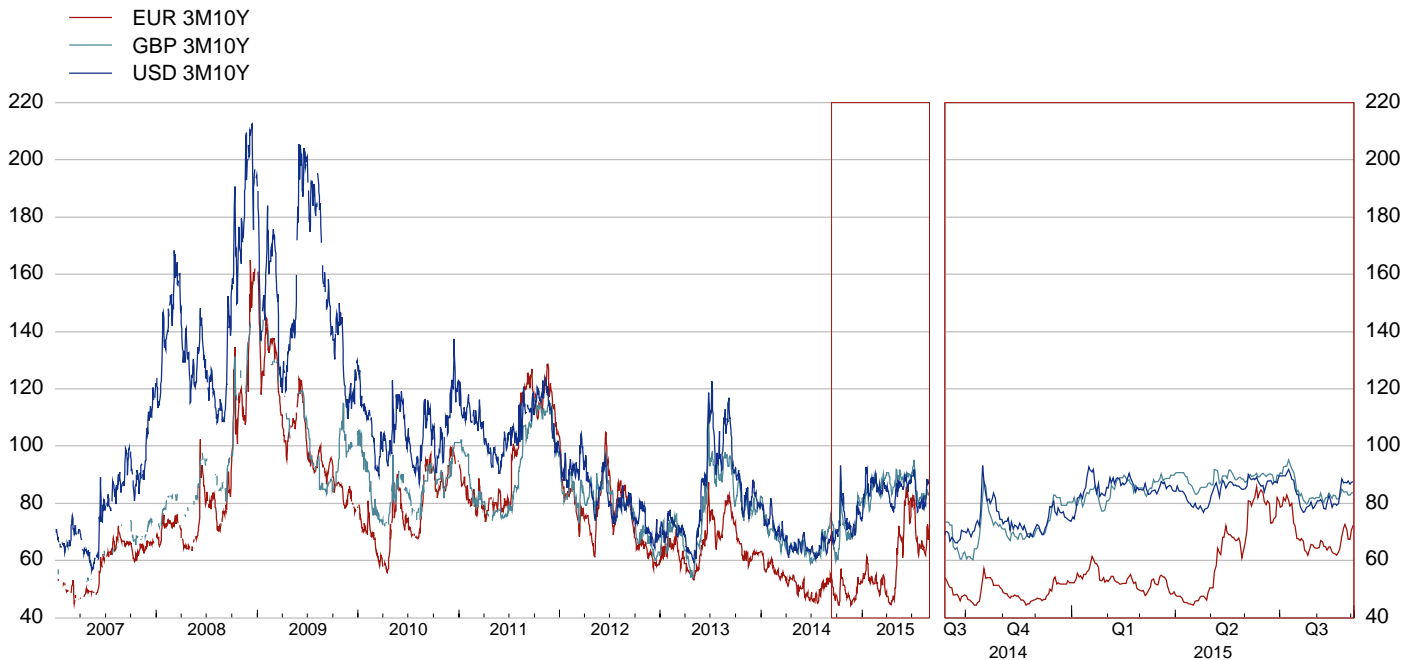


Source: Bloomberg.

Notes: Volatility is implied by at-the-money swaption prices observed in the market.

5.5 Long-term interest rates - implied volatility

(three months - ten years; last observation: 2 Sep. 2015)



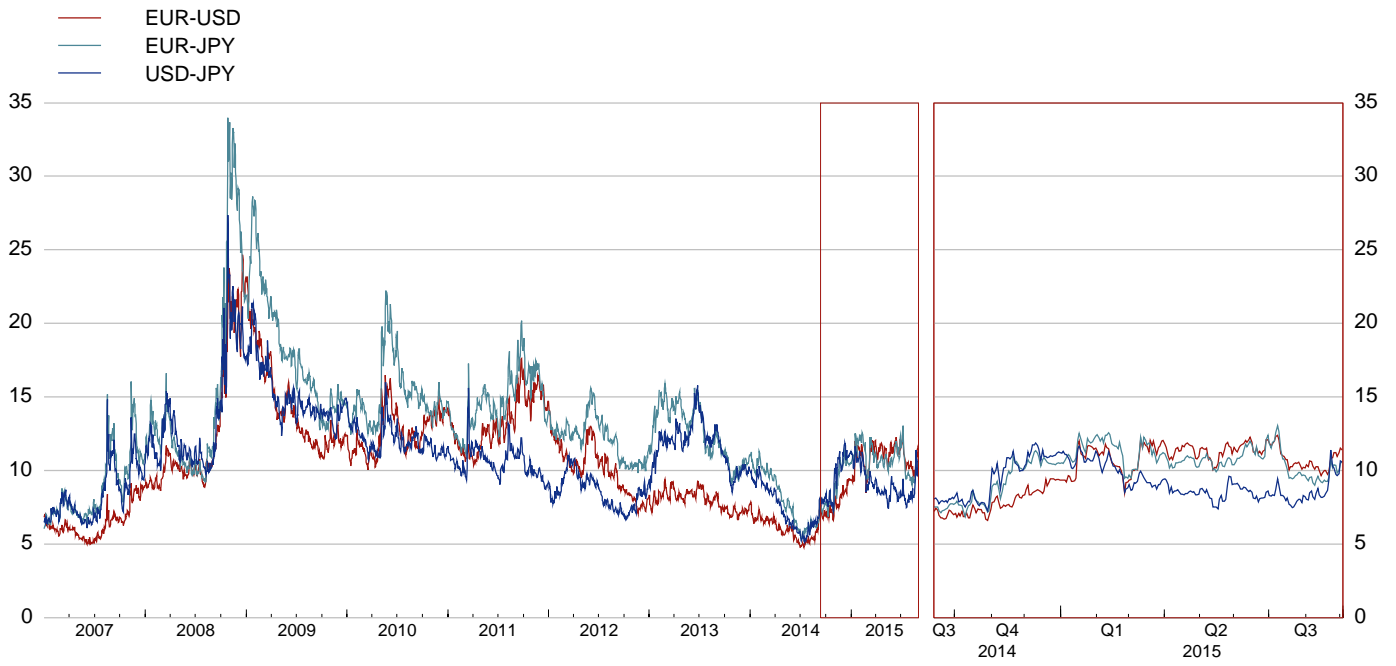
Source: Bloomberg.

Note: Volatility is implied by at-the-money swaption prices observed in the market.

5. Market risk

5.6 Exchange rate volatility

(Last observation: 2 Sep. 2015)



Source: Bloomberg.

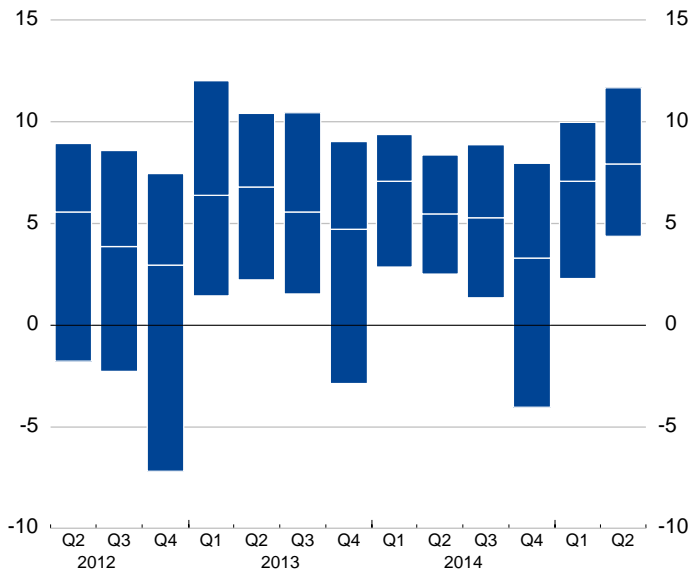
Note: Volatility is implied by at-the-money option prices observed in the market for major currencies, based on three-month maturity.

6. Profitability and solvency

6.1 Banking groups' profitability indicators*

a. Return on equity

(EU; percentages; interquartile range and median; last observation: Q2 2015)

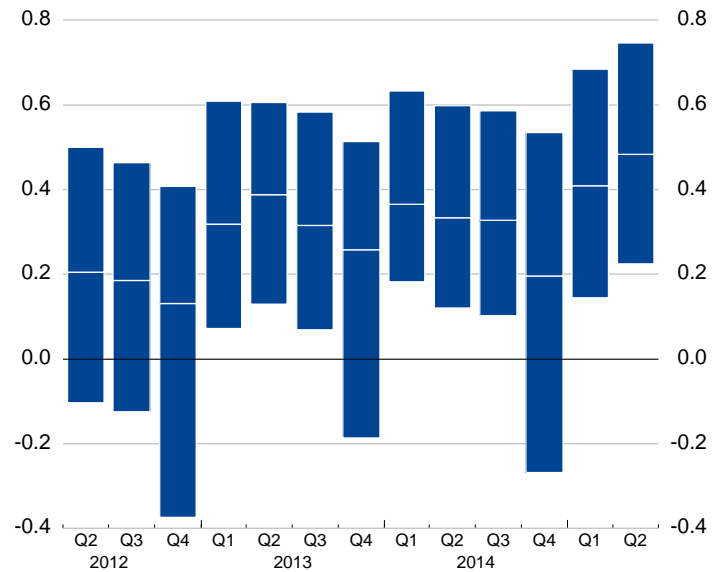


Source: EBA.

Note: Quarterly flows are annualised.

b. Return on assets

(EU; percentages; interquartile range and median; last observation: Q2 2015)

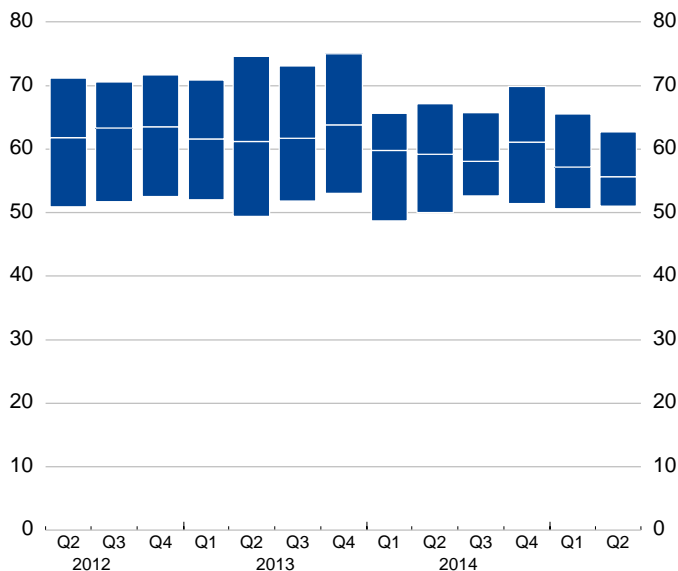


Source: EBA.

Note: Quarterly flows are annualised.

c. Cost-to-income ratio

(EU; percentages; interquartile range and median; last observation: Q2 2015)

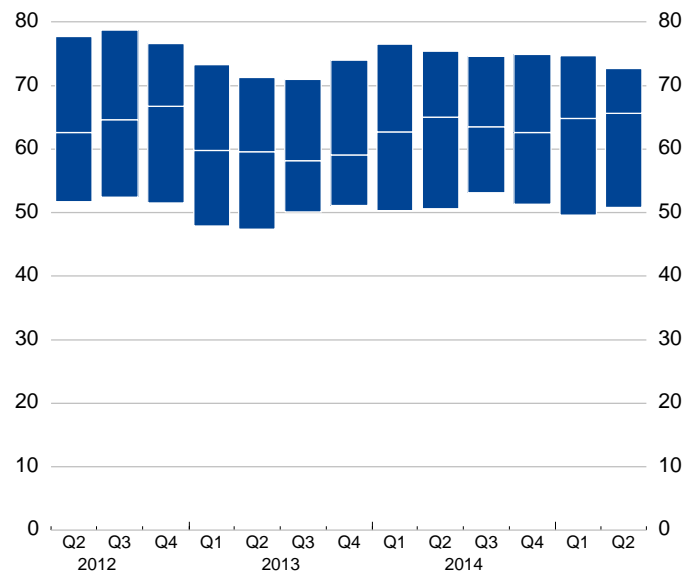


Source: EBA.

Note: Quarterly data refer to cumulative flows over the corresponding year.

d. Net interest income-to-total operating income

(EU; percentages; interquartile range and median; last observation: Q2 2015)



Source: EBA.

Note: Quarterly data refer to cumulative flows over the corresponding year.

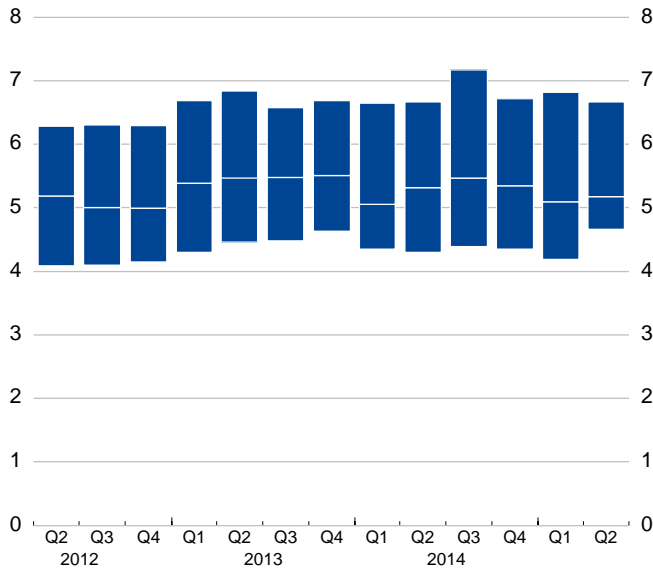
* See the annex for the list of large EU banking groups. The EBA data presented are subject to changes in the composition of the sample over time. The figures are subject to revision. Quarterly data from Q3 2014 onwards are fully based on the EBA's ITS on supervisory reporting (COREP data from Q1 2014 and FINREP data from Q3 2014). Further details on the main methodological aspects of the EBA's ITS are available on EBA's website: www.eba.europa.eu.

6. Profitability and solvency

6.2 Banking groups' solvency indicators*

a. Ratio of Tier 1 capital to total assets, excluding intangible assets

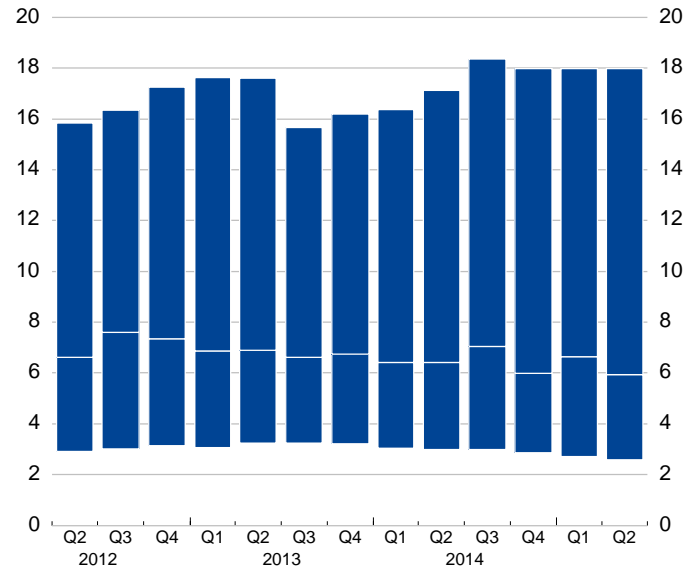
(EU; percentages; interquartile range and median; last observation: Q2 2015)



Source: EBA.

b. Ratio of impaired loans and past due (>90 days) loans to total loans

(EU; percentages; interquartile range and median; last observation: Q2 2015)

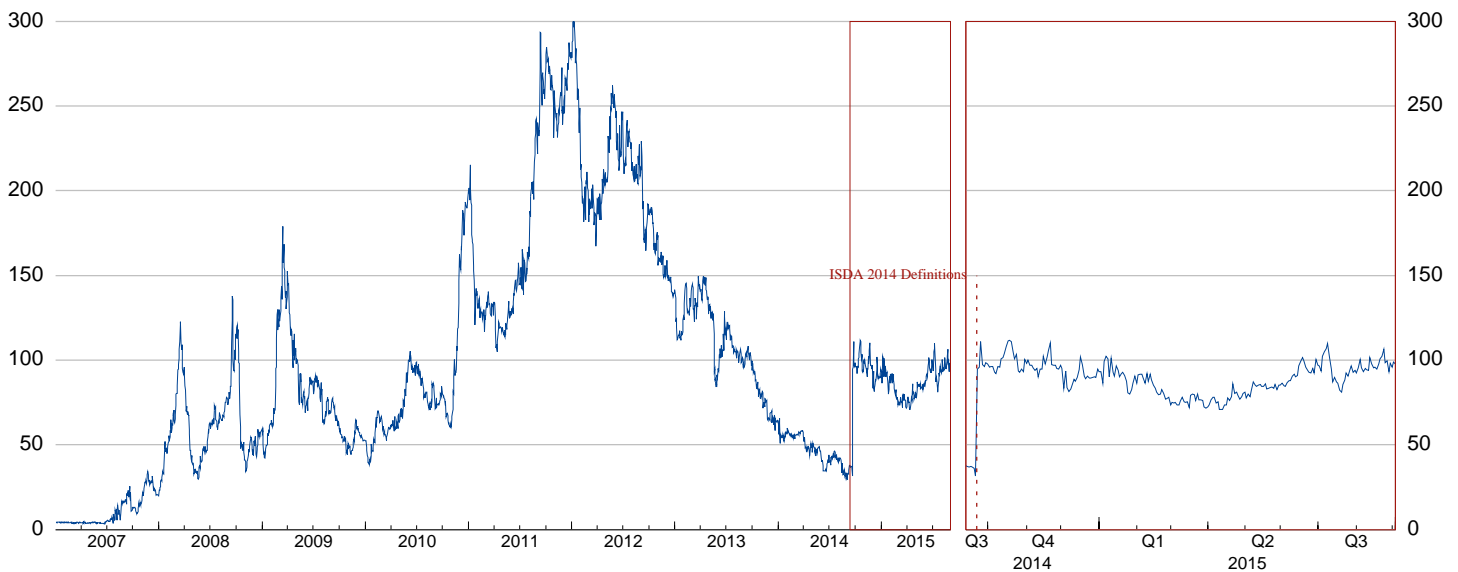


Source: EBA.

* See the annex for the list of large EU banking groups. The EBA data presented are subject to changes in the composition of the sample over time. The figures are subject to revision. Quarterly data from Q3 2014 onwards are fully based on the EBA's ITS on supervisory reporting (COREP data from Q1 2014 and FINREP data from Q3 2014). Further details on the main methodological aspects of the EBA's ITS are available on EBA's website: www.eba.europa.eu.

6.3 CDS spread between senior and subordinated debt

(EU; basis points; five-year maturities; last observation: 2 Sep. 2015)



Sources: Thomson Reuters Datastream, CMA and ECB calculations.

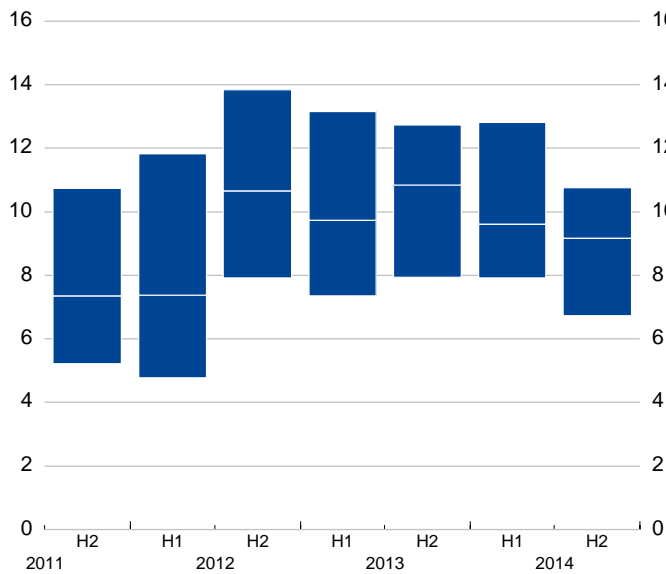
Notes: Data available for 39 out of 56 banks in the EBA sample. Shift in data as of 22 September 2014 due to the implementation of the ISDA 2014 Credit Derivatives Definitions.

6. Profitability and solvency

6.4 Insurance groups' profitability indicators*

a. Return on equity

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

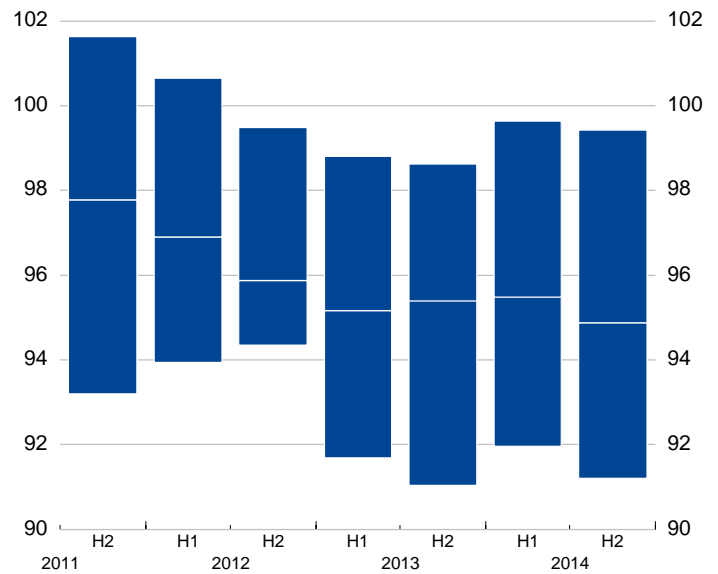


Source: EIOPA.

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.

b. Combined ratio - non-life insurance

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

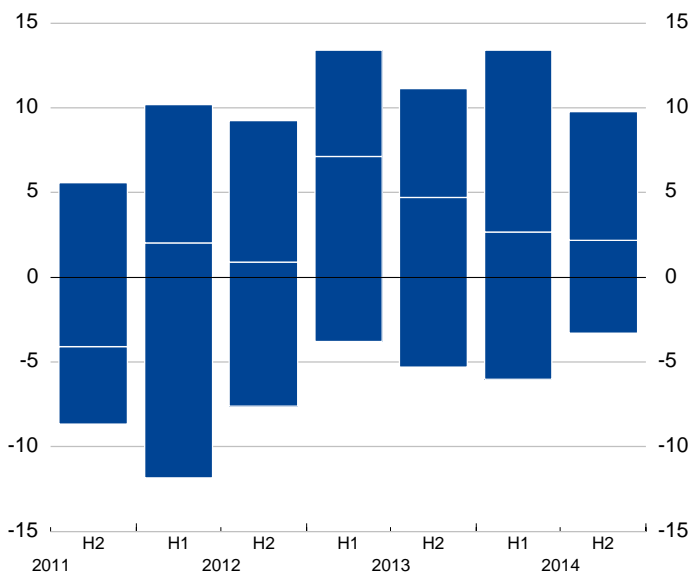


Source: EIOPA.

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

c. Gross premiums written - life insurance

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

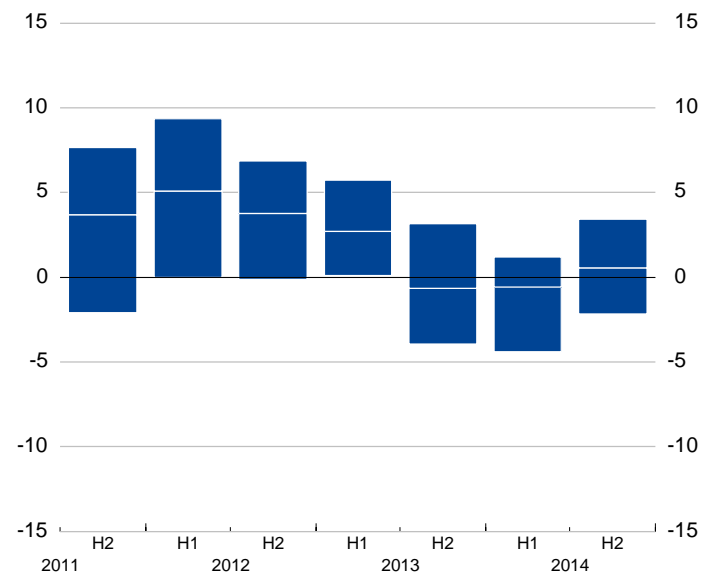


Source: EIOPA.

* See the annex for the list of large EU insurance groups.

d. Gross premiums written - non-life insurance

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



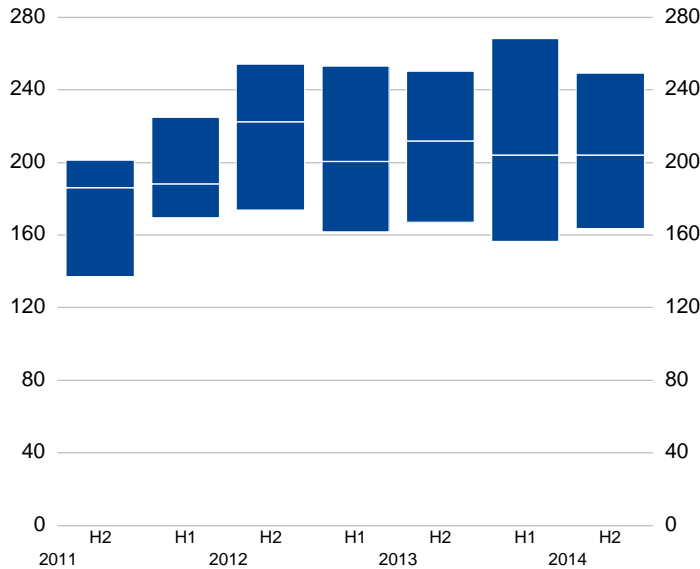
Source: EIOPA.

6. Profitability and solvency

6.5 Insurance groups' solvency indicators*

a. Solvency ratio - life insurance

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

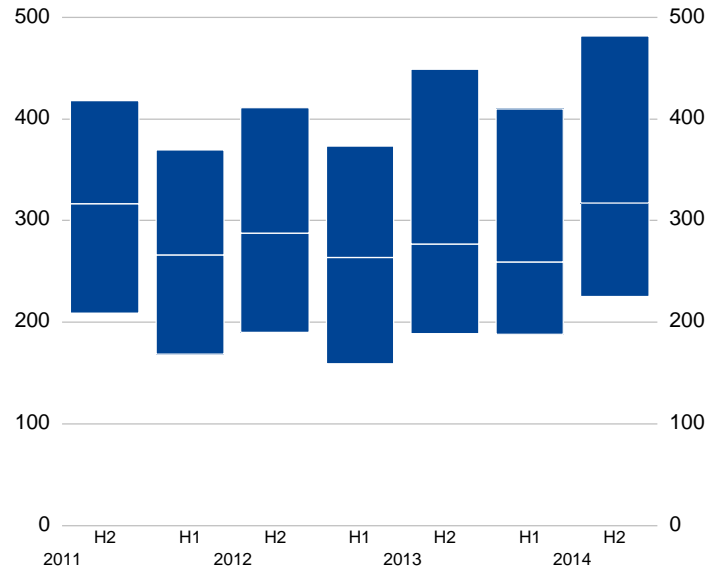


Source: EIOPA.

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

b. Solvency ratio - non-life insurance

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

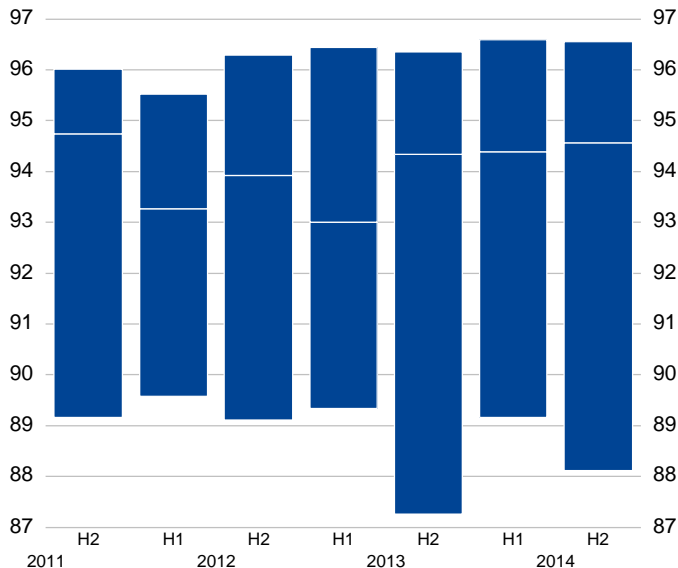


Source: EIOPA.

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

6.6 Insurance groups' Retention ratio

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



Source: EIOPA.

Note: The retention ratio is defined as net premiums written divided by gross premiums written.

* See the annex for the list of large EU insurance groups.

Samples of large EU banking groups and large EU insurance groups

Sample of large EU banking groups (EBA)

Sample of large EU insurance groups (EIOPA)

1	Erste Group Bank AG	1	Achmea (Eureko group)
2	Oesterreich Volksbanken	2	AEGON
3	Raiffeisen Zentralbank	3	AGEAS
4	Dexia	4	Allianz
5	KBC Group-KBC Groep NV/ KBC Groupe SA	5	Aviva
6	Bank of Cyprus	6	AXA
7	Marfin Popular Bank ¹	7	BNP Paribas Cardif
8	Bayerische Landesbank	8	Catalana Occidente
9	Commerzbank AG	9	CNP Assurances
10	Deutsche Bank AG	10	Direct Line Insurance Group
11	Deutsche Zentral-Genossenschaftsbank-DZ Bank AG	11	Generali
12	Hypo Real Estate	12	Groupama
13	Landesbank Baden-Wuerttemberg	13	Groupe Crédit Agricole assurances
14	Norddeutsche Landesbank Girozentrale NORD/LB	14	HDI/Talanx
15	WestLB AG ²	15	IF P&C Insurance
16	Danske Bank A/S	16	ING
17	Alpha Bank AE	17	KBC
18	Eurobank Ergasias	18	Legal & General Group plc
19	National Bank of Greece	19	Mapfre S.A.
20	Piraeus Bank	20	Munich Re
21	Banco Bilbao Vizcaya Argentaria SA	21	Old Mutual plc
22	Banco Santander SA	22	Prudential
23	Banco Financiero y de Ahorro	23	Royal Sun alliance
24	La Caixa	24	SCOR
25	OP-Pohjola Group	25	Lloyds HBOS and Scottish Widows
26	BNP Paribas	26	The Standard Life Assurance Company
27	Crédit Agricole Group-Crédit Agricole	27	Unipol
28	Credit Mutuel CM5-CIC	28	UNIQA Group
29	Group BPCE	29	Vienna Insurance Group
30	Société Générale		
31	OTP Bank NYRT		
32	Allied Irish Banks		
33	Bank of Ireland		
34	Banca Monte dei Paschi di Siena		
35	Banco Popolare - Societa Cooperativa		
36	Intesa Sanpaolo		
37	UniCredit SpA		
38	Bank of Valletta (BOV)		
39	ABN Amro		
40	ING Groep NV		
41	Rabobank Group-Rabobank Nederland		
42	Powszechna Kasa Oszczednosci Bank Polski		
43	Banco Comercial Portugues		
44	Caixa Geral de Depositos		
45	Espirito Santo Financial Group (ESFG) ³		
46	Nova Ljubljanska Bank (NLB)		
47	Nordea Bank AB (publ)		
48	Skandinaviska Enskilda Banken AB		
49	Svenska Handelsbanken		
50	SWEDBANK AB		
51	Barclays Plc		
52	HSBC Holdings Plc		
53	Lloyds Banking Group Plc		
54	Nationwide Building Society		
55	Royal Bank of Scotland Group Plc (The)		
56	Standard Chartered Plc		

1. Marfin Popular Bank is included in the indicators up to Q4 2012.

2. WestLB AG is included in the indicators up to Q1 2011. On 30 June 2012 WestLB AG was formally dissolved.

3. Espirito Santo Financial Group (ESFG) is included in the indicators up to Q4 2013.

