



EUROPEAN CENTRAL BANK

EUROSYSTEM

**Peter Praet**

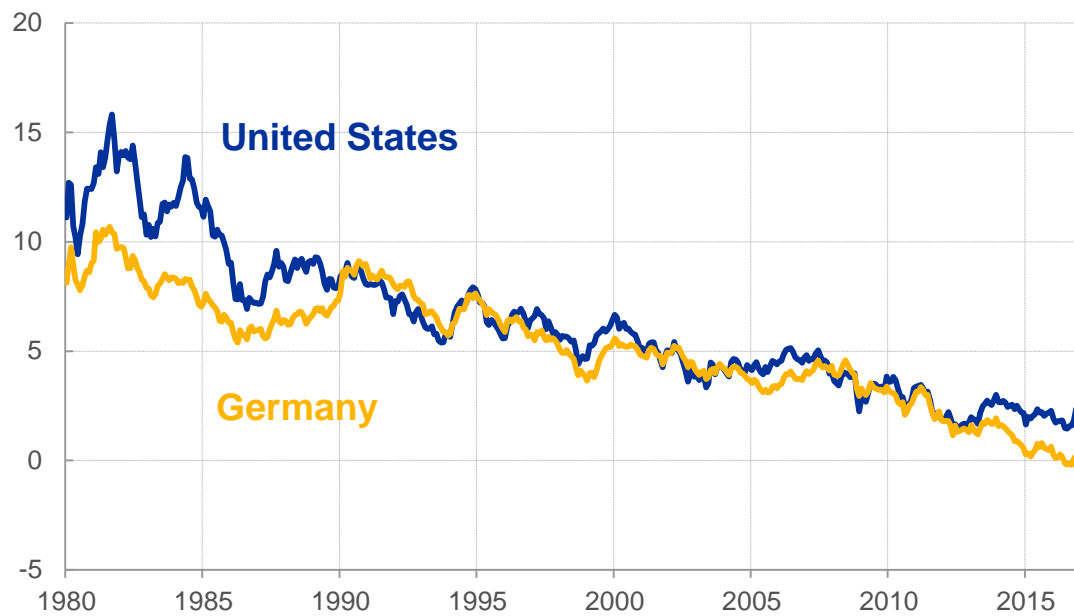
Member of the Executive Board of the ECB

**PensioPlus**

**Financial Seminar**

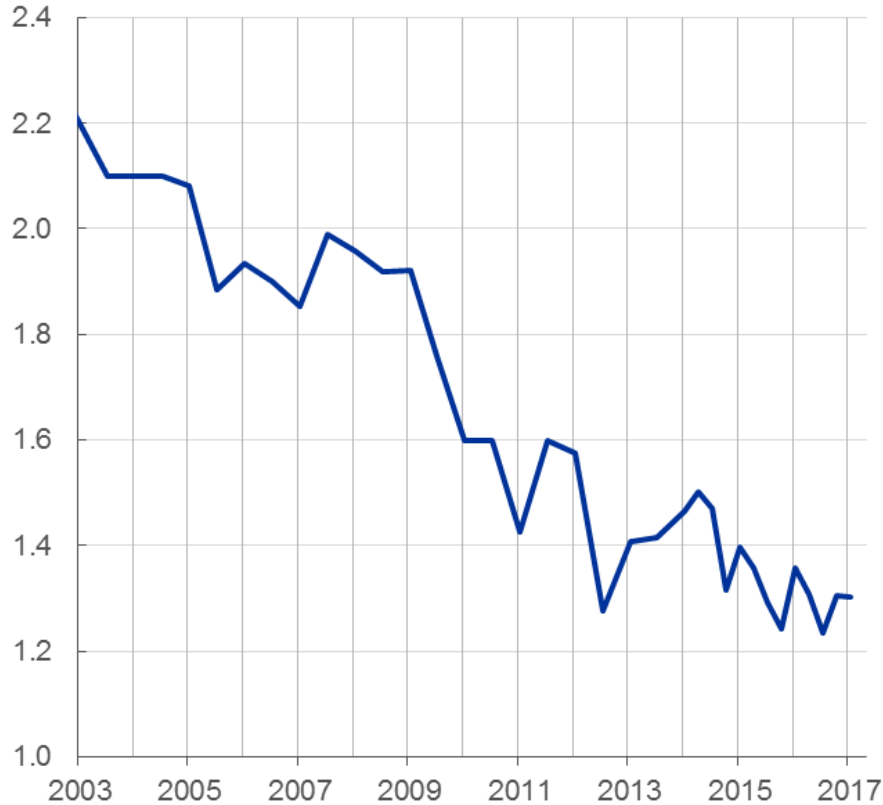
Brussels, 15 May 2017

## Long-term government bond yields (10-year yields; % p.a.)



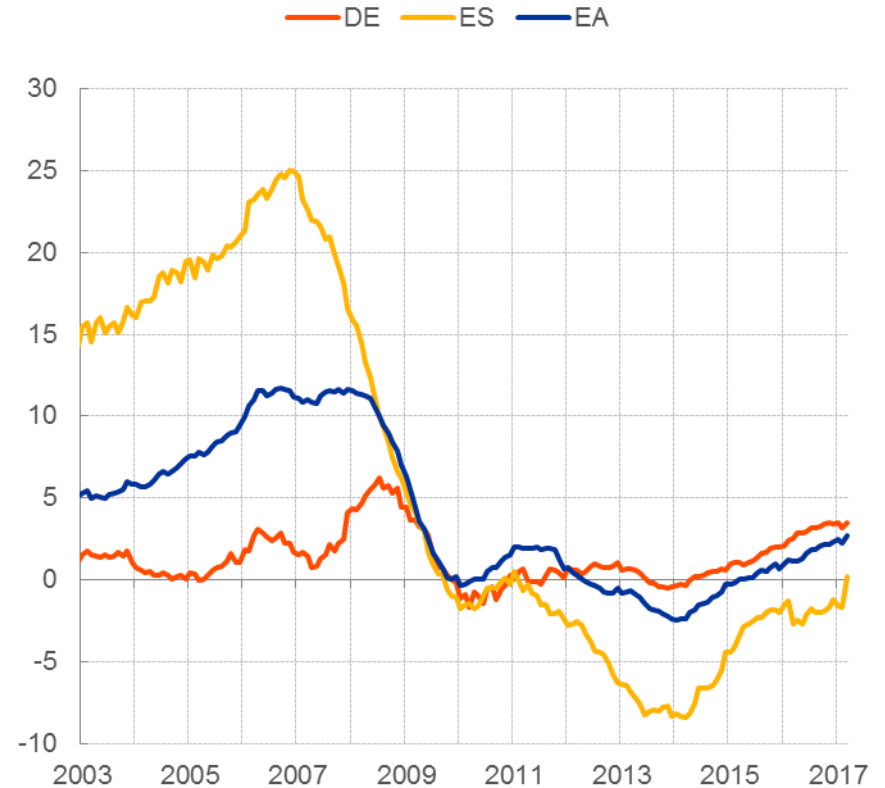
Sources: Thomson Reuters, ECB.  
Latest observation: April 2017.

## 6-10 years ahead growth expectations for the euro area (annual % change)



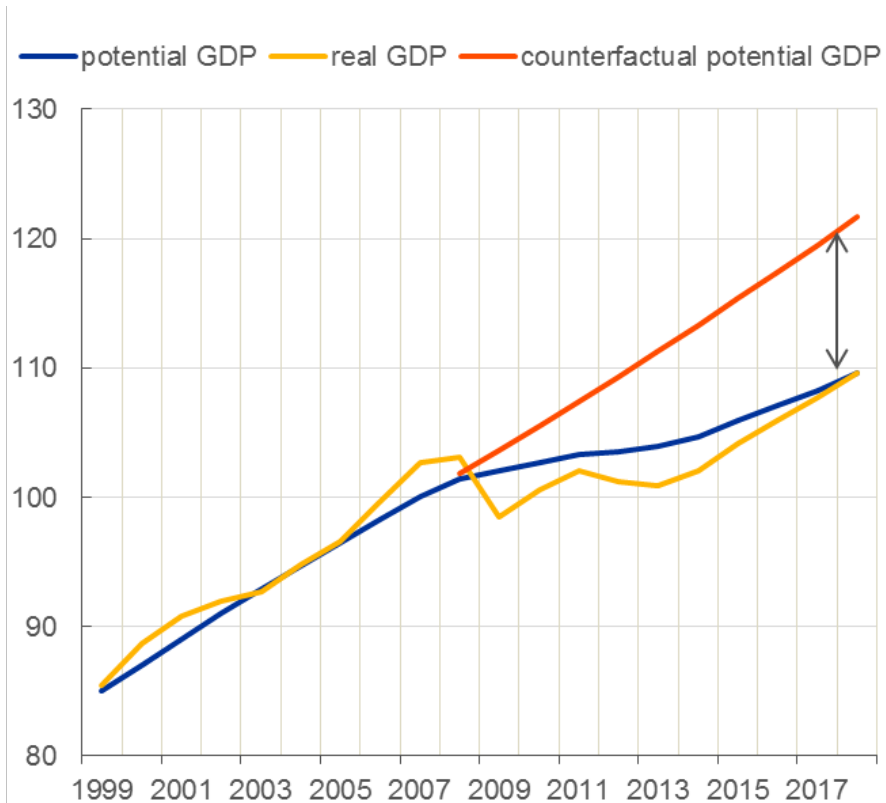
Source: Consensus Economics.  
Latest observation: April 2017.

## Bank loans to the private sector (annual percentage changes)



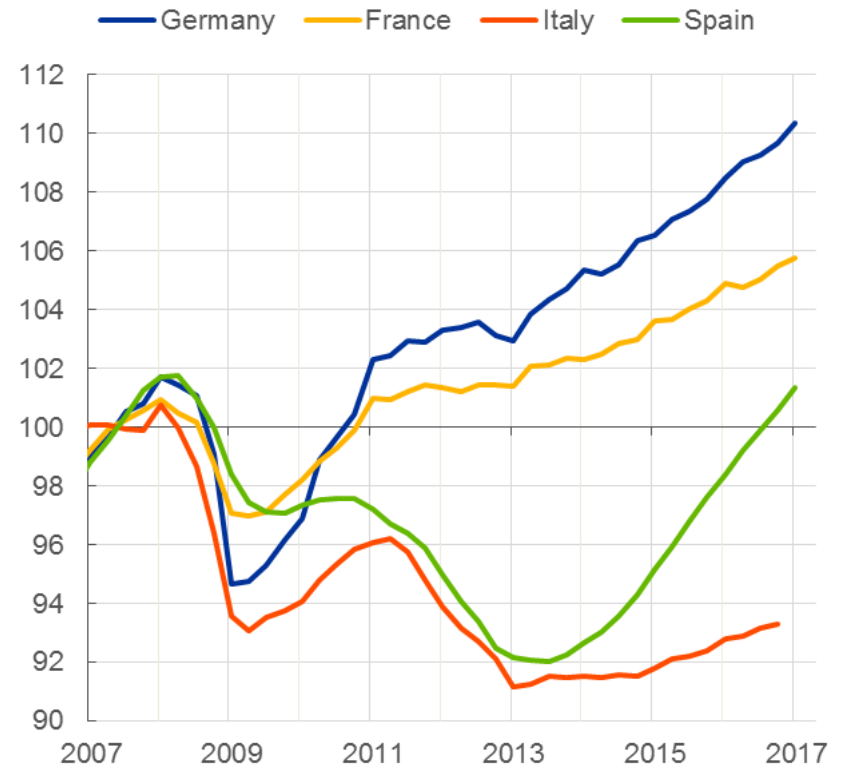
Source: ECB.  
Latest observation: March 2017.

## Euro area actual and counterfactual real GDP growth path (2007 = 100)



Sources: European Commission, ECB calculations.  
 Note: Counterfactual GDP assumes that potential GDP continued to grow at its 2007 growth rate.  
 Latest observation: 2017Q1.

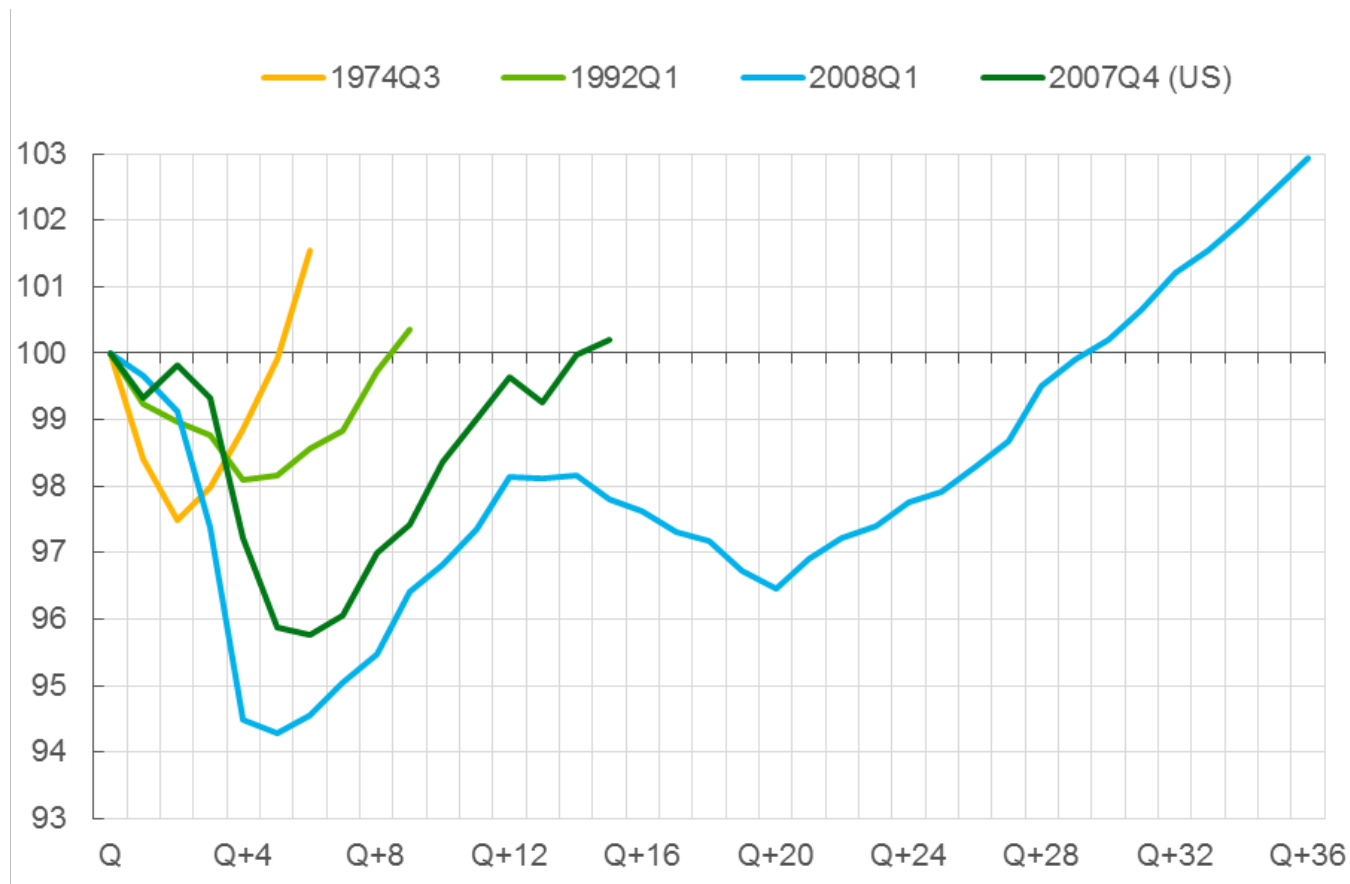
## Real GDP growth path in selected euro area countries (2007 = 100)



Sources: Eurostat, ECB calculations.  
 Latest observation: 2017Q1 (Germany, France, Spain), 2016Q4 (Italy).

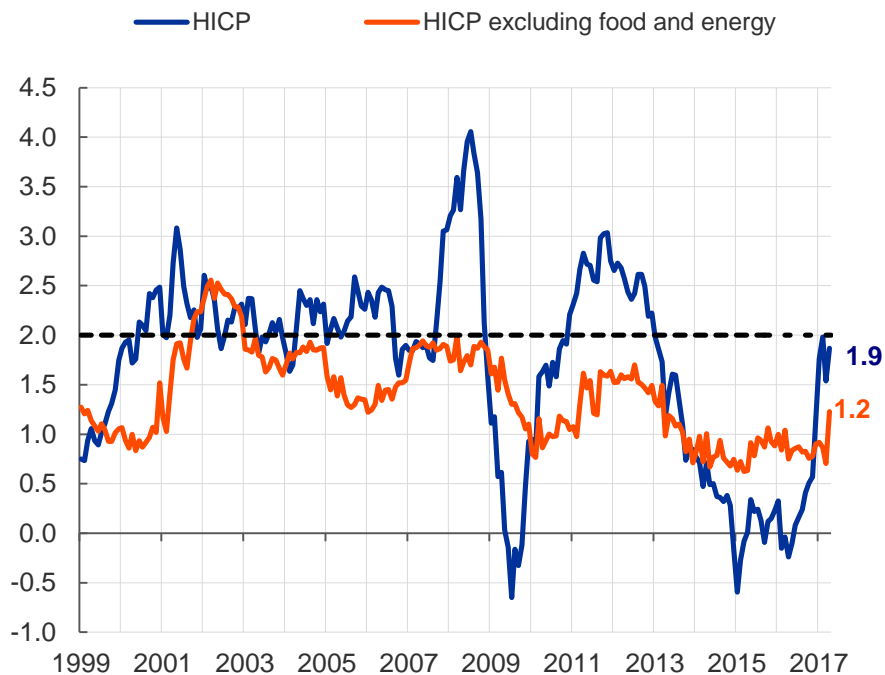
# Euro area real GDP over various cycles and compared with the current US cycle

(index: business cycle peak = Q = 100)



Sources: Eurostat, United States Census Bureau and ECB calculations.  
Latest observation: 2017Q1.

## HICP inflation and HICP excluding food and energy (annual percentage changes)



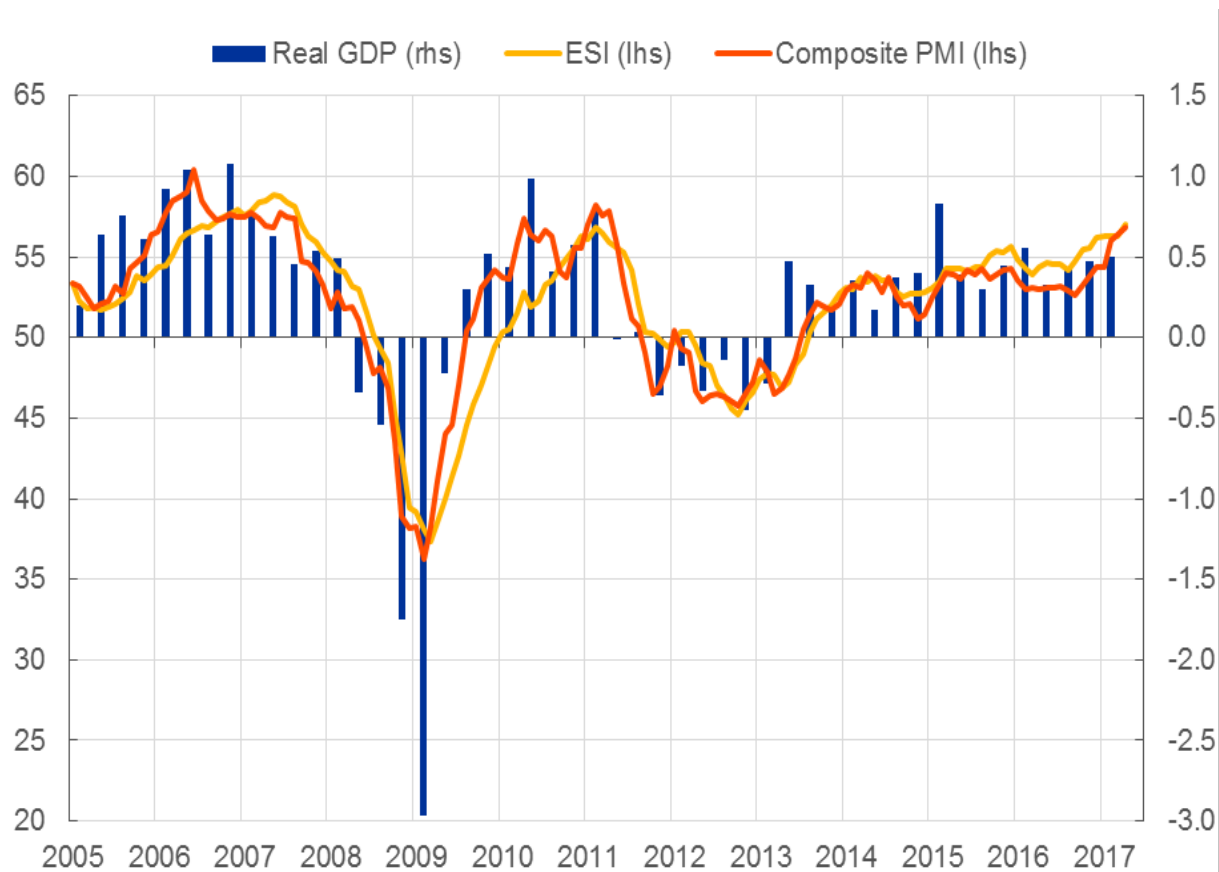
Source: Eurostat.  
Latest observation: April 2017.

## Price of inflation and deflation protection (% p.a.)



Source: Bloomberg.  
Note: The price of inflation (deflation) protection refers to the price of a five-year year-on-year inflation option with a 4% cap (0% floor).  
Latest observation: 10 May 2017.

## Euro area real GDP, composite PMI and ESI (annual % change)

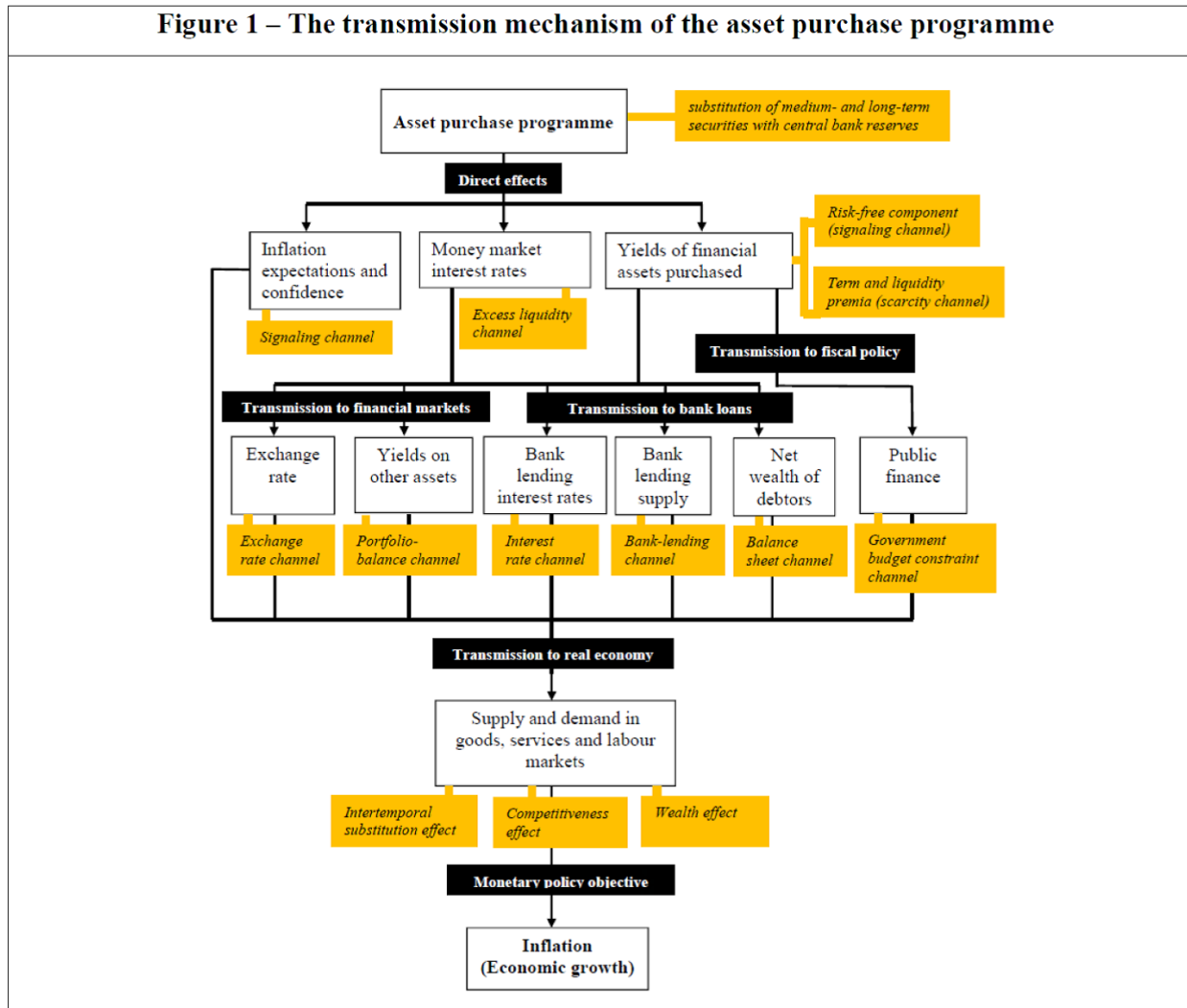


Sources: Markit, DG-ECFIN and Eurostat.

Note: The ESI and PMI are normalised.

Latest observations: 2017Q1 for GDP outcome, April 2017 for the ESI and the PMI.

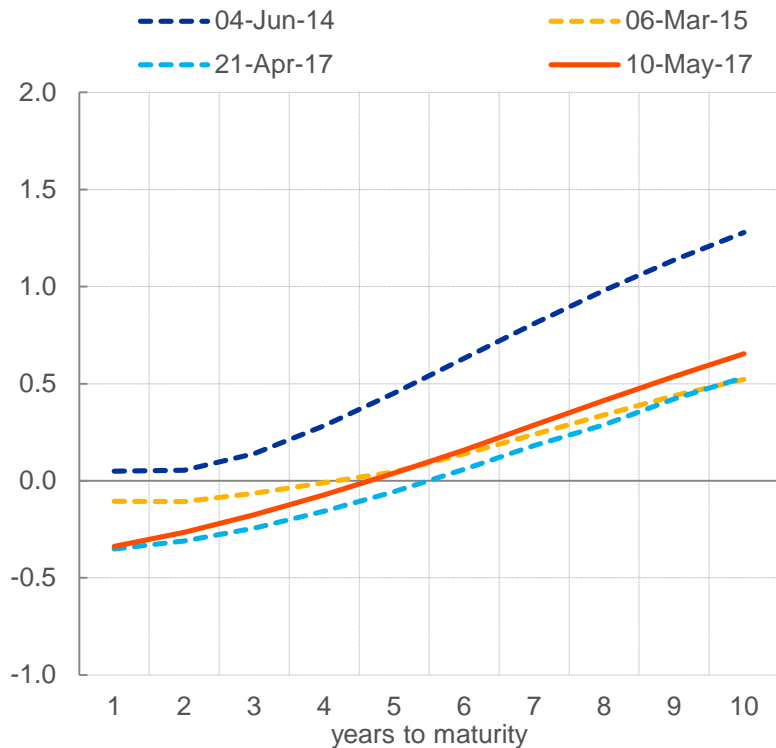
Figure 1 – The transmission mechanism of the asset purchase programme



Source: Banca d'Italia. Questioni di Economia e Finanza (Occasional Papers), Number 270, April 2015.

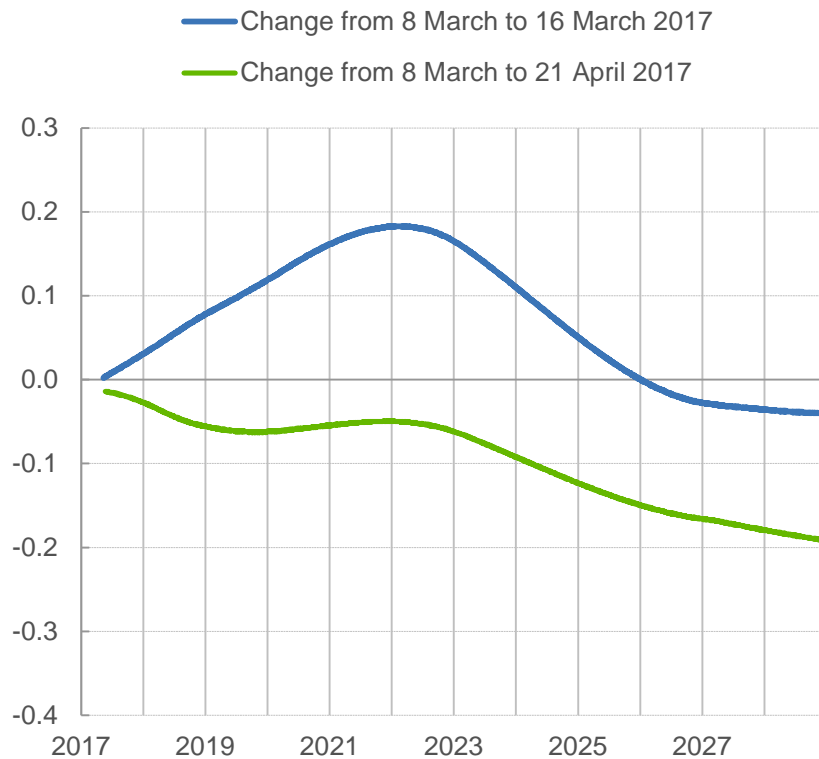


## OIS spot term structure (percentages per annum)



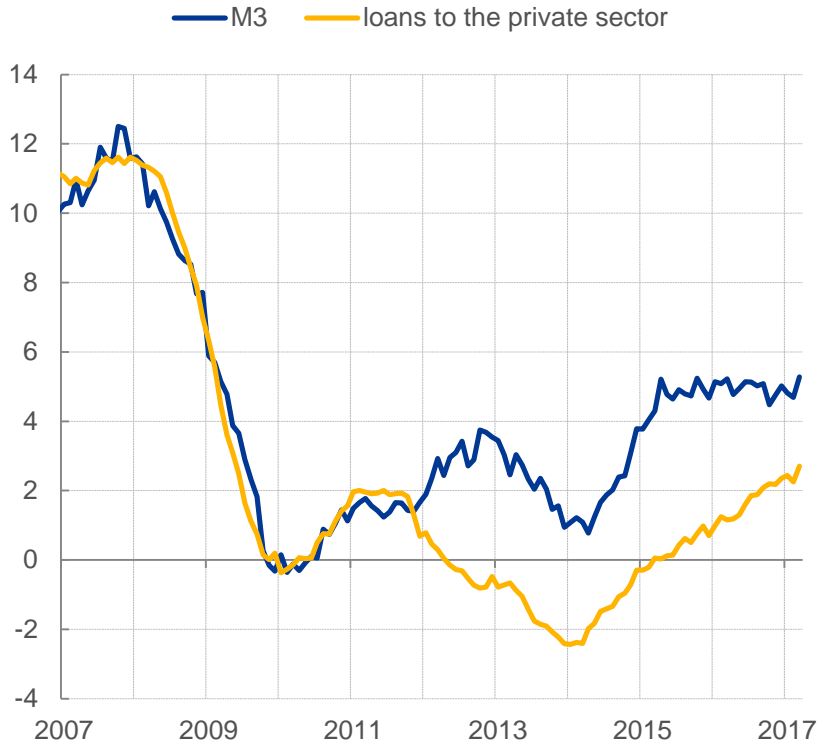
Sources: Thomson Reuters and ECB calculations.

## Change in EONIA forward yield curve (percentages per annum)



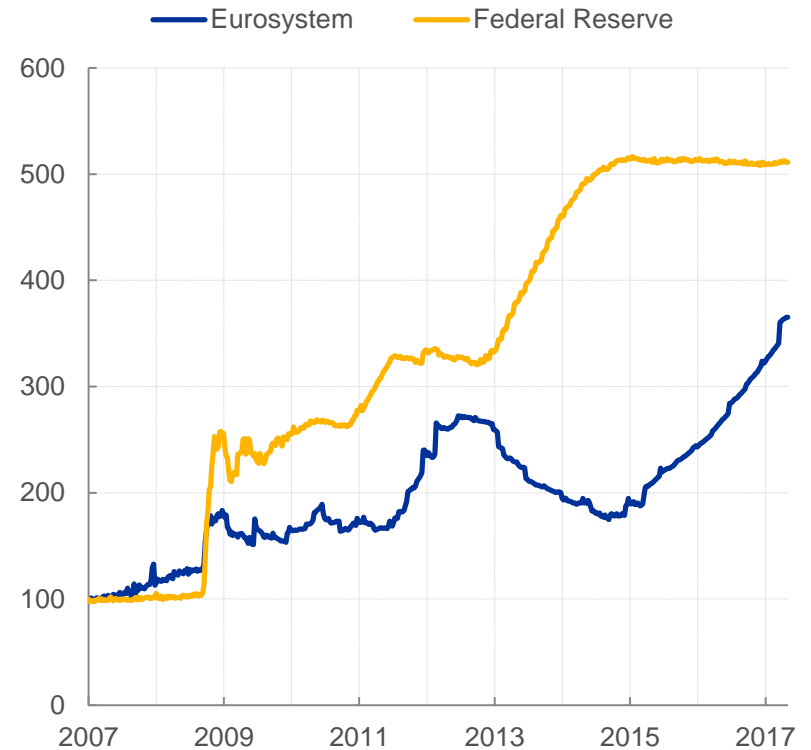
Sources: Thomson Reuters and ECB calculations.  
Latest observation: 2 May 2017.

## M3 and loan growth (annual percentage changes)



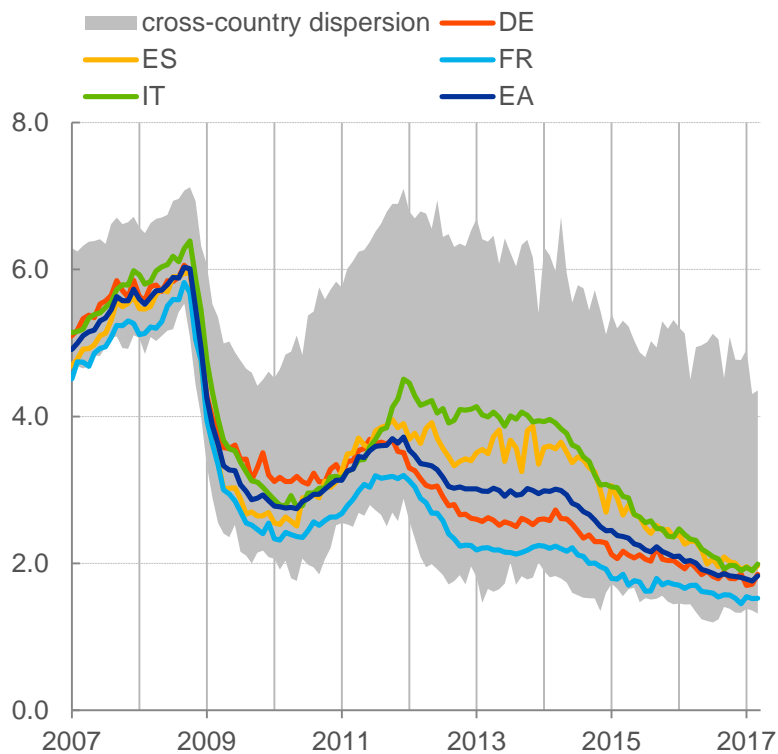
Source: ECB.  
Latest observation: March 2017.

## Central bank balance sheets (Jan. 2007 = 100)

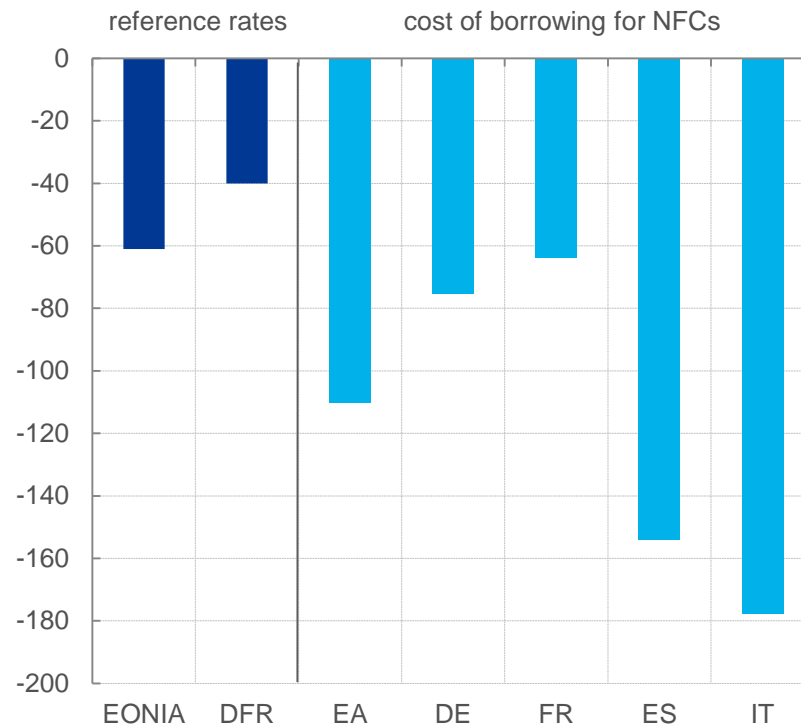


Sources: ECB, Federal Reserve.  
Latest observation: 5 May 2017.

## Composite lending rates to NFCs (percent per annum)



## Changes in reference rates and NFCs' cost of borrowing, May 2014 – March 2017 (basis points)



Source: ECB.

Notes: The indicator for the total cost of bank borrowing is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes. The cross-country dispersion displays the min and max range over a fixed sample of 12 euro area countries.

Latest observation: March 2017.

# ECB monetary policy measures since June 2014

	Jun. 2014	Sep. 2014	Jan. 2015	Dec. 2015	Mar. 2016	Dec. 2016
Rate cuts	MRO: 0.15%; MLF: 0.40%; DRF: -0.10%	MRO: 0.05%; MLF: 0.30%; DRF: -0.20%		MRO: 0.05%; MLF: 0.30%; DRF: -0.30%	MRO: 0.00%; MLF: 0.25%; DRF: -0.40%	
TLTROs	Fixed rate (MRO) Max. maturity: Sep. 2018 Uptake depends on net lending Mandatory early repayment				Fixed rate at MRO or below if lending > benchmark ( <i>min.</i> <i>DFR</i> ) No mandatory early repayment	
Private asset purchases		Broad portfolio of simple & transparent ABS and CBs		APP recalibration I	Purchase of inv.- grade NFC bonds ... with high pass-through to real economy	APP recalibration III
Public asset purchases			Purchases in EA sov. debt markets  €60bn monthly purchases, incl. ABSPP/CBPP3	<ul style="list-style-type: none"> <li>• Extension to Mar. 2017</li> <li>• Reinvestment of principal payments</li> </ul>	APP recalibration II	<ul style="list-style-type: none"> <li>• €80bn monthly purchases</li> <li>• Higher issue share limit for certain issuers</li> </ul>
						<ul style="list-style-type: none"> <li>• €60bn monthly purchases until December 2017</li> <li>• Min. remaining maturity for PSPP eligible securities decreased from 2y to 1y</li> <li>• Purchases below DF rate allowed if necessary</li> </ul>