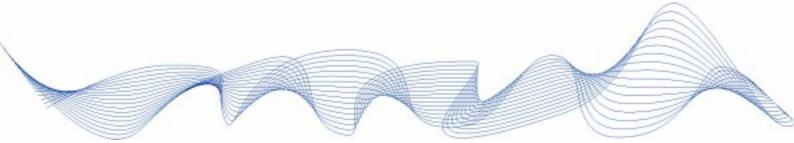




ESRB risk dashboard

Production date: 9 March 2017



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
- 1.1 Composite indicator of systemic stress 1.2 Probability of a simultaneous default 1.3 Cross-border claims of banks

- 1.4 MFI credits by counterpart sectors 1.5 MFI deposits by counterpart sector
- 1.6 MFI credits to general government

- 1.7 MFI loans for house purchase
 1.8 Investment funds' holdings of debt securities by counterpart sector
 1.9 Investment funds' holdings of equity and investment fund shares by counterpart sector
- 1.10 Insurance corporations' assets allocation (including derivative holdings)

2. Macro risk

- 2.1 Current and forecast real GDP growth
- 2.2 Domestic credit-to-GDP gap 2.3 Current account balance-to-GDP ratio

- 2.4 Unemployment rate 2.5 Aggregate debt-to-GDP ratio 2.6 General government debt-to-GDP ratio 2.7 General government deficit-to-GDP ratio
- 2.8 CDS premia on sovereign debt
- 2.9 Government debt service
- 2.10 Household debt-to-gross disposable income ratio 2.11 NFC debt-to-GDP ratio

3. Credit risk

- 3.1 Annual growth rates of MFIs loans to households 3.2 Annual growth rates of MFI loans to NFCs 3.3 Cost of borrowing from MFIs for households (for house purchase)
- 3.4 Cost of borrowing from MFIs for NFCs
 3.5 Lending margins of MFIs loans to households (for house purchase)
 3.6 Lending margins of MFIs loans to NFCs
- 3.7 Changes in credit standards for loans to households (for house purchase)
- 3.8 Changes in credit standards for loans to NFCs
- 3.9 Option-adjusted spreads on euro area corporate bonds
 3.10 Expected default frequency of the corporate sector
 3.11 Foreign currency loans
 3.12 Over/undervaluation of residential property prices

- 3.13 Change in nominal residential property prices

- 4. Funding and liquidity
 4.1 Interbank interest rate spreads
 4.2 EUR/USD cross-currency basis swap spreads
 4.3 Banks' funding by central banks
 4.4 Money markets and the Eurosystem's standing facilities
 4.5 Motive particle of Particle interpreting data accurities
- 4.5 Maturity profile of Banks' outstanding debt securities 4.6 Banks' long-term debt securities issuance
- 4.7 Loan-to-deposit ratio 4.8 CDS spread between senior and subordinated debt

5. Market risk

- 5.1 Equity indices5.2 Price/earnings ratio of equity indices5.3 Exchange rate volatility
- 5.4 Short-term interest rates implied volatility 5.5 Long-term interest rates implied volatility

- 6. Profitability and solvency
 6.1 Banking groups' profitability indicators
 6.2 Banking groups' solvency, liquidity and balance sheet structure indicators
 6.3 Insurance groups' profitability indicators
 6.3 Insurance groups' solvency ratio
 6.4 Insurance groups' solvency ratio

- 6.5 Insurance groups' retention ratio

7. Structural risk

- 7.1 Banking sector size 7.2 Banking sector leverage
- 7.3 Growth of components of the EU financial sector 7.4 Total assets of investment funds and OFIs 7.5 Total assets of investment funds and OFIs in the EU

- 7.6 Non-MMF investment funds ratio of short term assets to short term liabilities

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 2017. Unless otherwise indicated: a) all EU indicators relate to the 28 Member States of the EU (the EU28) and b) all data series relate to the Euro 19 (i.e. the euro area) 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.

Additional indicators to support the systemic risk assessment in the EU financial system are available in the Macroprudential Database: http://sdw.ecb.europa.eu/browse.do?node=9689335

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	
				1		

List of acronyms

BIS	Bank for International Settlements	ICPF	Insurance Corporation and Pension Funds
CDS	Credit Default Swap	IMF	International Monetary Fund
CISS	Composite Indicator of Systemic Stress	IPD	Investment Property Ďatabank
COREP	Common Solvency Ratio Reporting	MFI	Monetary and Financial Institutions
EBA	European Banking Authority	MMF	Money Market Funds
ECB	European Central Bank	NFC	Non-Financial Corporations
EIOPA	European Insurance and	OFI	Other Financial Intermediaries
	Occupational Pensions Authority	ITS	Implementing Technical Standards
EONIA	Euro OverNight Index Average	SovCISS	Sovereign Composite Indicator of Systemic Stress
ESCB	European System of Central Banks		

Cut-off date

Data available to the ECB by Thursday, 9 March 2017 were taken into account in these statistics.

Contact

For enquiries regarding the risk dashboard and its contents, please contact: https://ecb-registration.escb.eu/statistical-information

correlation forex market money market equity market CISS financial sector bond market SovCISS 1.0 1.0 0.8 0.8 0.6 0.6 0.4 0.4 0.2 0.2 0.0 0.0 -0.2 -0.2 -0.4 -0.4 Q1 Q2 2009 2010 2011 2012 2014 2016 Q3 2007 2008 2013 2015 Q4 2016 2017

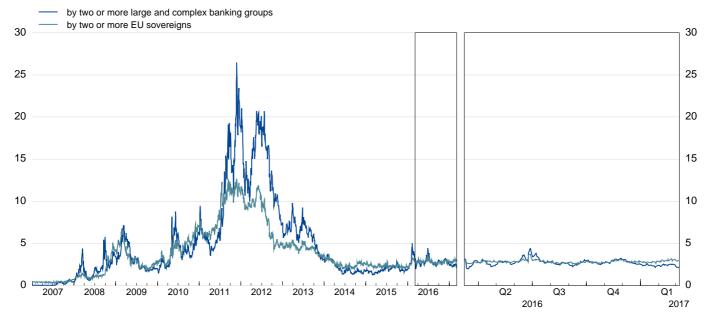
1.1 Composite indicator of systemic stress (Last observation: 3 Mar. 2017)

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.

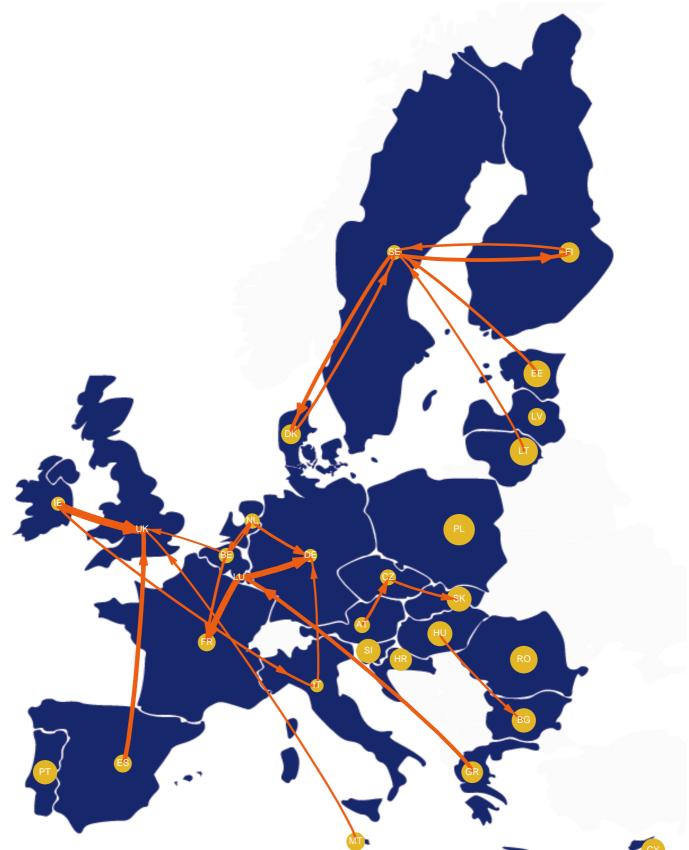
1.2 Probability of a simultaneous default

(Percentages; last observation: 7 Mar. 2017)



Sources: Bloomberg, Thomson Reuters and ECB calculations. Note: See Box 8, Financial Stability Review, ECB, June 2012.

1.3 Cross-border claims of banks (Sample of EU countries; percentages; last observation: Q3 2016)



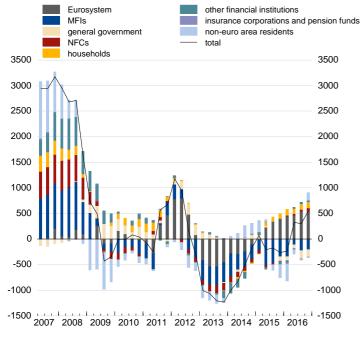
Source: ECB and ECB calculations.

Notes: Based on Consolidated Banking Data. The size of the bubbles corresponds to the ratio of domestic to total claims of a country's consolidated banking sector. The thickness of the arrows depends on the share of bilateral foreign claims in the total claims of the banking sector extending the loans. Arrows are not displayed in cases where the corresponding ratio is below 5%. Due to the use of consolidated data, cross-border claims also include banks' exposures to other countries in the EU through the presence of subsidiaries in those countries. Data for UK not available.

1.4 MFI credits by counterpart sectors

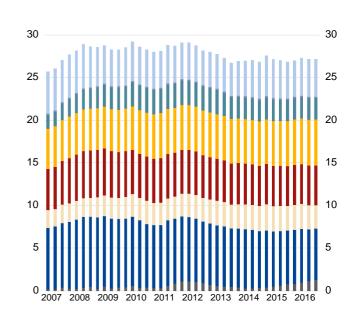
a. Four-quarter cumulated flows

(euro area; EUR billions; last observation: Q4 2016)



b. Outstanding amounts

(euro area; EUR trillions; last observation: Q4 2016)



Source: ECB

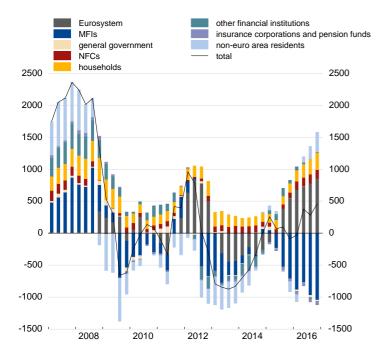
Source: ECB. Notes: MFIs excluding the Eurosystem. Credit comprises loans and holdings of securities. Eurosystem credit comprises only loans. Households include non-profit institutions serving households.

Source: ECB

1.5 MFI deposits by counterpart sector

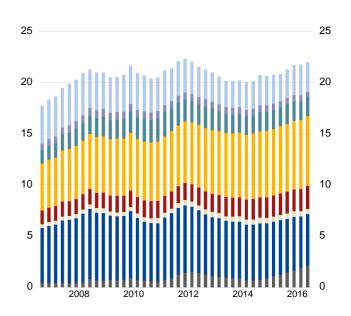
a. Four-quarter cumulated flows

(euro area; EUR billions; last observation: Q4 2016)



b. Outstanding amounts

(euro area; EUR trillions; last observation: Q4 2016)

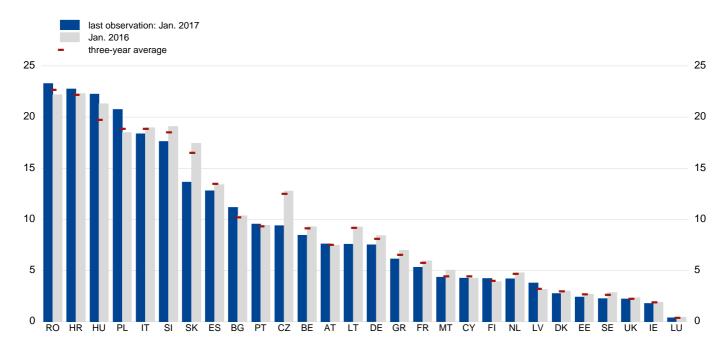


Source: ECB

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

1.6 MFI credits to general government

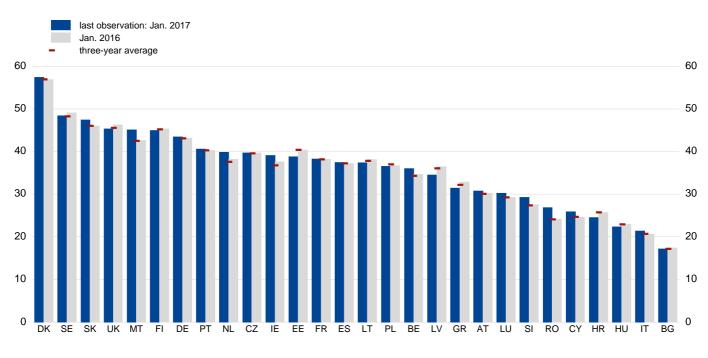
(EU; share of total assets; percentages)



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. Data for Hungary refer to December 2016 instead of January 2017.

1.7 MFI loans for house purchase (EU; share of credit to the private sector; percentages)



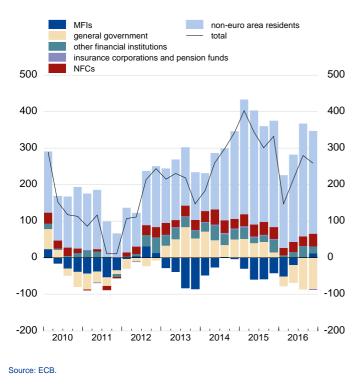
Source: ECB.

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. Data for Hungary refer to December 2016 instead of January 2017.

1.8 Investment funds' holdings of debt securities by counterpart sector

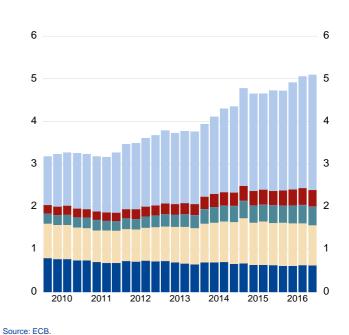
a. Cumulated flows

(euro area; four-quarter cumulated flows; EUR billions; last observation: Q4 2016)



b. Outstanding amounts

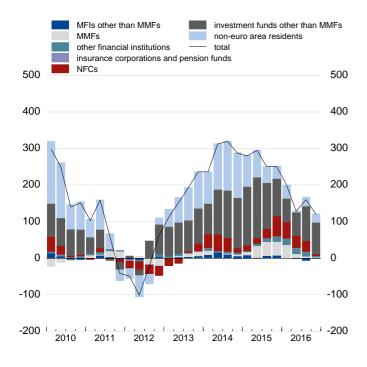
(euro area; EUR trillions; last observation: Q4 2016)



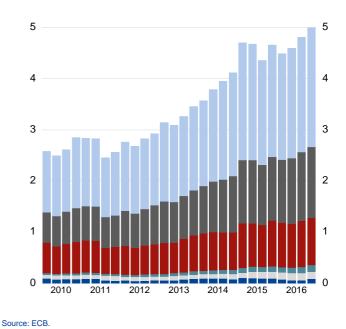
1.9 Investment funds' holdings of equity and investment fund shares by counterpart sector

a. Cumulated flows

(euro area; four-quarter cumulated flows; EUR billions; last observation: Q4 2016)



b. Outstanding amounts (euro area; EUR trillions; last observation: Q4 2016)



Source: ECB.

ESRB risk dashboard - Section 1. Interlinkages and composite measures of systemic risk, 9 March 2017

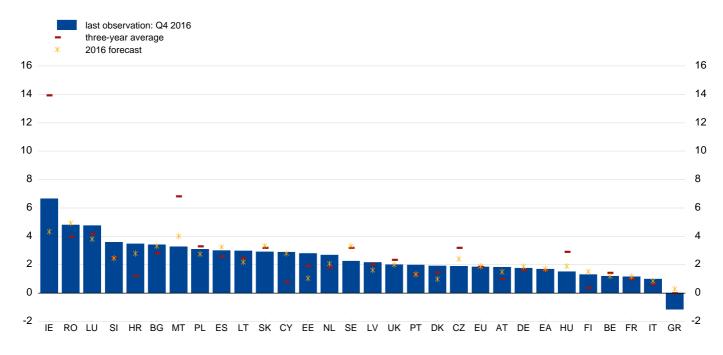
1.10 Insurance corporations' assets allocation (including derivative holdings) (EU; outstanding amounts; EUR billions; last observation: Q3 2016)

	government bonds corporate bonds - financials - unsecured corporate bonds - financials - secured	loans & mortgages equity & participations property	derivative holdings not allocated		
9000	corporate bonds - non-financials	cash & deposits (short term investments)		_	9000
8000 -					- 8000
7000 -					- 7000
6000 -					- 6000
5000 -					- 5000
4000 -					4000
3000 -					- 3000
2000 -					2000
1000 -					- 1000
0					0
				Q3 2016	

Source: EIOPA, based on Solvency II Reporting.

2.1 Current and forecast real GDP growth

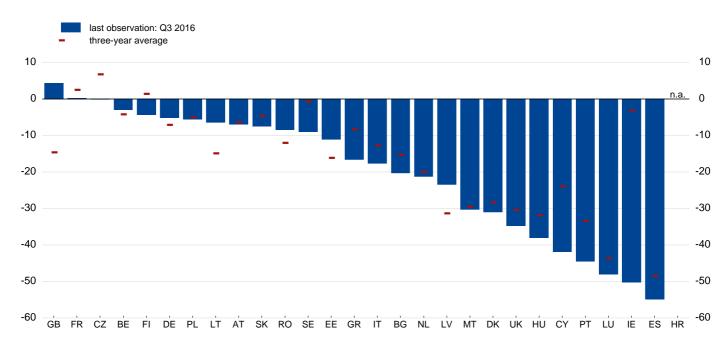
(EU; percentage changes; year-on-year growth)



Sources: European Commission and the European Commission Winter 2017 forecast.

Notes: The three-year historical average is the average of the year-on-year growth rates over the last 12 quarters. For IE, CY, LU and MT, "last observation" refers to Q3 2016.

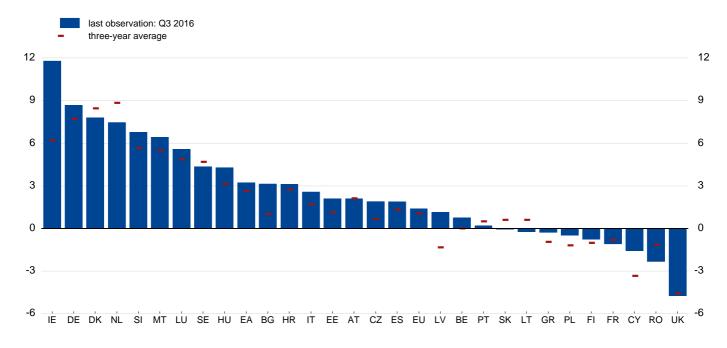
2.2 Domestic credit-to-GDP gap (EU; percentages)



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). ECB calculations and national calculations may differ.

2.3 Current account balance-to-GDP ratio (EU; percentages)

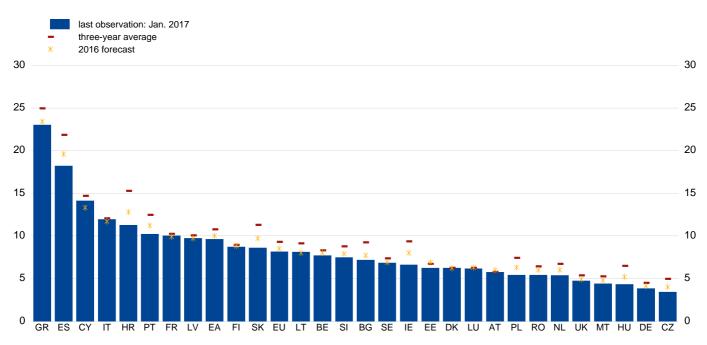


Source: ECB and European Commission.

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.

2.4 Unemployment rate

(EU; percentage of labour force; seasonally adjusted)



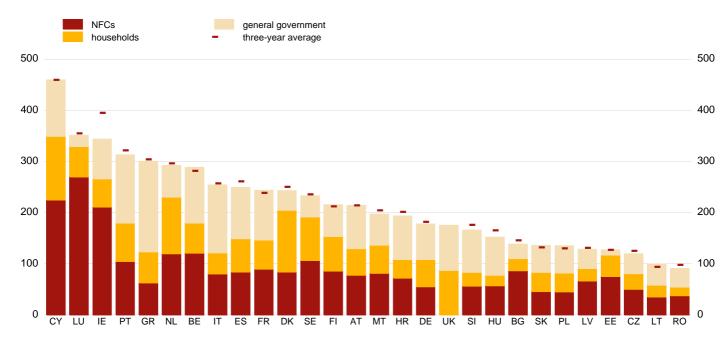
Sources: European Commission and the European Commission Winter 2017 forecast.

Notes: For EE and HU, "last observation" refers to December 2016. for GR and UK, "last observation" refers to November 2016.

2.5 Aggregate debt-to-GDP ratio

a. Level

(EU; percentages; last observation: Q3 2016)

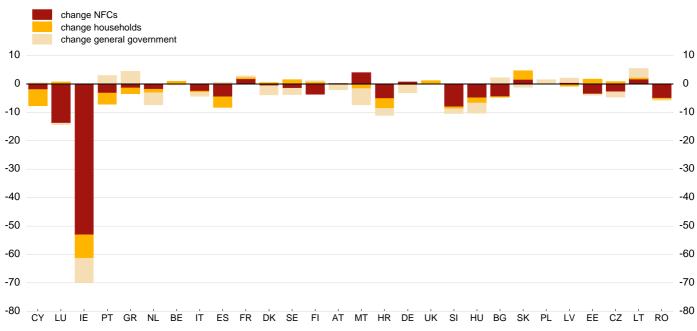


Sources: ECB and European Commission.

Notes: Debt-to-GDP ratios for NFCs are based on consolidated debt figures. Consolidated non-financial coporations' debt not available for UK. Three-year average is not available for UK.

b. Year-on-year change

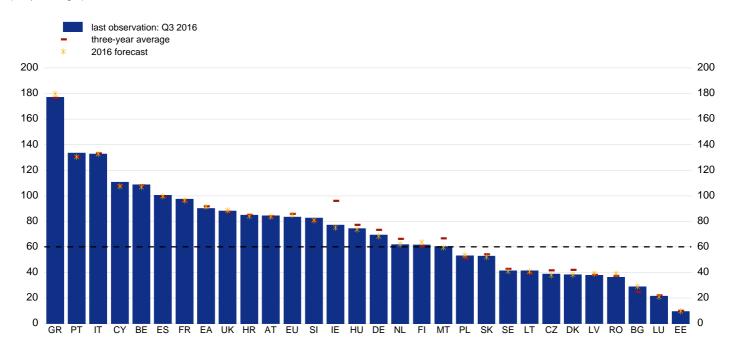
(EU; percentage points; year-on-year changes; last observation: Q3 2016)



Sources: ECB and European Commission.

Notes: Debt-to-GDP ratios for NFCs are based on consolidated debt figures. Data on changes of non-financial corporations' debt are not available for the UK. The decrease in the debt-to-GDP ratios for Ireland can to a great extent be explained by the large increase in the official Irish GDP in 2015 mainly due to the reallocation of global operators in Ireland. For more information see Eurostat's explanatory note (http://ec.europa.eu/eurostat/documents/24987/6390465/lrish_GDP_communication.pdf).

2.6 General government debt-to-GDP ratio (EU; percentages)

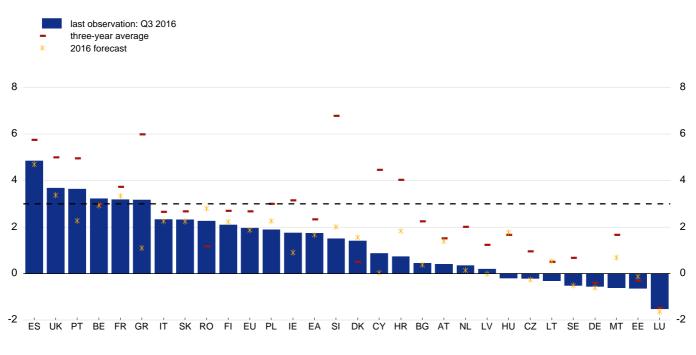


Sources: European Commission and the European Commission Winter 2017 forecast.

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

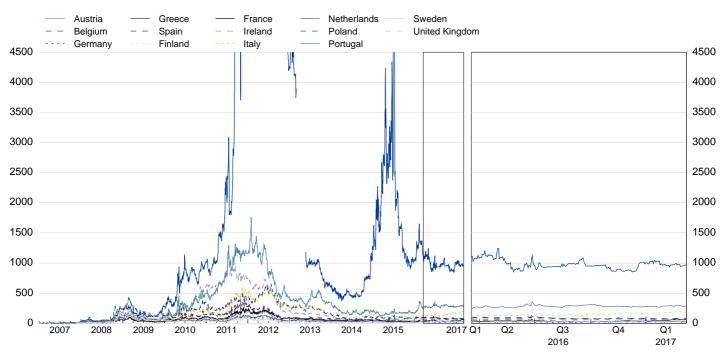
(EU; four-quarter moving sum; percentages)



Sources: European Commission and the European Commission Winter 2017 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.

2.8 CDS premia on sovereign debt



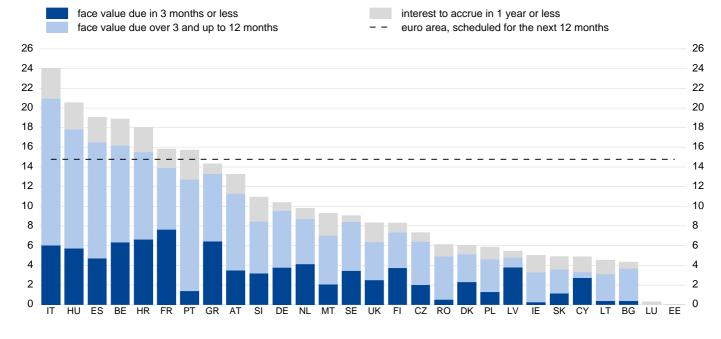
(Sample of EU countries; basis points; five-year maturities; last observation: 8 Mar. 2017)

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 Government debt service

(EU; percentage of GDP; Feb. 2017 to Jan. 2018)



Source: ECB

Notes: Debt service is a set of payments, including the principal amount and interest, to be made by the debtor over the life of a debt. Debt service is measured for the coming 12 months.

last observation: Q3 2016 three-year average 300 300 250 250 200 200 150 150 100 100 50 50 n.a 0 0 DK NL SE IE LU UK FI PT ES BE GR FR AT DE EE PL MT CY IT CZ SK HR SI BG LV HU LT RO

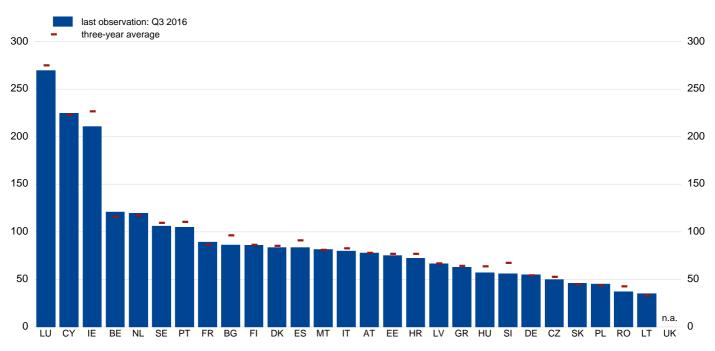
2.10 Household debt-to-gross disposable income ratio (EU; percentages)

Sources: ECB and European Commission.

Notes: Data for HR are based on Q1 2016. Data for FR, GR and PL are based on Q2 2016. Data for BG are based on annual ESA2010 series for 2014. Data for CY, EE, HU, LT, LV, SK are based on annual ESA2010 series for 2015. Data for LU are based on annual ESA95 series for 2012. Data for MT are not available.

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 consolidated NFC debt for UK are not available.

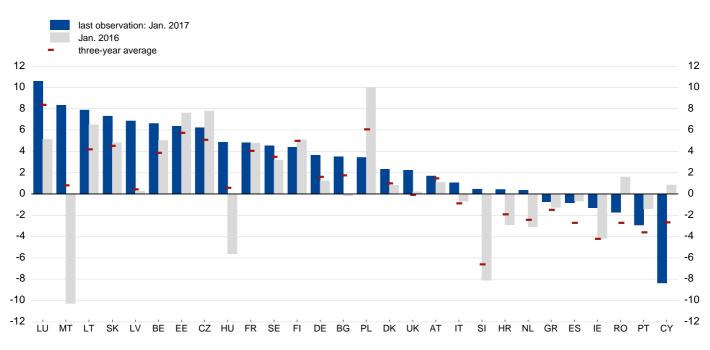


3.1 Annual growth rates of MFIs loans to households (EU; percentages)

Source: ECB.

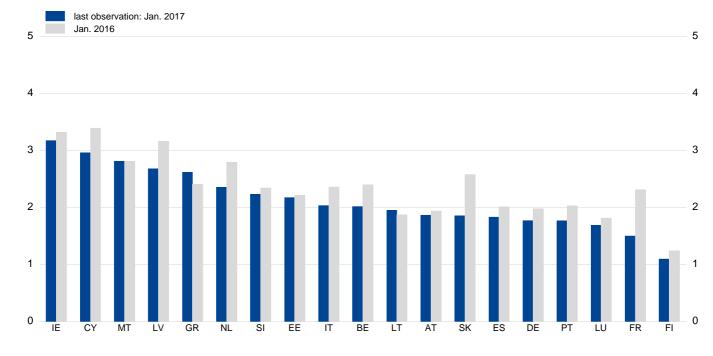
Notes: Loans extended by MFIs excluding the ESCB. Data for euro area Member States refer to loans granted to euro area households, while for non-euro area Member States to loans to domestic households. Euro area Member States data are adjusted for the derecognition of loans from the MFI statistical balance sheet due to their sale or securitisation. The figure is based on growth in the index of notional stocks. Data for Hungary show the values from December 2016 instead of January 2017.





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 Hungary refer to December 2016 instead of January 2017.



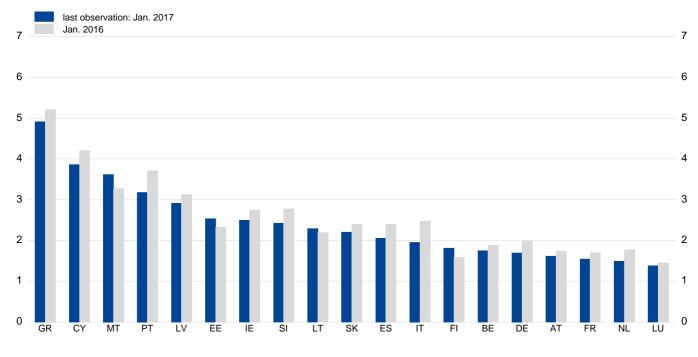
3.3 Cost of borrowing from MFIs for households (for house purchase) (euro area; percentage points)

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).

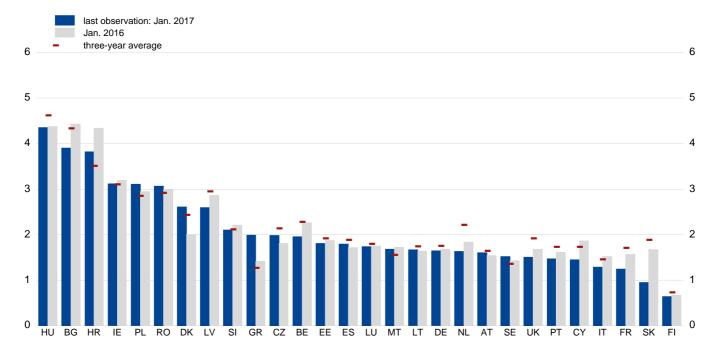
$3.4\ \text{Cost}$ of borrowing from MFIs for NFCs

(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).

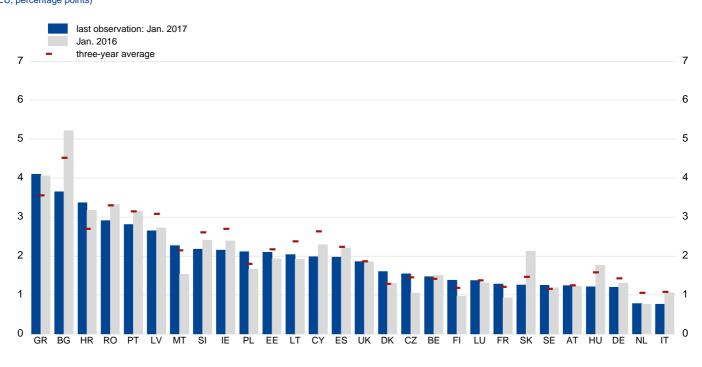


3.5 Lending margins of MFIs - loans to households (for house purchase) (EU; percentage points)

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 UK, only loans and deposits in national currency are included in the calculation. 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. Data for Hungary refer to December 2016 instead of January 2017.

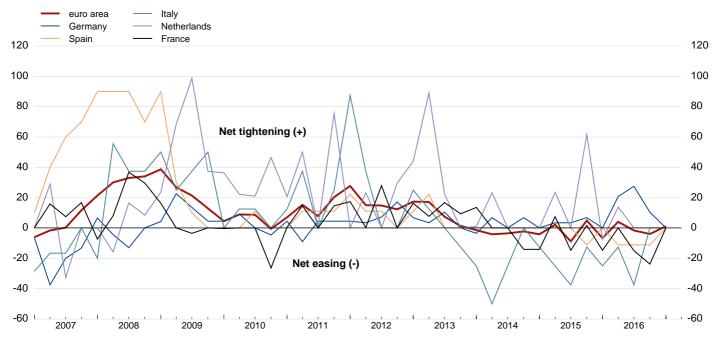
3.6 Lending margins of MFIs - loans to NFCs (EU; percentage points)



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 UK, only loans and deposits in national currency are included in the calculation. 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. Data for Hungary refer to December 2016 instead of January 2017.

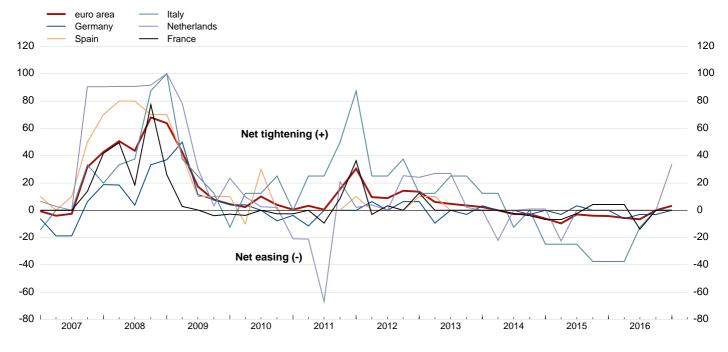
3.7 Changes in credit standards for loans to households (for house purchase) (Sample of euro area countries; net percentages; last observation: Q1 2017)



Source: ECB

Notes: Net percentages of banks contributing to the tightening of standards over the previous three months. The last observation refers to the quarter in which the most recent BLS was published.

3.8 Changes in credit standards for loans to NFCs (Sample of euro area countries; net percentages; last observation: Q1 2017)

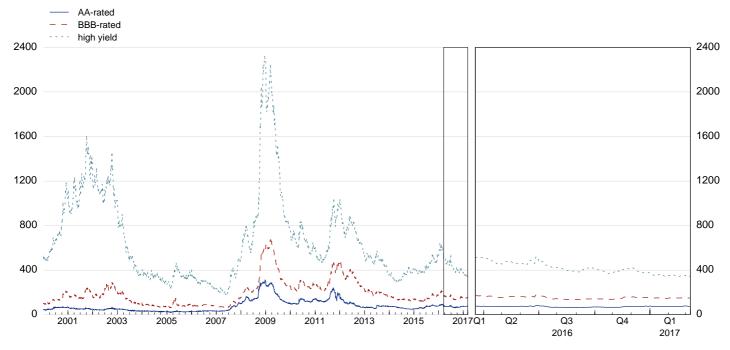


Source: ECB.

Notes: Net percentages of banks contributing to the tightening of standards over the previous three months. The last observation refers to the quarter in which the most recent BLS was published.

3.9 Option-adjusted spreads on euro area corporate bonds

(euro area; percentages; last observation: 8 Mar. 2017)

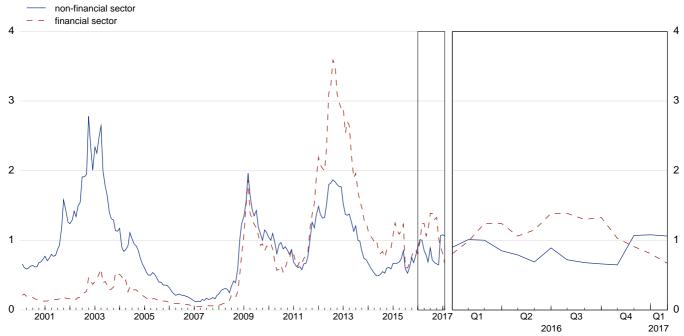


Source: Bank of America Merrill Lynch.

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: Jan. 2017)





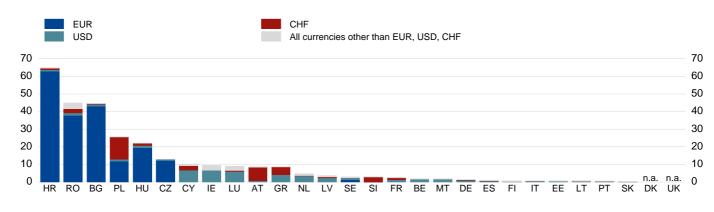
Sources: Moody's KMV and ECB calculations.

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

3.11 Foreign currency loans

a. By currency

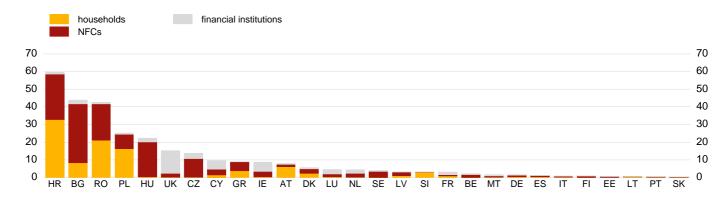
(EU; percentages; last observation: Q4 2016)



Source: ECB.

b. By sector

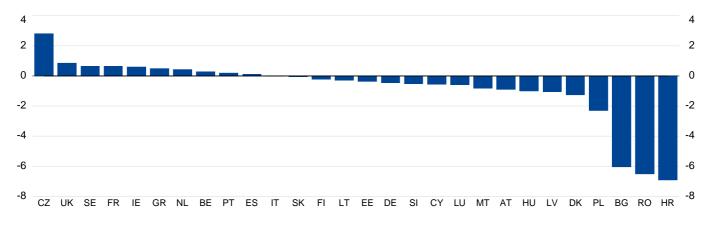
(EU; percentages; last observation: Jan. 2017)



Source: ECB.

c. Annual changes

(EU; percentage points; last observation: Jan. 2017)



Source: ECB.

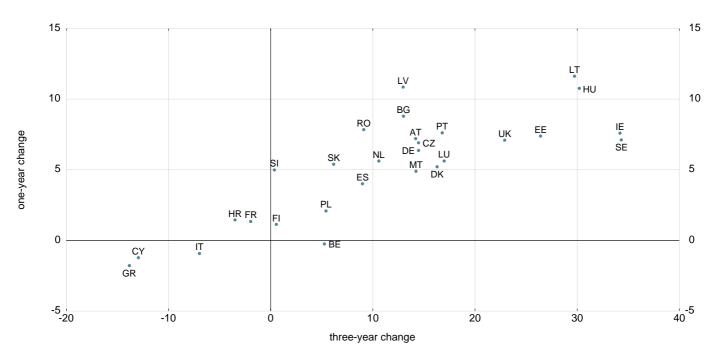
Notes for charts 3.11 - a, b and c: BG (currency board arrangement) and DK have a regime of fixed exchange rates vis-à-vis the euro. Data for Hungary refer to December 2016 instead of January 2017.

Last observation: Q3 2016 (range of estimates) Last observation: Q3 2016 (demand model) 2007 (demand model, annual average) 80 80 60 60 40 40 20 20 0 Ω -20 -20 -40 -40 AT BE BG CY CZ DE DK EE ES FI FR GR HR HU IE IT LT LU LV MT NL PL PT RO SE SI SK UK EA

3.12 Over/undervaluation of residential property prices (EU; percentages)

Sources: Eurostat, national sources, ECB and ECB calculations.

Notes: Estimates based on four different valuation methods: price-to-rent ratio, price-to-income ratio, asset pricing approach and a Bayesian estimated inverted demand model. For further details see Box 3, Financial Stability Review, ECB, June 2011; and box 3, Financial Stability Review, ECB, November 2015. For each country, the blue bars represent the range of estimates across the four valuation methods. For CY, MT, SK, DK, HR and HU last observation refers to Q2 2016.

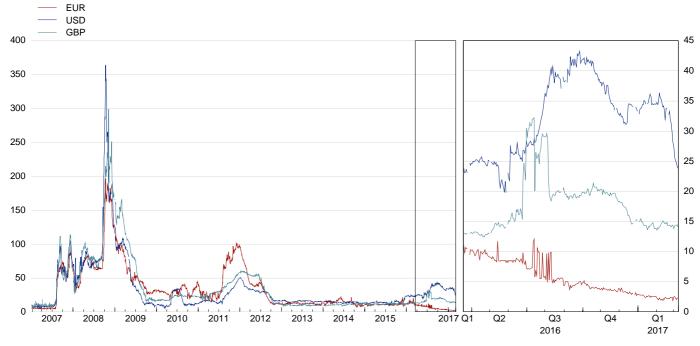


3.13 Change in nominal residential property prices (EU; percentages; last observation: Q3 2016)

Sources: ECB, national sources and ECB calculations.

4.1 Interbank interest rate spreads

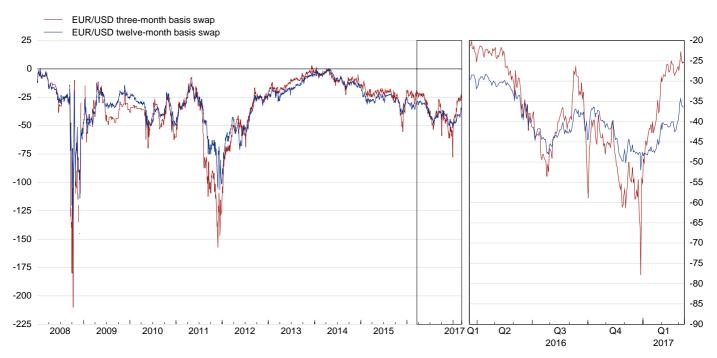
(basis points; three-month maturities; last observation: 8 Mar. 2017)



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

4.2 EUR/USD cross-currency basis swap spreads

(basis points; last observation: 9 Mar. 2017)

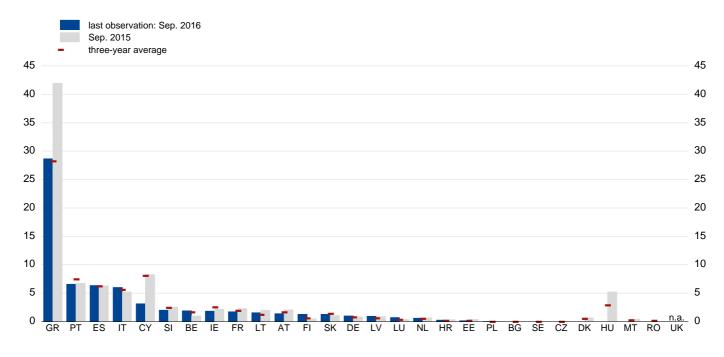


Source: Bloomberg.

Note: Data available since January 2008.

4.3 Banks' funding by central banks

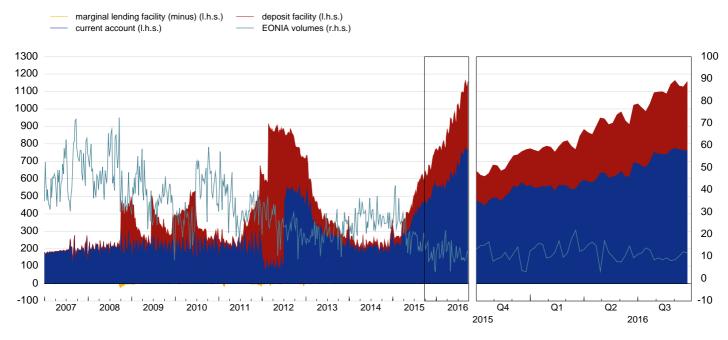
(EU; share of total liabilities; percentages)



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.

4.4 Money markets and the Eurosystem's standing facilities (euro area; EUR billions; last observation: 2 Mar. 2017)

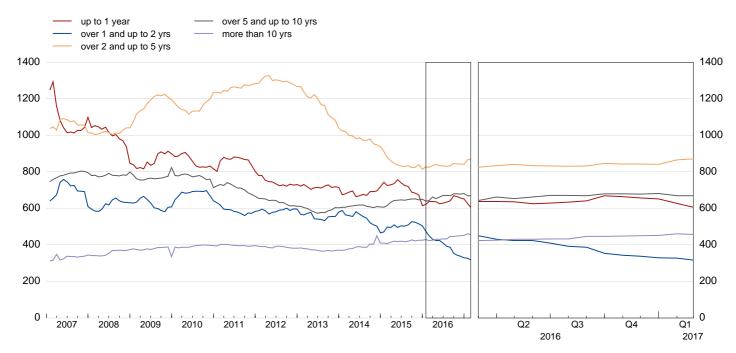


Sources: ECB and Bloomberg.

Note: Eurosystem's current account includes minimum reserves.

4.5 Maturity profile of Banks' outstanding debt securities

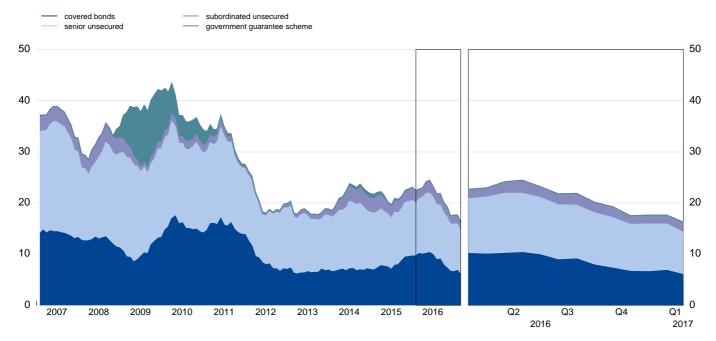
(EU; EUR billions; last observation: Feb. 2017)



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 debtincludes 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.

4.6 Banks' long-term debt securities issuance (EU; EUR billions; last observation: Feb. 2017)

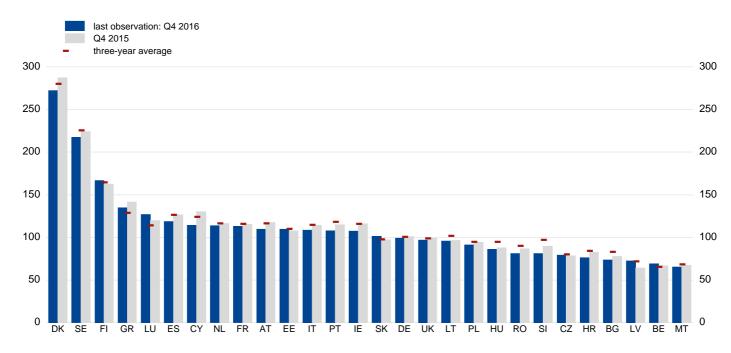


Source: Dealogic DCM Analytics.

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.

4.7 Loan-to-deposit ratio

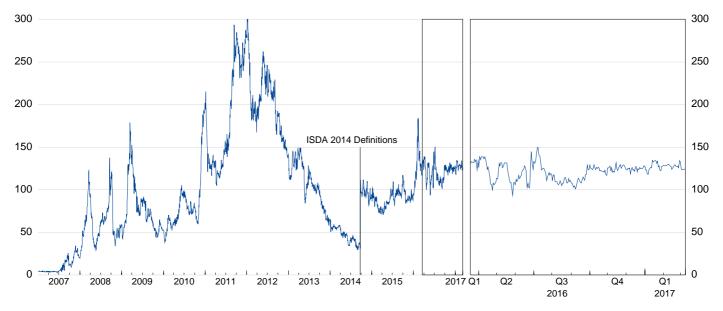
(EU; percentages)



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 0.75 for Q4 2016 and 0.79 for Q4 2015.

4.8 CDS spread between senior and subordinated debt (EU; basis points; five-year maturities; last observation: 8 Mar. 2017)



Sources: Thomson Reuters Datastream, CMA and ECB calculations

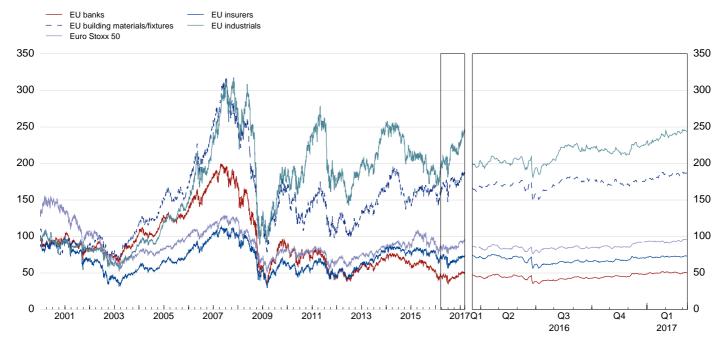
Notes: Data available for a sample of 39 large EU banks. Shift in data as of 22 September 2014 due to the implementation of the ISDA 2014 Credit Derivatives Definitions.

5. Market risk

5.1 Equity indices

a. By sector

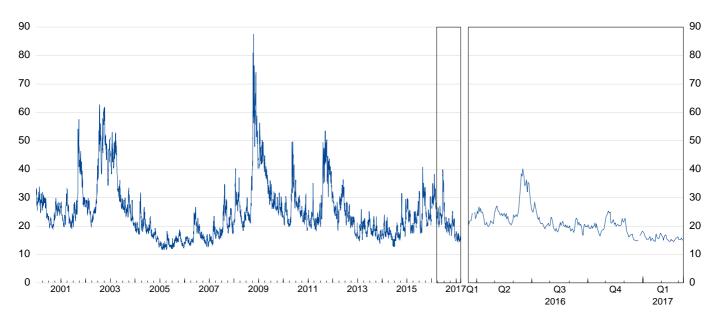
(EU, index: 4 Jan. 1999 = 100; last observation: 8 Mar. 2017)



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

b. Implied volatility

(Euro Stoxx 50 index; last observation: 8 Mar. 2017)

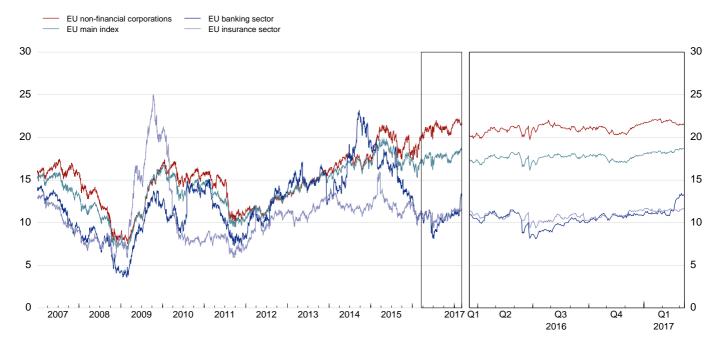


Source: Bloomberg.

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 Eurox. 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

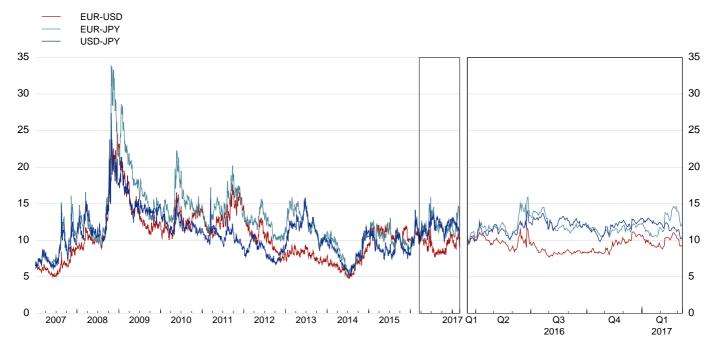
5.2 Price/earnings ratio of equity indices (EU; last observation: 8 Mar. 2017)



Source: Thomson Reuters Datastream.

5.3 Exchange rate volatility





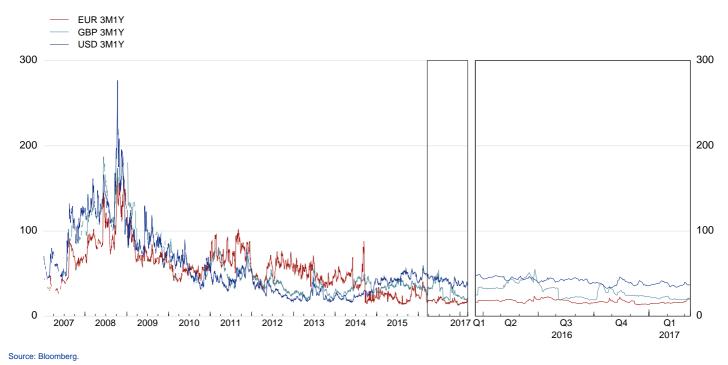
Source: Bloomberg.

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

5. Market risk

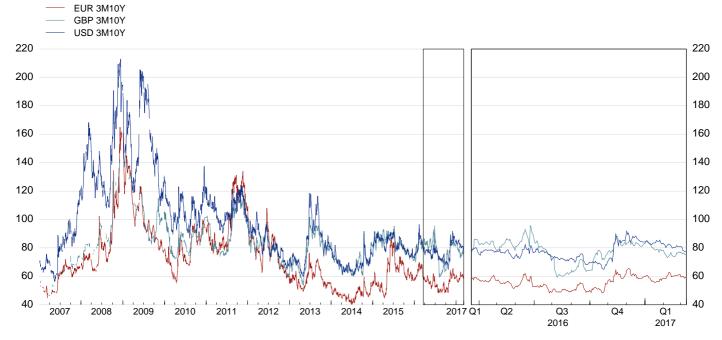
5.4 Short-term interest rates - implied volatility

(three months - one year; last observation: 9 Mar. 2017)



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: 9 Mar. 2017)



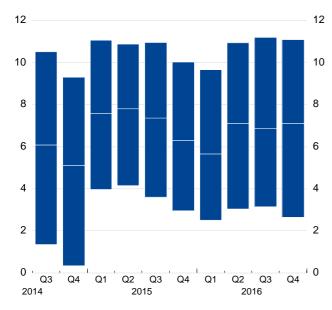
Source: Bloomberg.

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

6.1 Banking groups' profitability indicators*

a. Return on equity

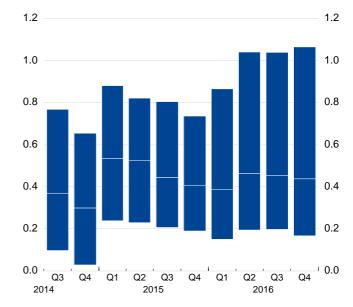
(EU; percentages; interquartile range and median; last observation: Q4 2016)



Source: EBA. Note: Quarterly flows are annualised.

b. Return on assets

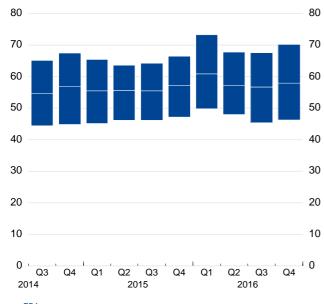
(EU; percentages; interquartile range and median; last observation: Q4 2016)



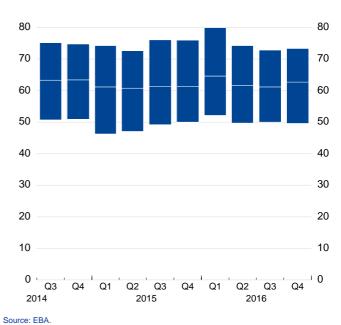
Source: EBA.

Note: Quarterly flows are annualised.

(EU; percentages; interquartile range and median; last observation: Q4 2016)



d. Net interest income to total operating income (EU; percentages; interquartile range and median; last observation: Q4 2016)



Source: EBA.

Quarterly data refer to cumulative flows over the corresponding year.

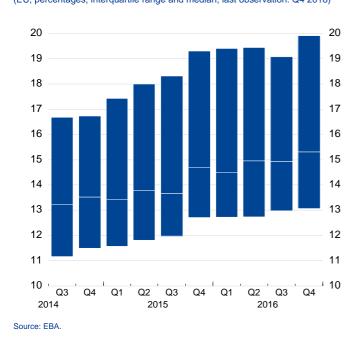
Quarterly data refer to cumulative flows over the corresponding year.

* The EBA data presented are subject to changes in the composition of the sample over time. The figures are subject to revision. Data are fully based on the EBA's ITS on supervisory reporting. Further details on the main methodological aspects of the EBA's ITS are available on EBA's website: www.eba.europa.eu.

c. Cost-to-income ratio

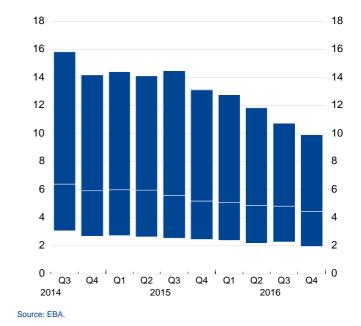
JUICE. EDA.

6.2 Banking groups' solvency, liquidity and balance sheet structure indicators*

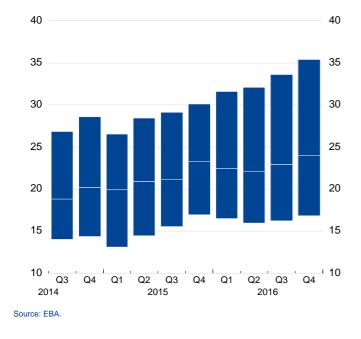


a. CET1 to risk weighted assets ratio (EU; percentages; interquartile range and median; last observation: Q4 2016)

b. Non-performing loans to total gross loans and advances (EU; percentages; interquartile range and median; last observation: Q4 2016)

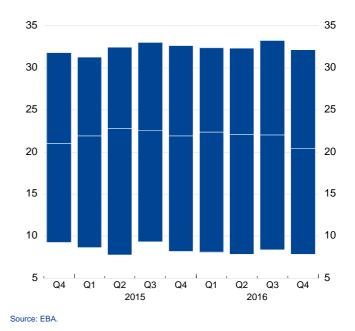


c. Ratio of liquid assets to short term liabilities (EU; percentages; interquartile range and median; last observation: Q4 2016)



d. Asset encumbrance ratio

(EU; percentages; interquartile range and median; last observation: Q4 2016)

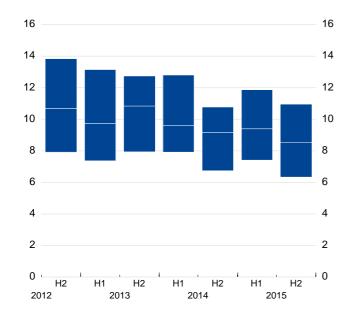


* The EBA data presented are subject to changes in the composition of the sample over time. The figures are subject to revision. Data are fully based on the EBA's ITS on supervisory reporting. Further details on the main methodological aspects of the EBA's ITS are available on EBA's website: www.eba.europa.eu.

6.3 Insurance groups' profitability indicators

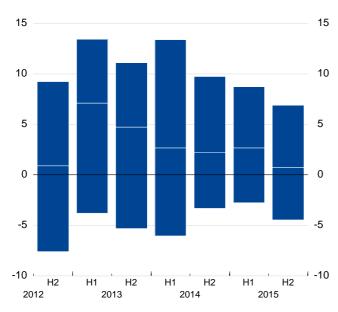
a. Return on equity

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



Source: EIOPA, based on Fast Track Indicators.

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.

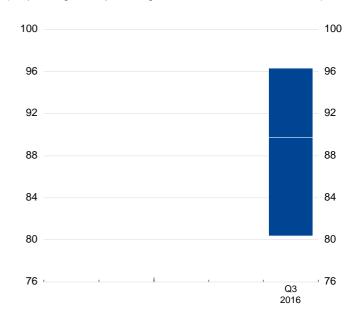


c. Gross premiums written - life insurance (EU; percentages; interquartile range and median; last observation: H2 2015)

Source: EIOPA, based on Fast Track Indicators.

b. Combined ratio - non-life insurance

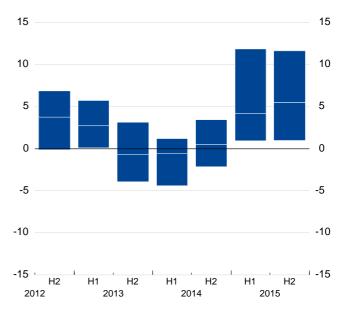
(EU; percentages; interquartile range and median; last observation: Q3 2016)



Source: EIOPA, based on Solvency II Reporting.

Note: The combined ratio is defined as net claims incurred and expenses incurred divided by net written premiums.

d. Gross premiums written - non-life insurance (EU; percentages; interquartile range and median; last observation: H2 2015)

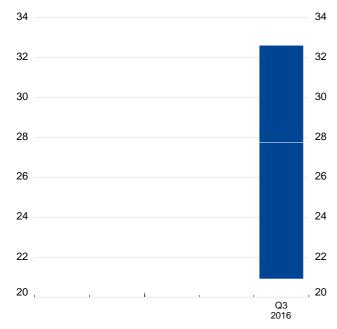


Source: EIOPA, based on Fast Track Indicators.

6.3 Insurance groups' profitability indicators

e. Expense ratio

(EU; percentages; interquartile range and median; last observation: Q3 2016)

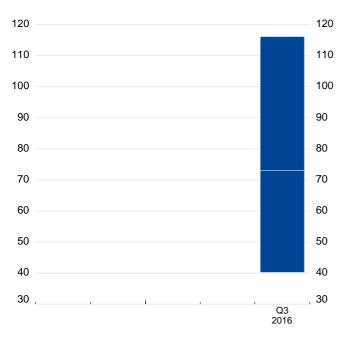


Source: EIOPA, based on Solvency II Reporting.

Note: Expense ratio is defined as expenses incurred divided by net written premiums.

g. Loss ratio - life insurance

(EU; percentages; interquartile range and median; last observation: Q3 2016)

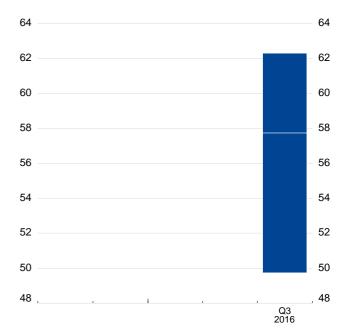


Source: EIOPA, based on Solvency II Reporting.

Note: Loss ratio is defined as net claims incurred divided by net written premiums.

f. Loss ratio - non-life insurance

(EU; percentages; interquartile range and median; last observation: Q3 2016)



Source: EIOPA, based on Solvency II Reporting.

Note: Loss ratio is defined as net claims incurred divided by net written premiums.

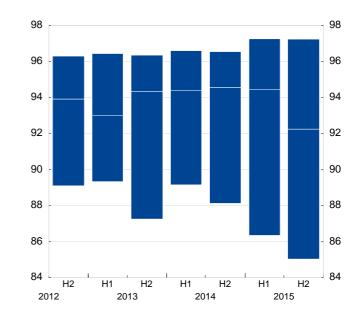
Q3 2016

6.4 Insurance groups' solvency ratio

(EU; percentages; interquartile range and median; last observation: Q3 2016)

6.5 Insurance groups' retention ratio

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



Source: EIOPA, based on Solvency II Reporting.

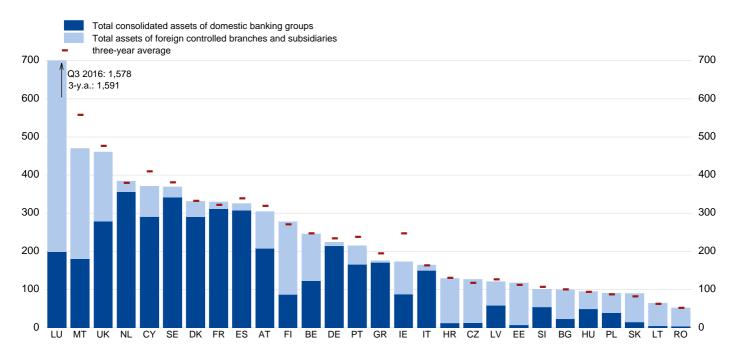
Source: EIOPA, based on Fast Track Indicators.

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

7. Structural risk

7.1 Banking sector size

(EU; share of nominal GDP; percentages; last observation: Q3 2016)

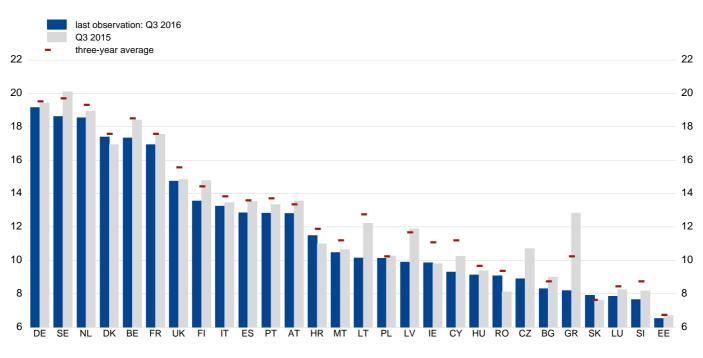


Sources: ECB and Eurostat.

Notes: Based on Consolidated Banking Data. Due to unavailability of quarterly data prior to 2015, the three-year average is based on last observation and semi-annual data.

7.2 Banking sector leverage

(EU; share of total assets in capital)

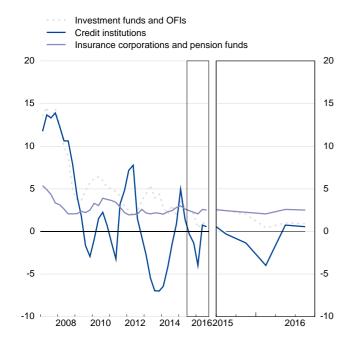


Sources: ECB.

Notes: Share of total assets in capital for domestic banking groups and stand-alone credit institutions. Consolidated data. Due to unavailability of quarterly data prior to 2015, the three-year average is based on last observation and semi-annual data. The three-year average is not available for CZ.

7. Structural risk

7.3 Growth of components of the EU financial sector (EU; percentages; total assets annualised growth rates; last observation: Q3 2016)



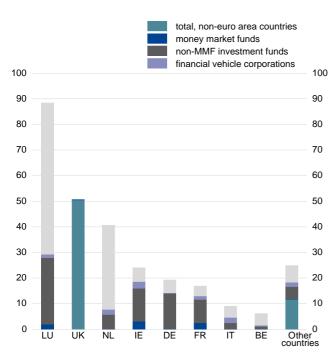
Source: ECB

Notes: Data based on financial accounts and monetary statistics. Data refer to the non-consolidated balance sheets of the respective entities.

7.5 Total assets of investment funds and OFIs in the EU

a. Outstanding amounts

(EU; percentages of EU GDP; last observation: Q3 2016)

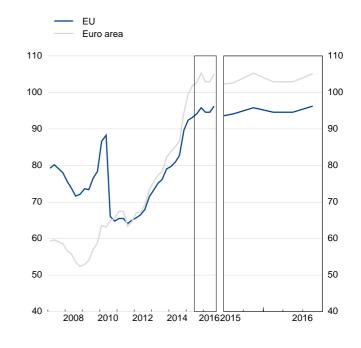


Sources: ECB and European Commission.

Note: Breakdowns are available only for euro area Member States.

7.4 Total assets of investment funds and OFIs

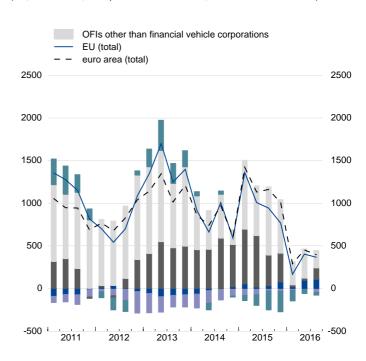




Source: ECB.

b. Cumulated flows

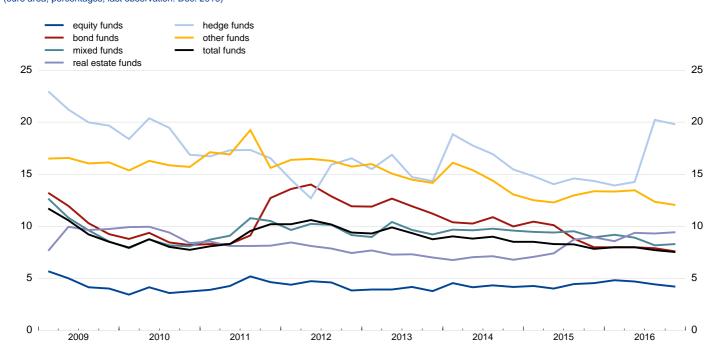
(EU; EUR billions; four-quarter cumulated flows; last observation: Q3 2016)



Source: ECB.

7. Structural risk

7.6 Non-MMF investment funds ratio of short term assets to short term liabilities (euro area; percentages; last observation: Dec. 2016)



Source: ECB.

Notes: Short-term assets include non-MMF investment funds' holdings of debt securities and loans and deposits with original maturity up to one year; short-term liabilities include open-ended fund units issued and loans received with original maturity up to one year. Maturity breakdowns for loans and deposits are available from 2014 Q4 and are estimated for prior periods based on the maturity breakdowns in 2015 for these instruments (for respective counterparty sectors).