



EUROPEAN CENTRAL BANK

EUROSYSTEM

May 2017 Financial Stability Review

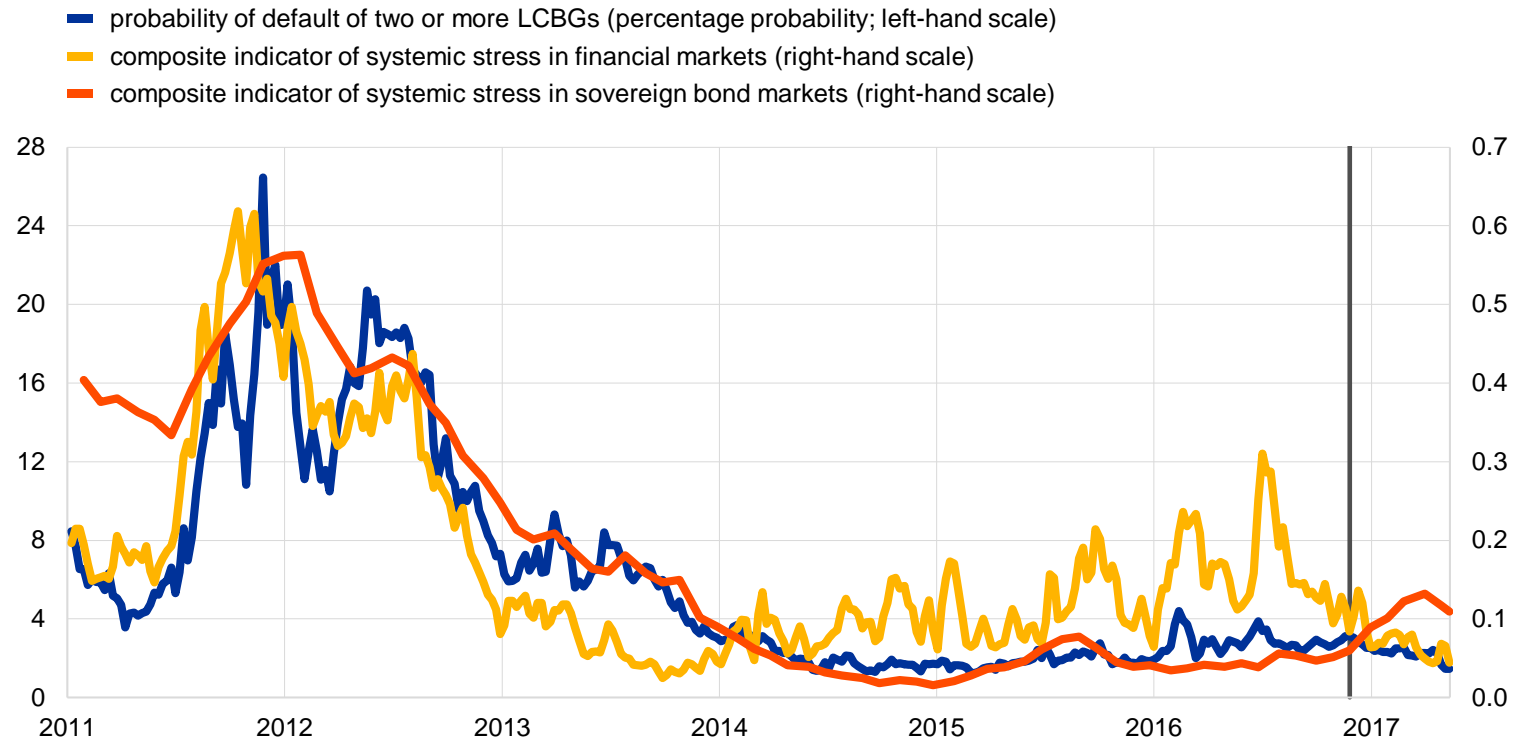
Press briefing

24 May 2017, Frankfurt am Main

- Measures of broad financial market and bank stress contained but higher political uncertainty around the turn of the year brought about a slight pickup in the sovereign stress indicator

Composite indicators of systemic stress

(Jan. 2011 – May. 2017; the vertical line represents the publication of the previous FSR on 24 November 2016)



Sources: Bloomberg and ECB calculations.

Notes: “Probability of default of two or more LCBGs” refers to the probability of simultaneous defaults in the sample of 15 large and complex banking groups (LCBGs) over a one-year horizon.

- Reflation expectations have led to rising stock prices and higher interest rates, despite the more recent retrenchment...
- ... but long-term bond yields still at low levels
- Banks still vulnerable to changes in market sentiment while structural challenges prevail
- Stress in sovereign bond markets has edged up against a background of rising uncertainty

RISKS FOR THE EURO AREA FINANCIAL SYSTEM

Current level
and change*

1. Repricing in global fixed-income markets – triggered by changing market expectations about economic policies – leading to spillovers to financial conditions



2. Adverse feedback loop between weak bank profitability and low nominal growth, amid structural challenges in the euro area banking sector



3. Public and private debt sustainability concerns amid a potential repricing in bond markets and political uncertainty in some countries



4. Liquidity risks in the non-bank financial sector with potential spillovers to the broader financial system



pronounced systemic risk
medium-level systemic risk
potential systemic risk



* The colours indicate the current level of risk, which is a combination of the probability of materialisation and an estimate of the likely systemic impact of the identified risk over the next two years, based on ECB staff assessment. The arrows indicate whether the risk has intensified since the previous Financial Stability Review.

■ RISK 1

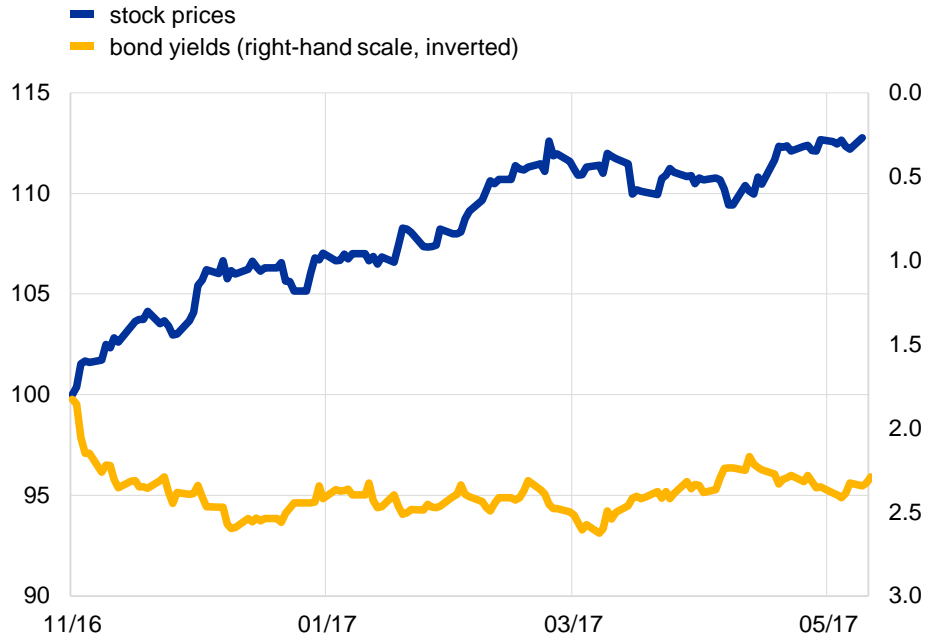
Repricing in global fixed-income markets – triggered by changing market expectations about economic policies – leading to spillovers to financial conditions

Risk 1

- Higher bond yields and stock prices in the United States since the presidential election ...
- ... with similar developments also in the euro area...
- ...but some back-tracking more recently

Changes in ten-year sovereign bond yields and stock prices in the United States

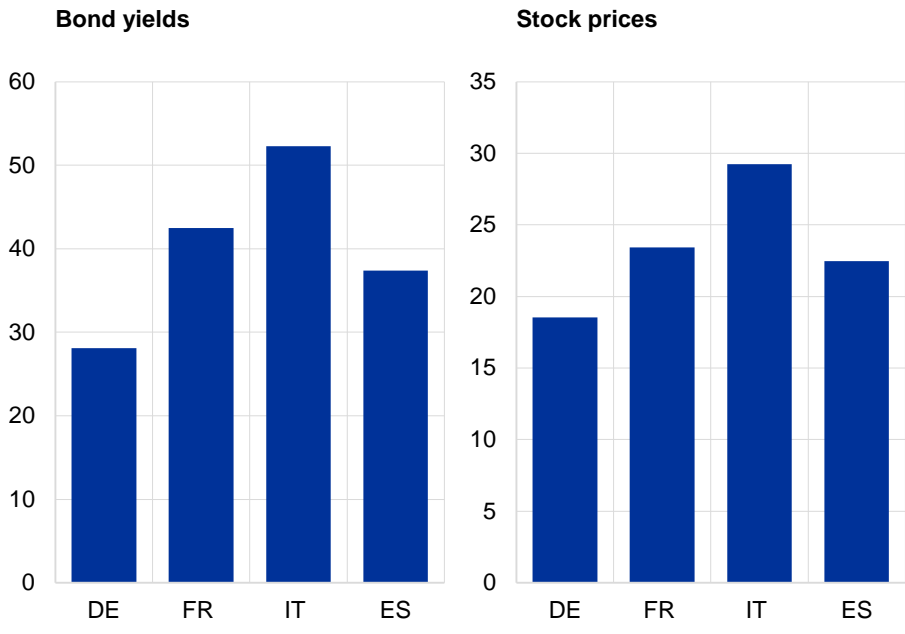
(7 Nov. 2016 – 16 May. 2017; daily data, bond yields: percentages per annum, stock prices indexed to 100 on 7 Nov. 2016)



Sources: Reuters, Consensus Economics and ECB calculations.

Changes in ten-year sovereign bond yields (left-hand panel) and stock prices (right-hand panel) for selected euro area countries

(7 Nov. 2016 – 16 May. 2017; bond yields: changes in basis points, stock prices: changes in percent)



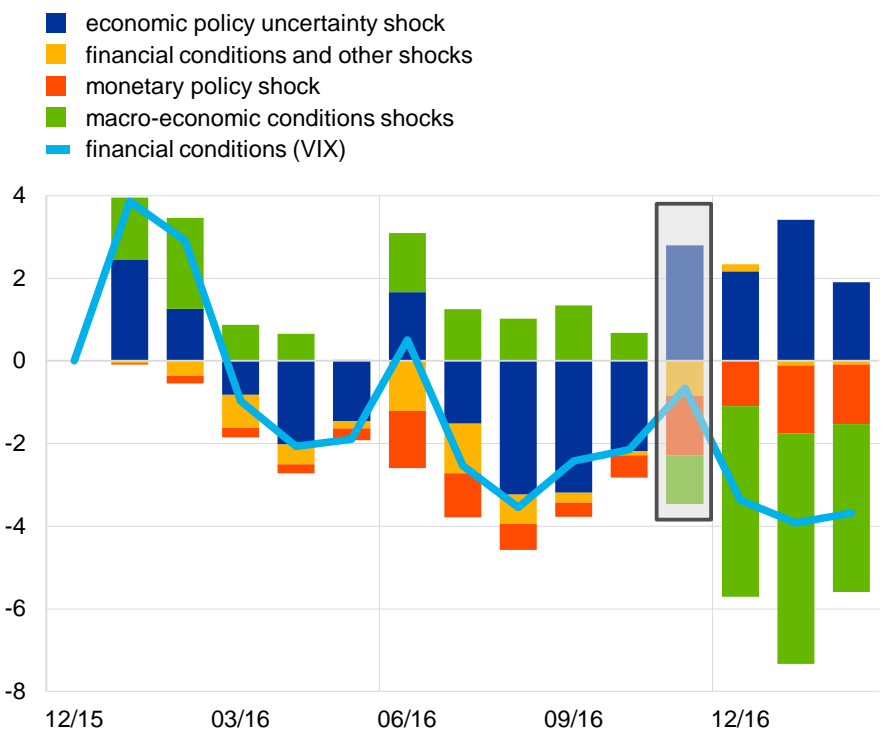
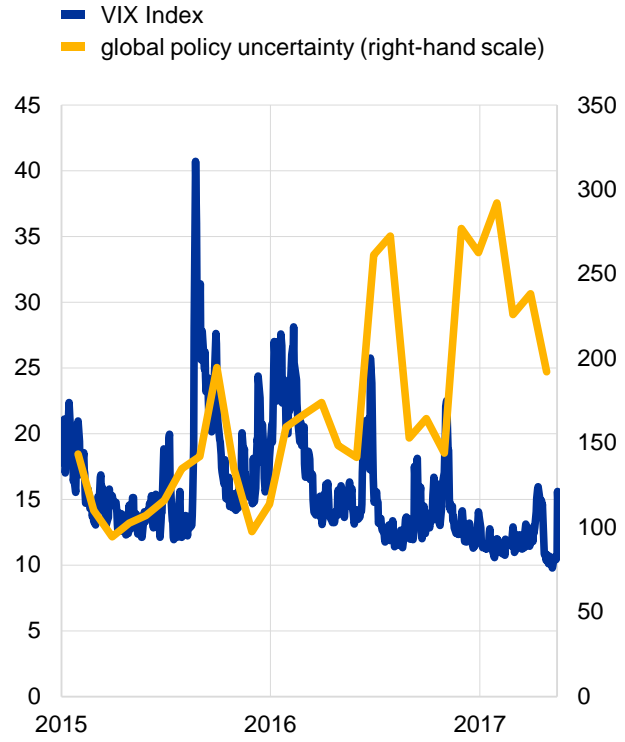
Sources: Bloomberg, Thomson Reuters Datastream and ECB calculations.

Risk 1 – Special Feature A

- Financial market uncertainty and policy uncertainty decoupled
- Tightening impact of higher policy uncertainty on US financial conditions more than offset by positive demand shock (SF A)

Global policy uncertainty vis-à-vis the VIX index (left panel), historical shock decomposition of US financial conditions (right panel)

(Left-hand panel: Jan. 2015 – May. 2017, VIX index (daily data, last observation 16 May 2017, annualised volatility in percentage points), policy uncertainty (monthly data, last observation May 2017, index values), right-hand panel: Dec. 2015 – Feb. 2017; monthly cumulative changes in the VIX index since Dec 2015)



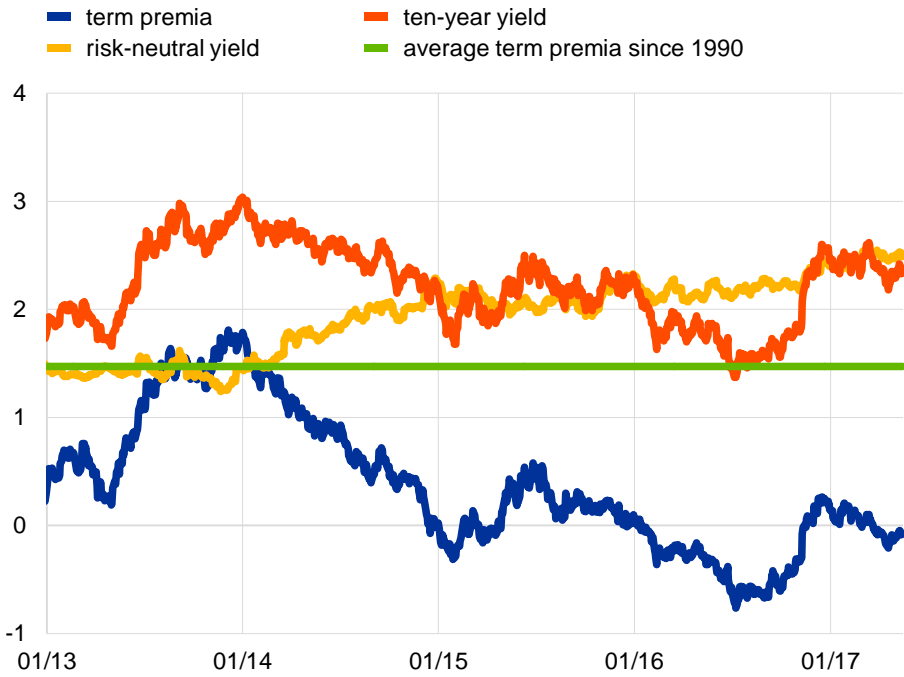
Sources: Bloomberg and ECB calculations.

Notes: For the right-hand panel: Structural shocks are identified by means of sign and zero restrictions similar to Arias et al. (2014). Estimates are derived using the BEAR toolbox (Dieppe et al., 2016). The shaded grey area highlights November 2016.

Risk 1

- Substantial scope for a further bond price correction in the US...
- ...stemming from a normalisation of term premia and/or higher MP expectations

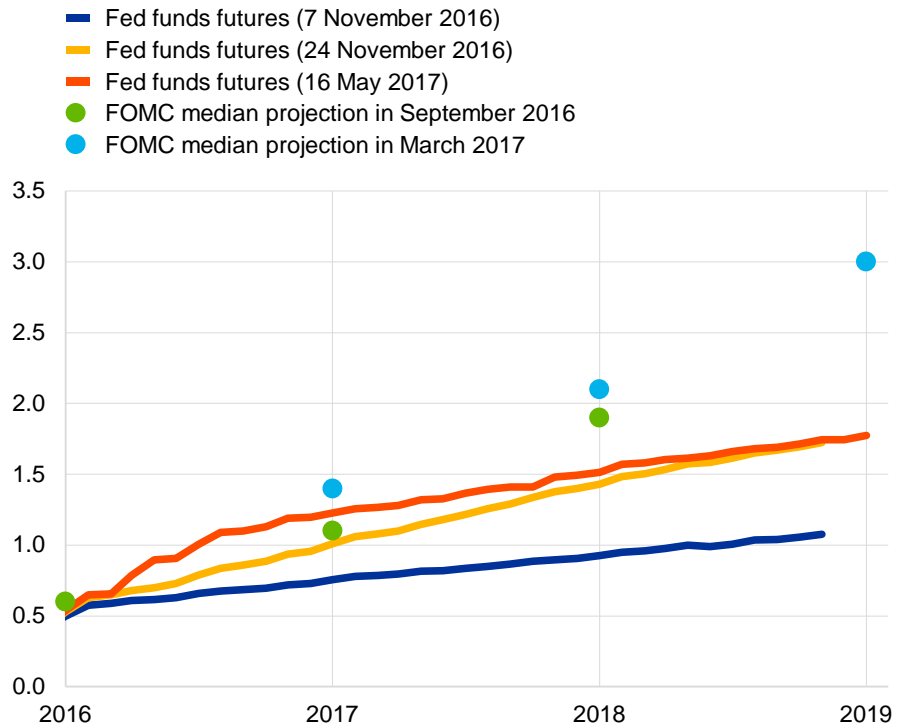
Long-term US sovereign bond yields decomposed into the risk-neutral yield and the term premium
(1 Jan. 2013 – 16 May. 2017, daily data, percentages per annum)



Sources: Haver, Bloomberg, ECB calculations.

US federal funds rate forecasts by the FOMC and financial markets

(FOMC median projections and Fed Funds Futures, percentages per annum)

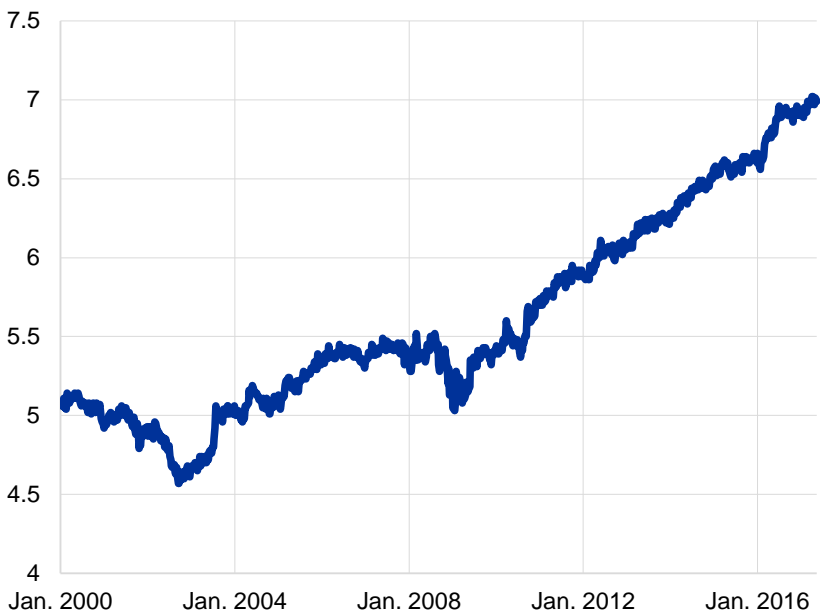


Sources: Bloomberg, Federal Reserve Board and ECB calculations

Risk 1

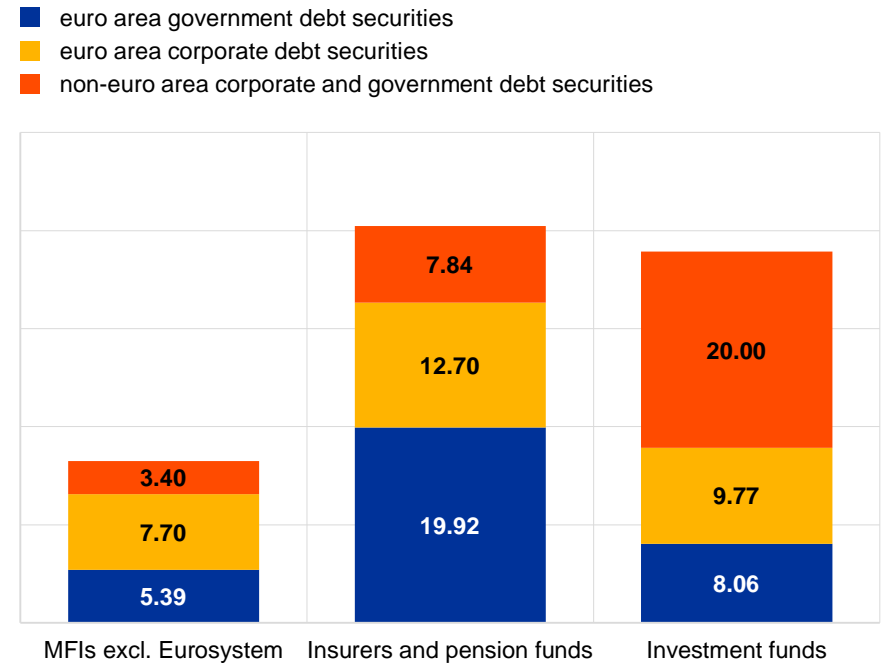
- Consistent increase in duration points to rising vulnerability to higher interest rates
- Significant part of financial institutions' total assets is made up of fixed income instruments

Duration based on Bloomberg Barclays global aggregate index
(1 Jan. 2000 – 12 May 2017; weekly data, years)



Source: Bloomberg.

Euro area financial institutions' debt security holdings
(percentages of total assets, December 2016 data for MFIs and Investment funds and June 2016 data for insurers and pension funds)



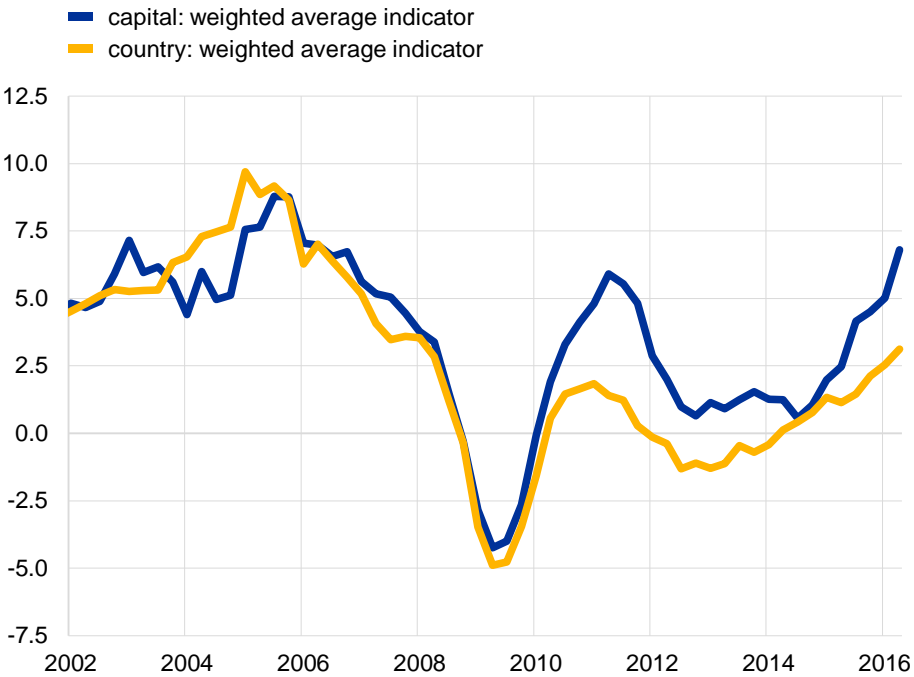
Sources: Bloomberg and ECB calculations.

Risk 1 - Box 3 Residential real estate prices in capital cities: a review of trends

- Strong house price increases in capital cities have been observed since 2010 ...
- ... but current price increases appear more moderate than seen in previous episodes

House price changes in euro area capital cities and at euro area aggregate level

(Q1 2001 – Q2 2016; annual percentage changes)

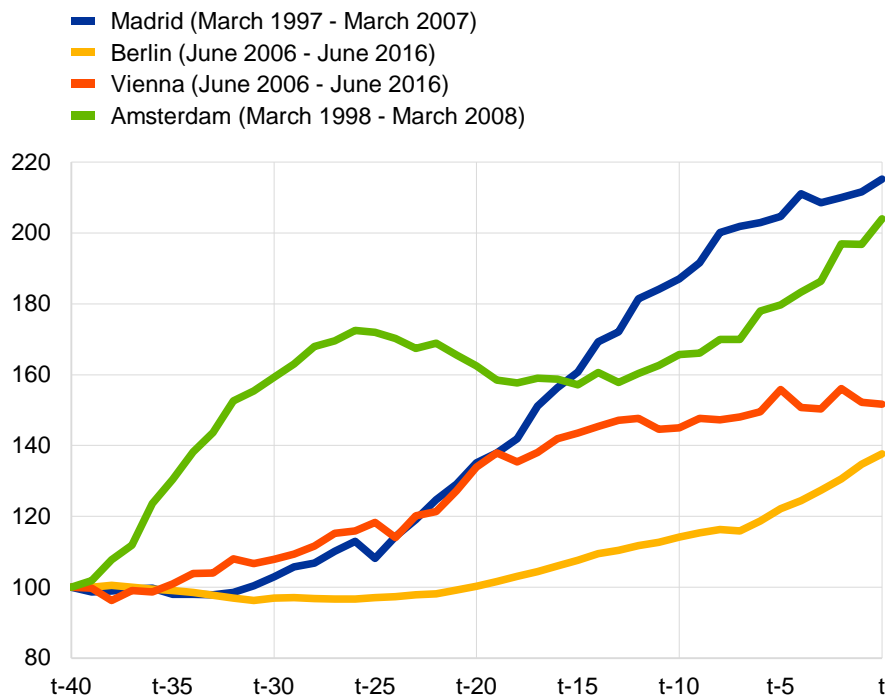


Sources: ECB calculations based on BIS and national data.

Notes: The composition of the sample changes over time and includes Germany, France, Italy, Spain, the Netherlands, Belgium, Austria, Ireland (from 2005), Estonia (from 2003), Slovenia (from 2010) and Finland (from 2010). The euro area series are a weighted average based on 2014 GDP weights.

Real house prices in selected capitals in the 10 years preceding a house price correction (Amsterdam and Madrid) and in the last 10 years (Berlin and Vienna)

(index: t-40 quarters = 100)



Sources: ECB calculations based on BIS and national data.

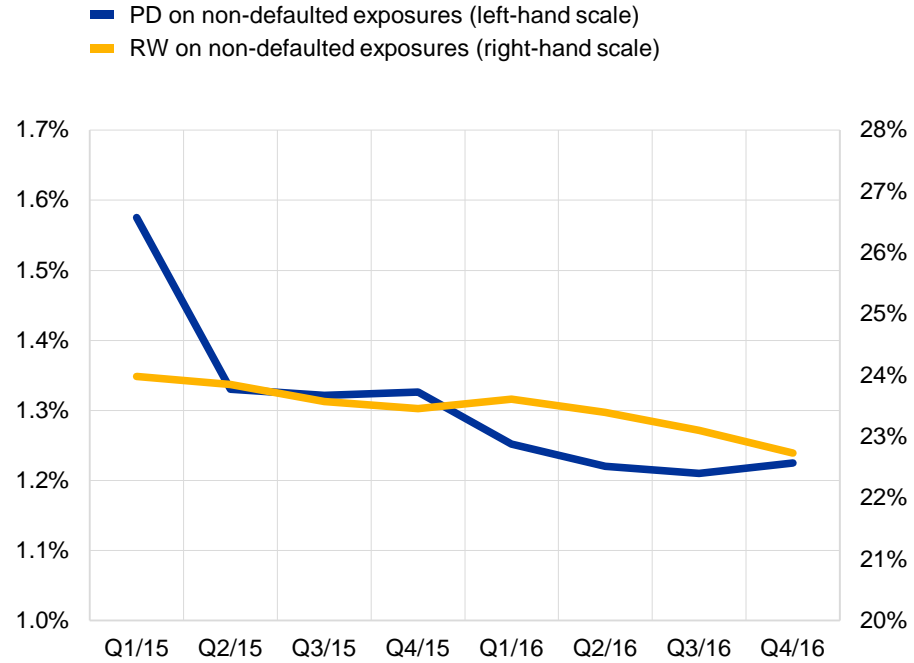
■ RISK 2

Adverse feedback loop between weak bank profitability and low nominal growth, amid structural challenges in the euro area banking sector

Risk 2

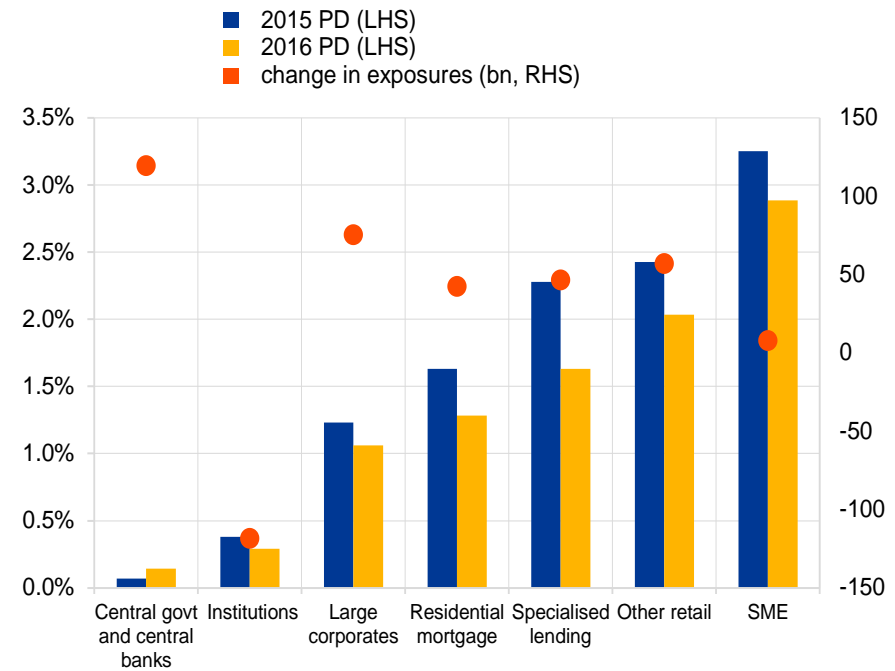
- No general signs that euro area banks are taking on excessive risks

Weighted average probability of default and average risk weight for non-defaulted IRB credit risk exposures (Q1 2015 – Q4 2016, percentages)



Sources: ECB supervisory data and ECB calculations.
 Notes: Excludes exposures in default. Based on weighted averages for a sample of 68 significant institutions.

Weighted average probability of default of IRB credit risk exposures by asset class and changes in exposures between 2015 and 2016 (2015–2016, percentage, EUR billions)



Sources: ECB supervisory data and ECB calculations.
 Notes: Excludes exposures in default. Based on a sample of 68 significant institutions.

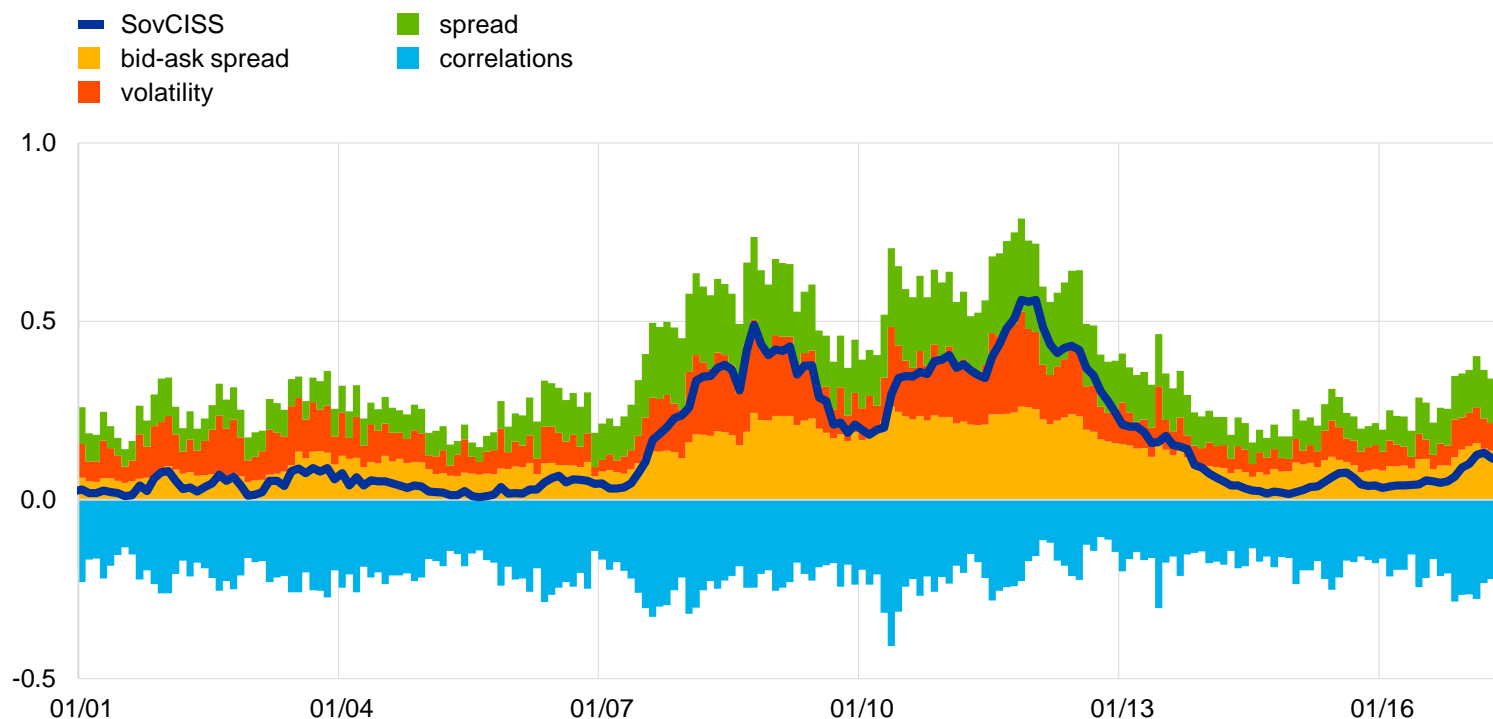
■ RISK 3

Public and private debt sustainability concerns amid a potential repricing in bond markets and political uncertainty in some countries

- Higher sovereign debt market stress driven by volatility and deteriorating market liquidity ...
- ... partly as a result of higher political uncertainty (albeit abating somewhat after the FR election)

Composite indicators of systemic stress in sovereign bond markets SovCISS and its main components

(Jan 2001 – May 2017)

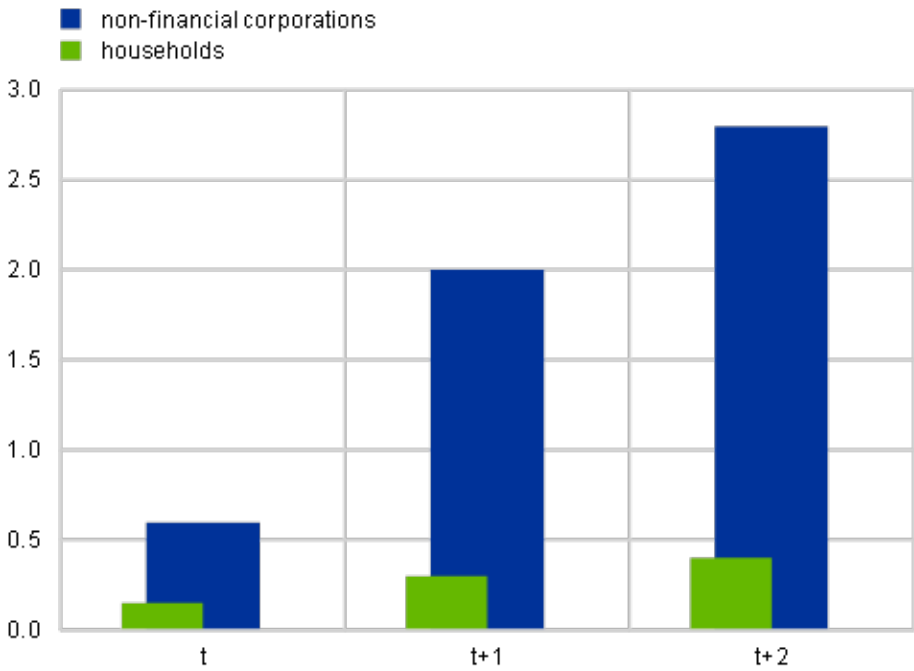


Sources: Bloomberg and ECB calculations.

Risk 3

- The impact of an interest rate shock appears to be relatively small, in particular for euro area households
- Loans with floating rates or rates with rather short fixation periods more widespread for euro area NFCs

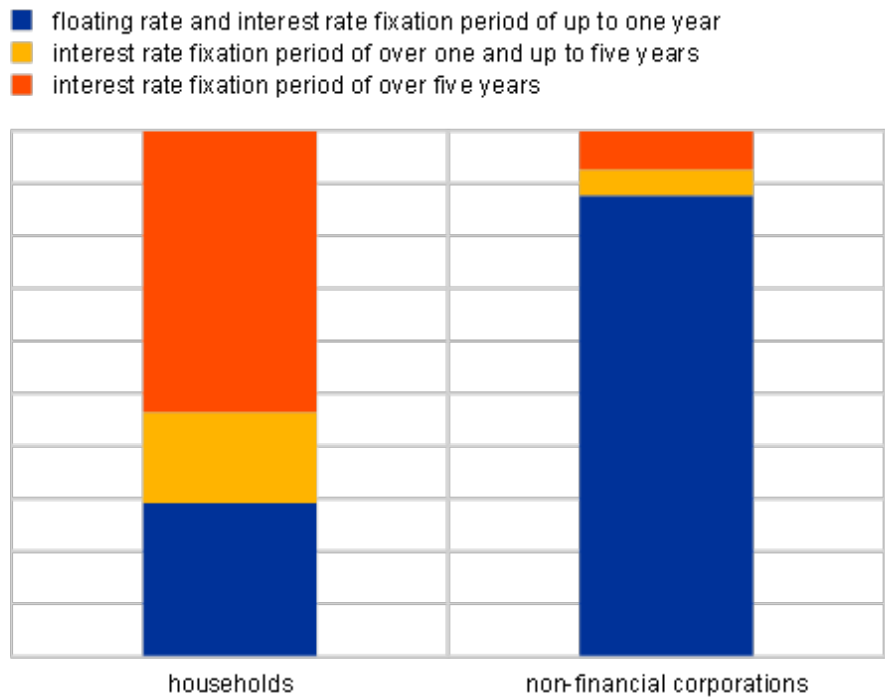
Impact of a +100 bp interest rate shock on gross interest payments of EA households and NFCs
(percentages of gross operating surplus and gross disposable income)



Source: ECB and ECB estimates.

Notes: The simulations capture the effects of a 100 basis point increase in short-term and long-term market interest rates in the first, second and third year after the shock.

Decomposition of new loans to households and NFCs by type of underlying interest rate arrangement
(average values covering a five-year period between March 2012 and February 2017, percentages of total loans)



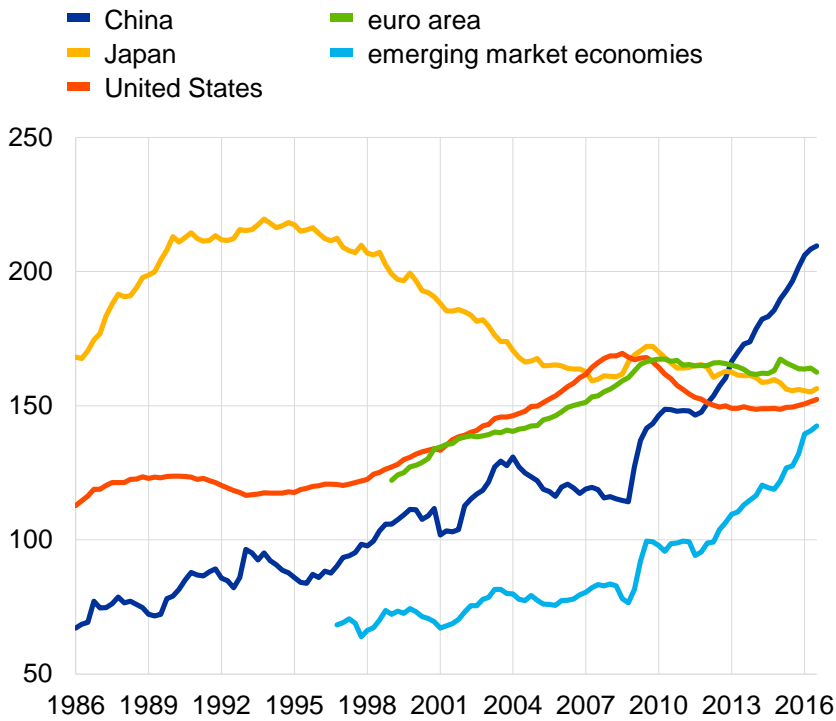
Sources: ECB and ECB calculations.

Notes: Loans to households comprise loans for house purchase, consumer lending and other lending.

Risk 3

- Private sector indebtedness remains high by historical and international standards
- An interest rate shock would have the strongest impact on the weakest households

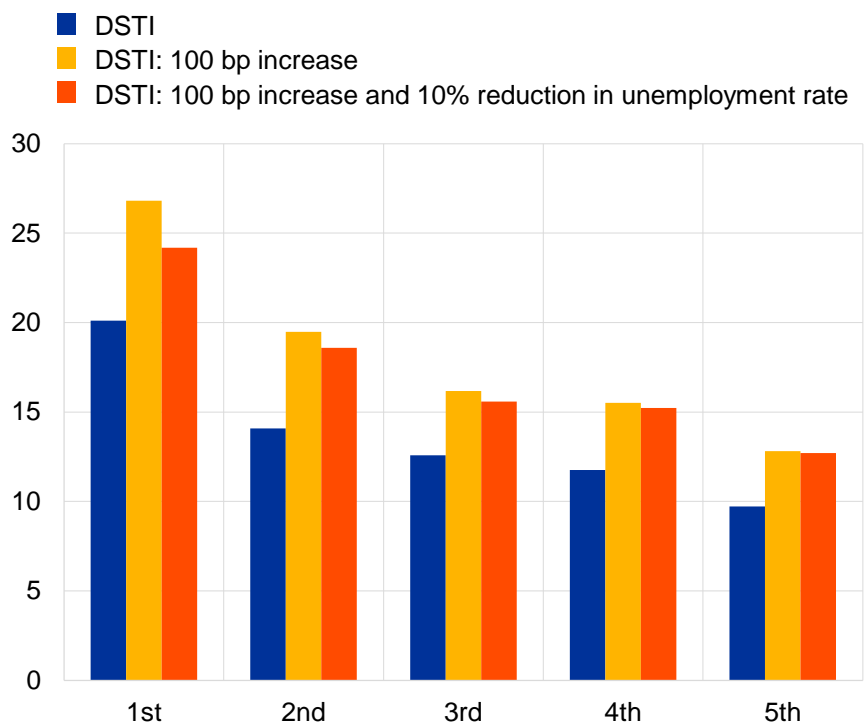
Indebtedness of the non-financial private sector in selected advanced and emerging market economies (Q1 1986 – Q3 2016; percentages of GDP)



Source: OECD.

Notes: Private debt refers to non-financial private sector debt, i.e. the sum of household and non-financial corporate debt.

Actual and simulated median debt service-to-income (DSTI) ratios by income quintile (Q4 2016; percentages)



Sources: Household Finance and Consumption Survey and ECB calculations.

Notes: The simulated debt service-to-income ratio (DSTI) assumes a 100% pass through of a 100 basis point interest rate increase to variable-rate mortgage payments. Finland is excluded, owing to the lack of data on variable-rate mortgages.

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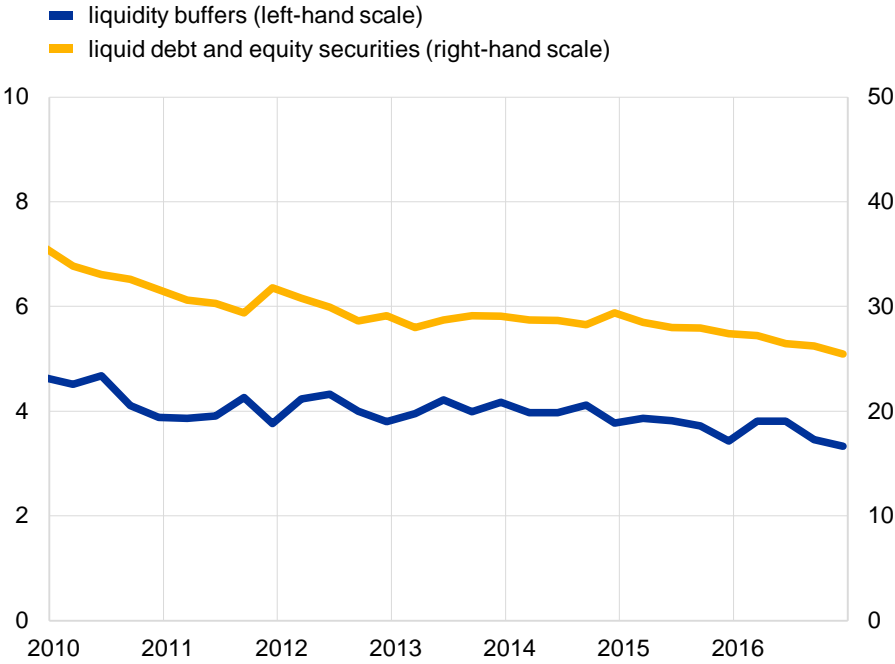
■ RISK 4

Liquidity risks in the non-bank financial sector with potential spillovers to the broader financial system

Risk 4

- Bond funds' liquidity buffers have further declined
- Flow-return correlations increase in anticipation of market-moving events, adding to procyclicality

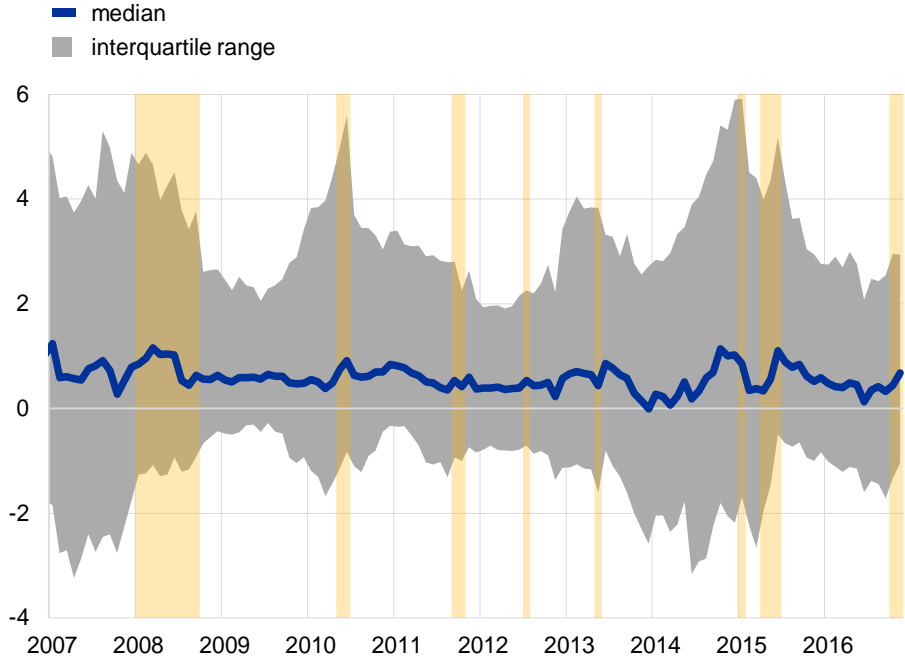
Bond funds' cash buffers and liquid assets
(Q1 2010 – Q4 2016; percentage of total assets)



Sources: ECB investment fund statistics and ECB calculations.

Notes: Liquidity buffers include loans and deposits. Liquid debt and equity securities include debt securities issued by euro area governments, debt securities issued with an original maturity under one year and equities issued in the EU, Japan and the United States.

Estimated sensitivities of flows to past returns for euro area bond funds
(Jan. 2007 – Dec. 2016; monthly data, median coefficient estimates and inter-quartile range)



Sources: Lipper IM and ECB calculations.

Notes: Yellow shaded areas represent periods of high financial stress: acceleration of subprime crisis/Lehman collapses (Jan.-Sept. 2008); emergence of sovereign debt crisis/start of SMP (May/June 2010); deepening of sovereign debt crisis/Italian bond yields peak (Sep.-Oct. 2011); President's speech (26 July 2012); Fed talks tapering (22 May 2013); PSPP announcement (22 Jan. 2015); German Bund sell-off (Apr.-May 2015); Greek sovereign crisis re-emerges (June 2015); Reversal of yields/US presidential elections (Oct./Nov. 2016). The sample includes all euro-area bond funds covered by Lipper IM.

BOXES AND SPECIAL FEATURES

Some highlights	
Box 1	Preparing for Brexit to secure the smooth provision of financial services to the euro area economy
Box 2	Financial vulnerability of euro area households – based on HFCS
Box 4	Interpretation of recent increases in TARGET 2
Box 7	Growing role of non-bank lending to households in the NL – DNB/ECB
Box 8	ETFs in the euro area
Special Features	
SF A	Assessing the decoupling of financial market uncertainty and financial conditions
SF B	Measuring credit gaps for macroprudential policy
SF C	Resolving non-performing loans: a role for securitisation and other financial structures?