



Peter Praet
Member of the Executive Board

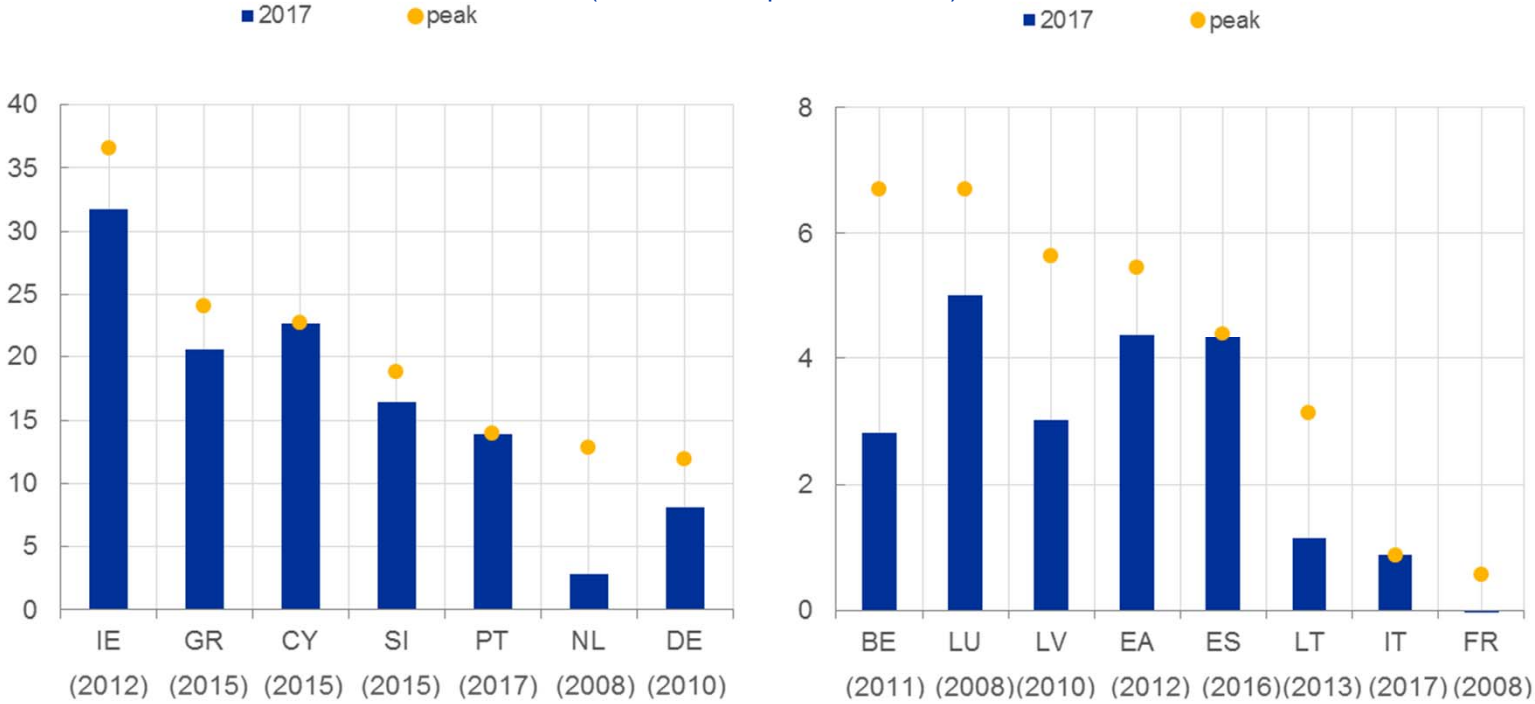
Economic developments in the euro area

Société Royale d'Economie Politique

17 September 2018

Assistance to financial sector since 2007: impact on the debt

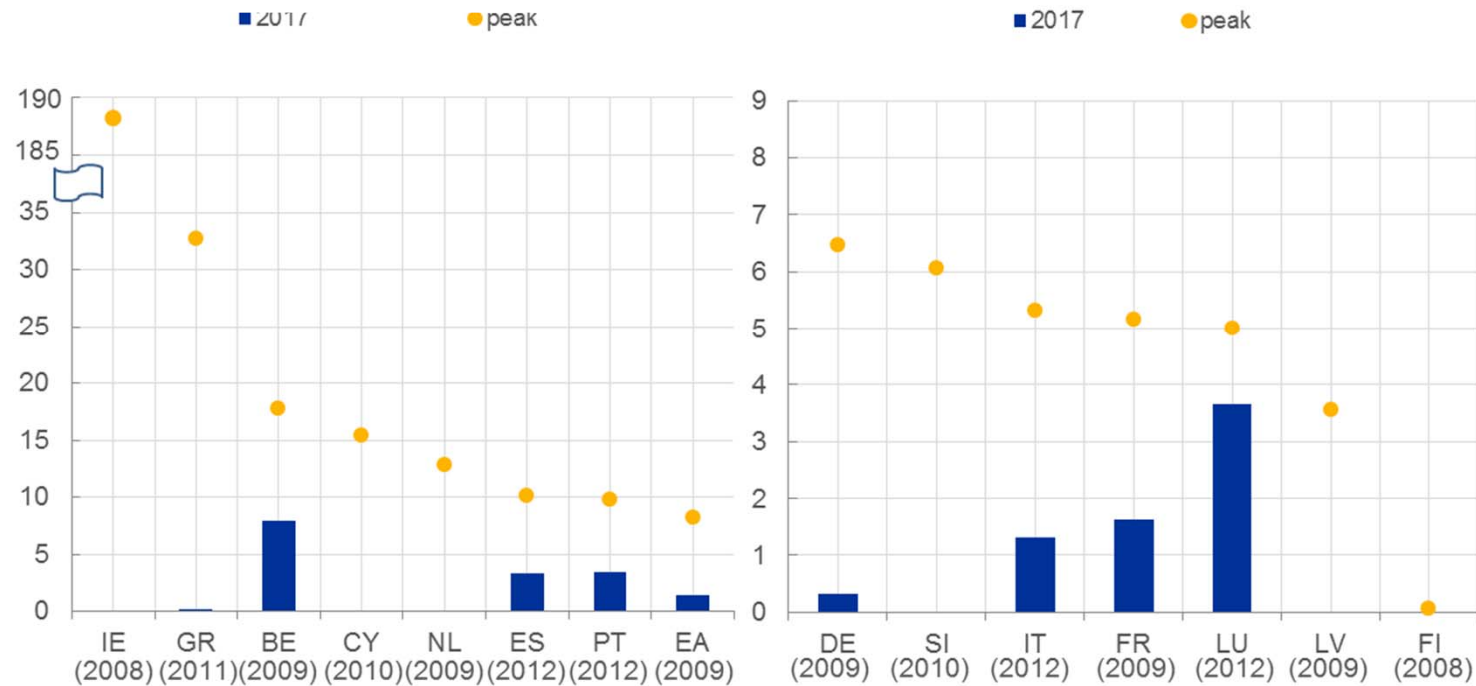
(cumulative, in percent of GDP)



Sources: ESCB
 Note: the years in brackets correspond to peak year of financial assistance impact. No impact in EE, MT, SK and FI.
 Latest observation: 2018.

Assistance to financial sector since 2007: contingent liabilities

(cumulative, in percent of GDP)

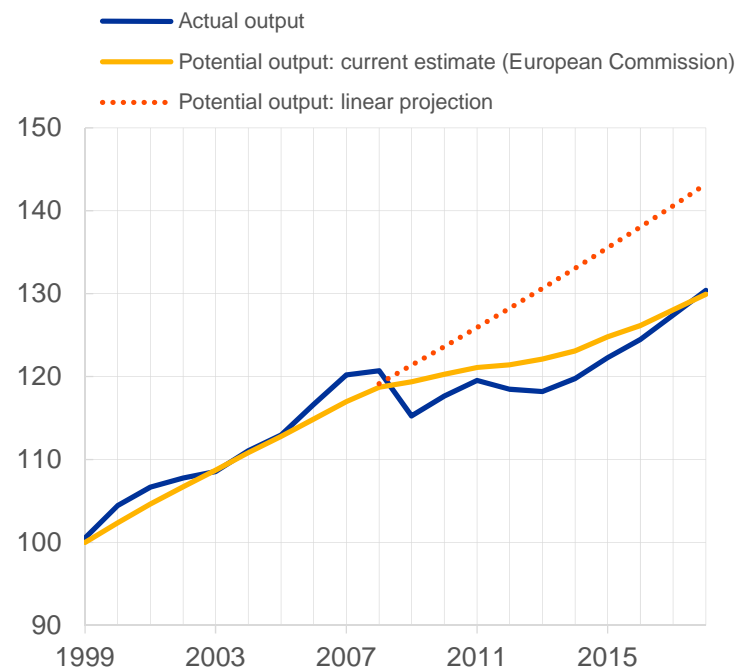


Sources: ESCB

Note: The years in brackets correspond to peak year of financial assistance impact. No impact on contingent liabilities in EE, MT, SK and FI. In IE, the increase in contingent liabilities on account of financial sector assistance also includes a guarantee on deposits.

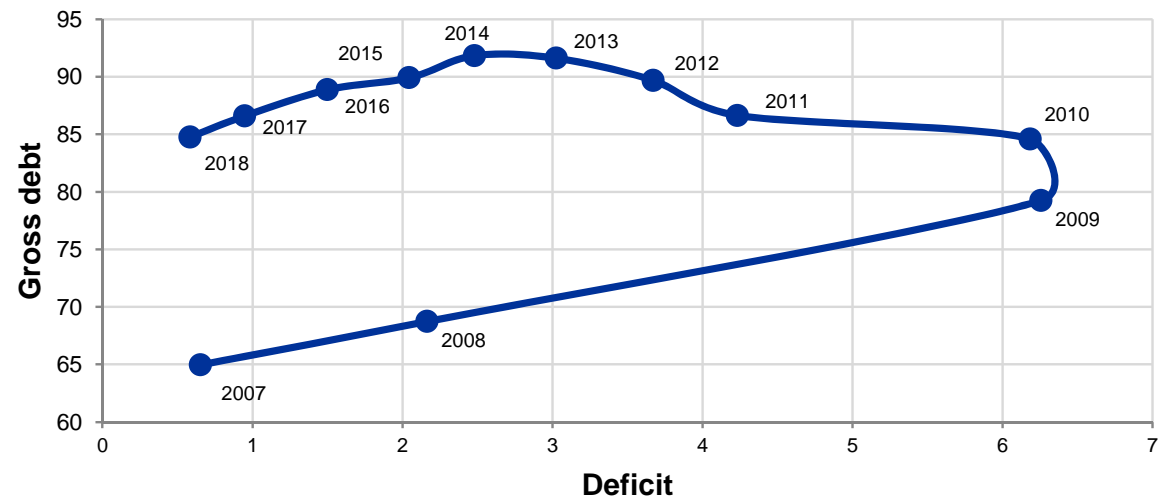
Latest observation: 2018.

Actual GDP and pre-crisis trend in the euro area (Index, 1999=100)



Sources: European Commission and ECB calculations
Latest observation: 2018.

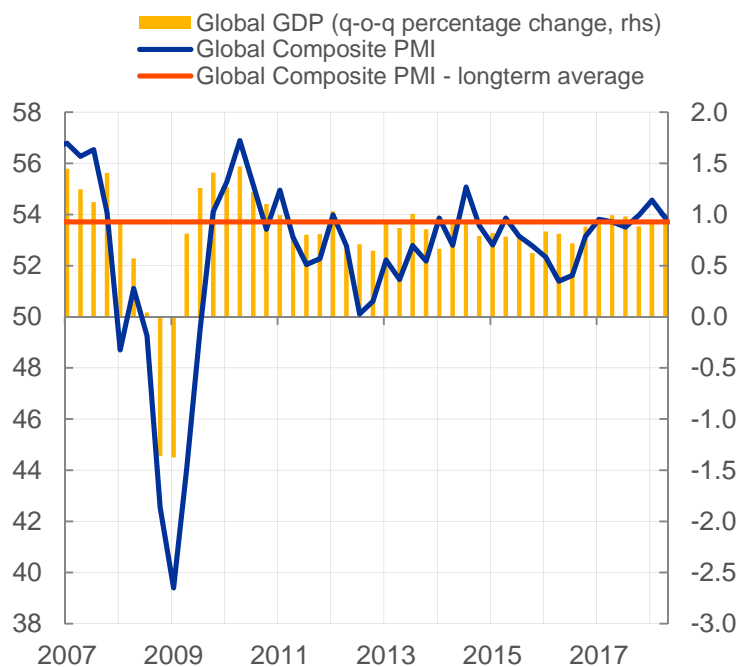
Euro area deficit and gross debt trajectory (percentage of GDP)



Source: ESCB

Global PMI composite output and global output

(lhs: diffusion index; rhs: q-o-q % changes)

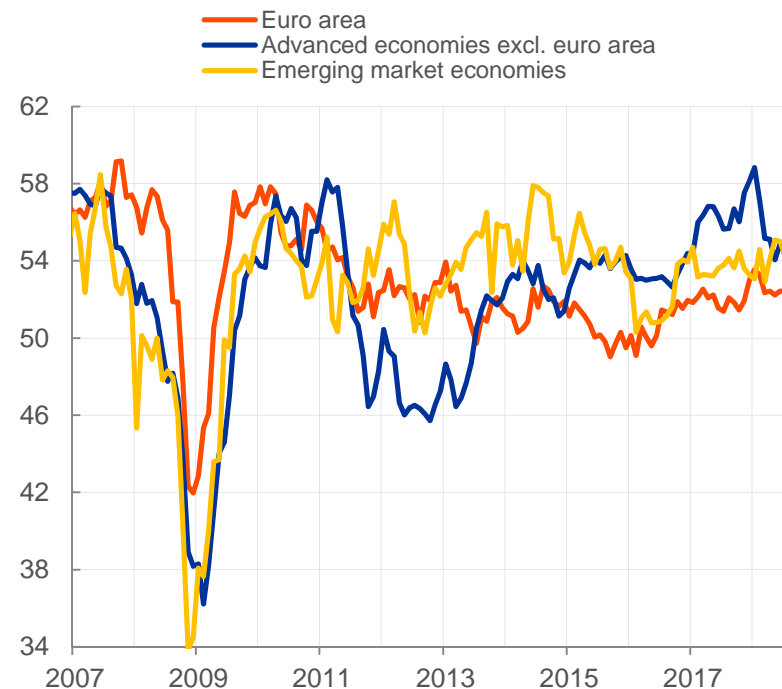


Sources: Markit, ECB staff calculations.

Note: Long-term average refers to 1999 onwards. Latest observation: 2018Q2 for PMI and for global GDP. Forecast from September 2018 MPE for 2018Q2 global GDP.

Composite output PMIs: euro area, advanced economies and EMEs

(diffusion index; SA; monthly data)

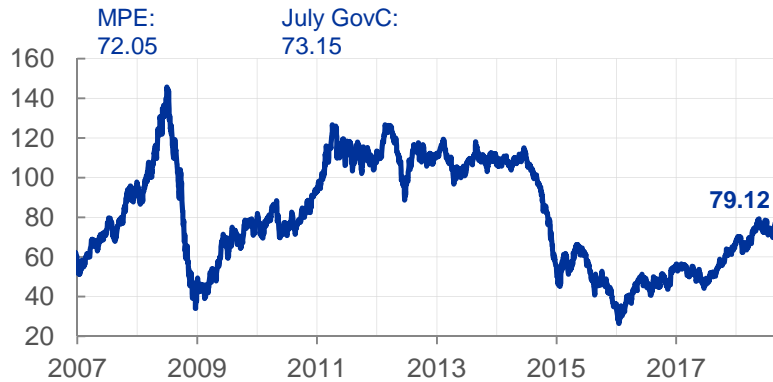


Sources: Markit, Haver Analytics, ECB staff calculations.

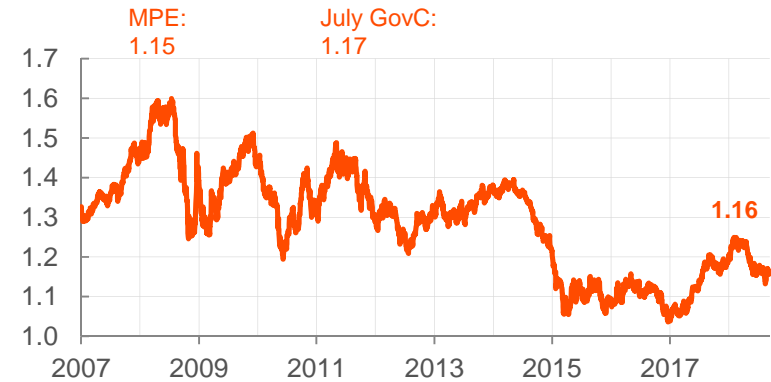
Notes: ECB staff calculations for the aggregate advanced economies excluding the euro area, comprising US, Japan and UK. Latest observation: August 2018.

Commodity prices and exchange rates

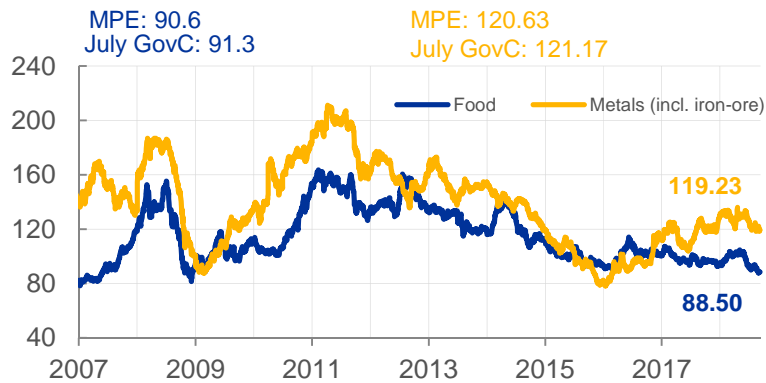
Oil (USD/barrel)



USD/EUR (level)

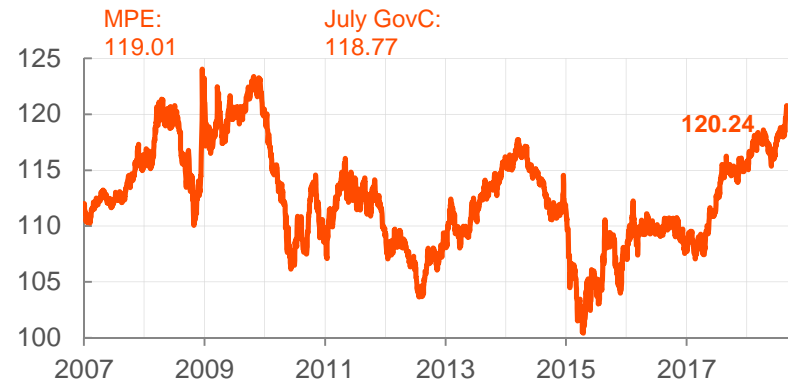


Non-oil (index, 2015=100)



Sources: Bloomberg (oil spot price), IMF (non-oil), ECB calculations.
Latest observations: 11 September 2018 (oil), 7 September 2018 (non-oil).

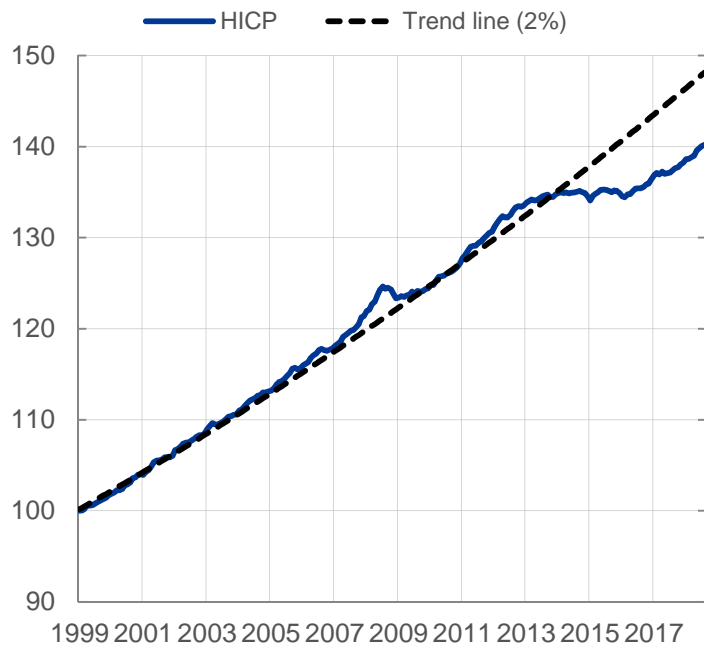
NEER-38 (index 1999Q1=100)



Source: ECB.
Latest observation: 11 September 2018.

Price level

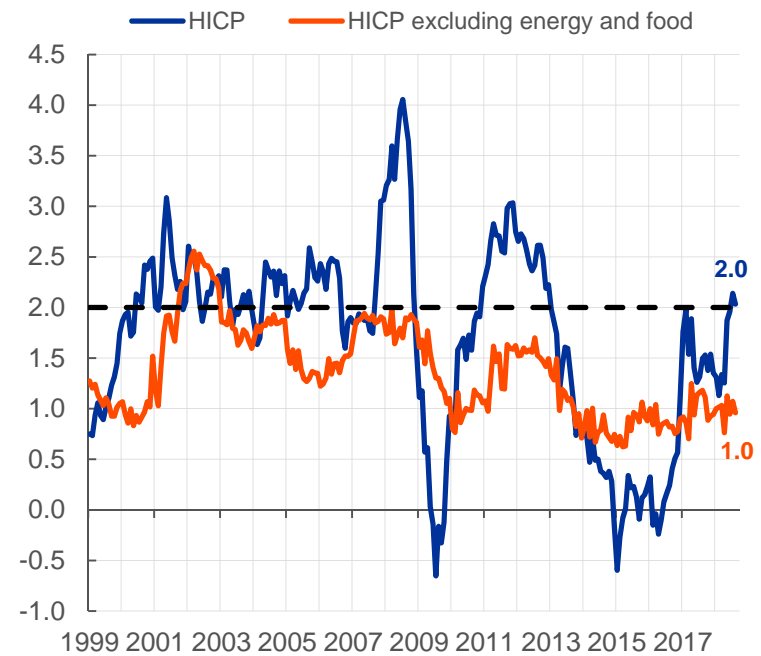
(1999m1=100, trend= year-on-year inflation at 2%)



Sources: Eurostat and ECB calculations
Latest observations: August 2018 (flash estimate)

HICP and HICP excluding energy and food

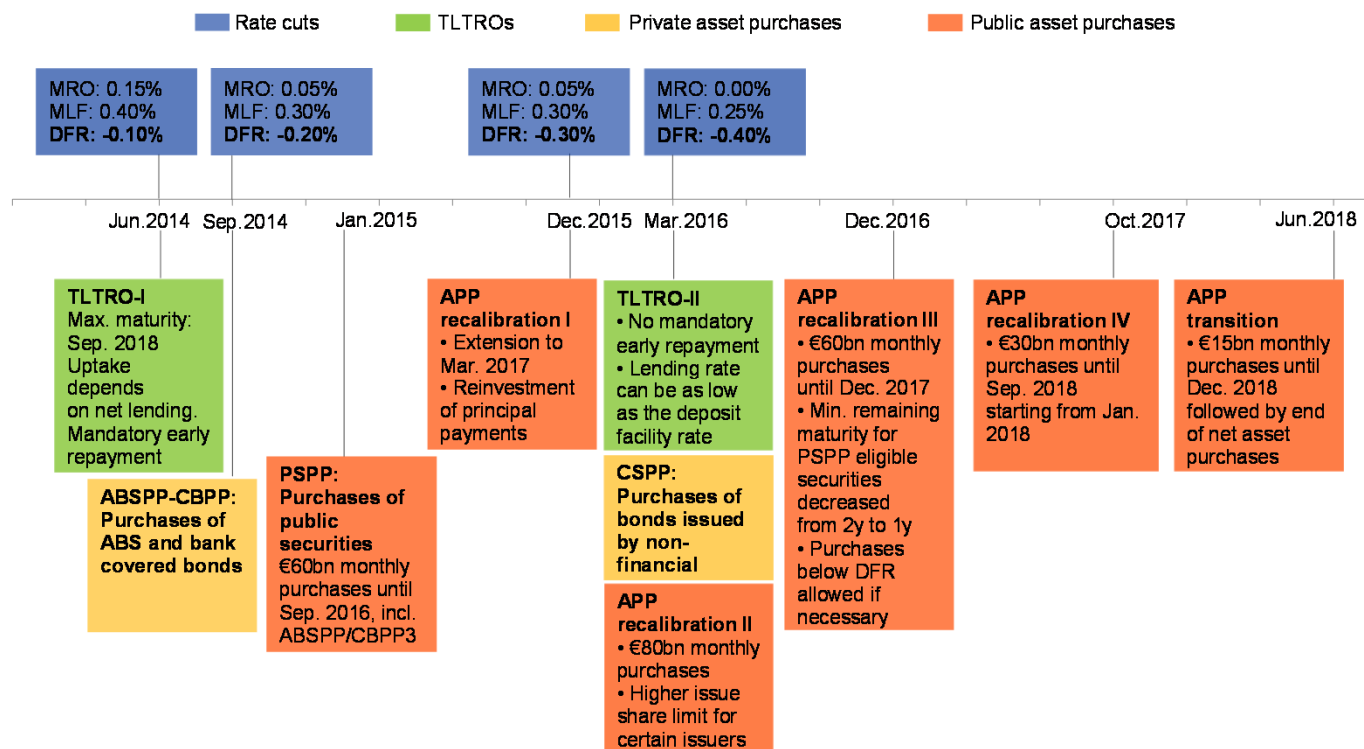
(annual percentage changes)



Sources: Eurostat.
Latest observations: August 2018 (flash estimates).

The 2014-2018 ECB package of measures

ECB package of measures timeline



Source: ECB.

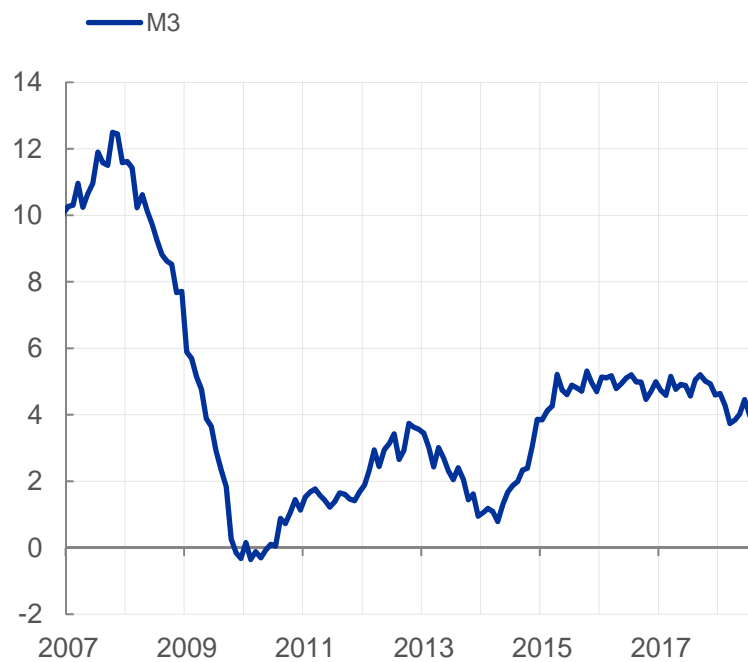
Monetary policy stance determined by combination & interaction of:

- our **policy rates**,
- our **asset purchase programme**,
- and our **forward guidance** on each of these tools

... complemented by:

- the **TLTROs**, which will remain outstanding until March 2021

Growth rate of M3 (annual percentage changes)

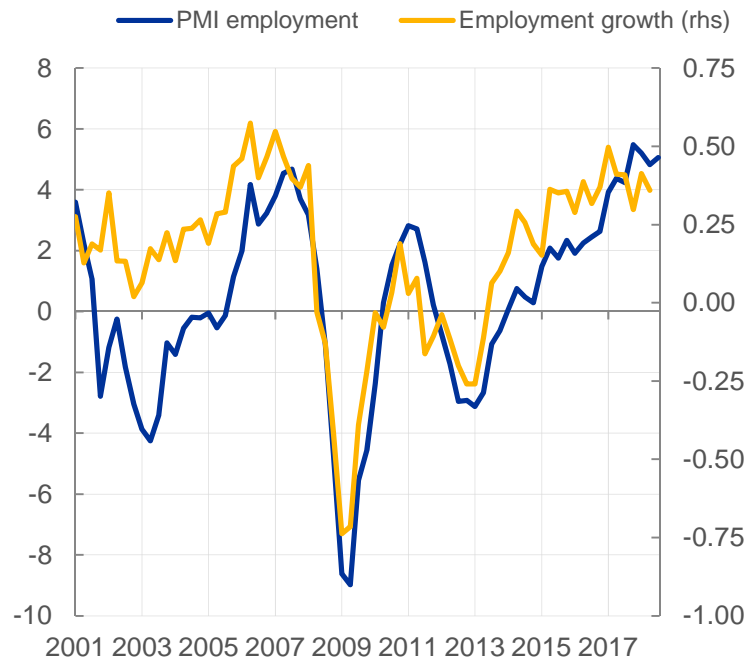


Sources: ECB
Latest observations: July 2018

Labour market

Employment

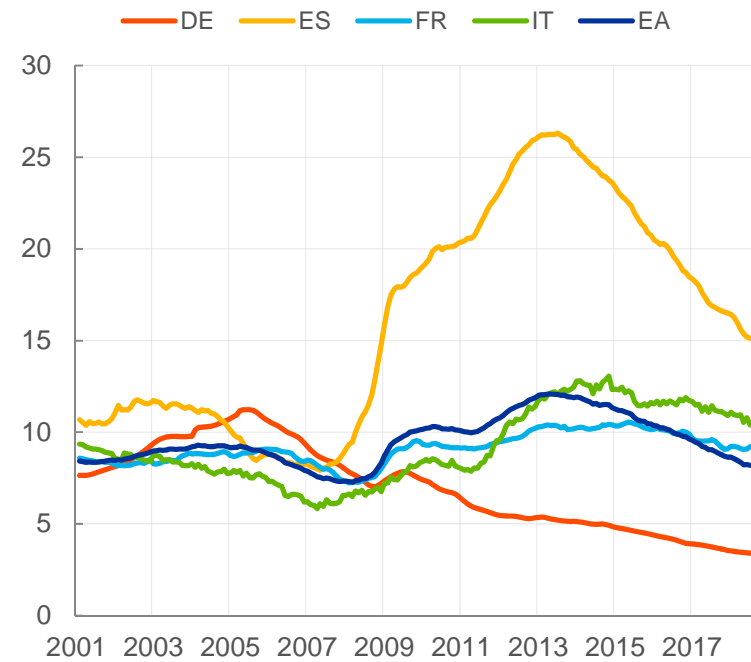
(PMI: deviation from 50; Employment growth q-o-q: percentages)



Sources: Eurostat, Markit. ECB calculations.
 Note: Positive values for PMI indicate expansion.
 Latest observations: 2018Q2 for employment growth; 2018Q3 for PMI.

Unemployment rate

(in percent of labour force)

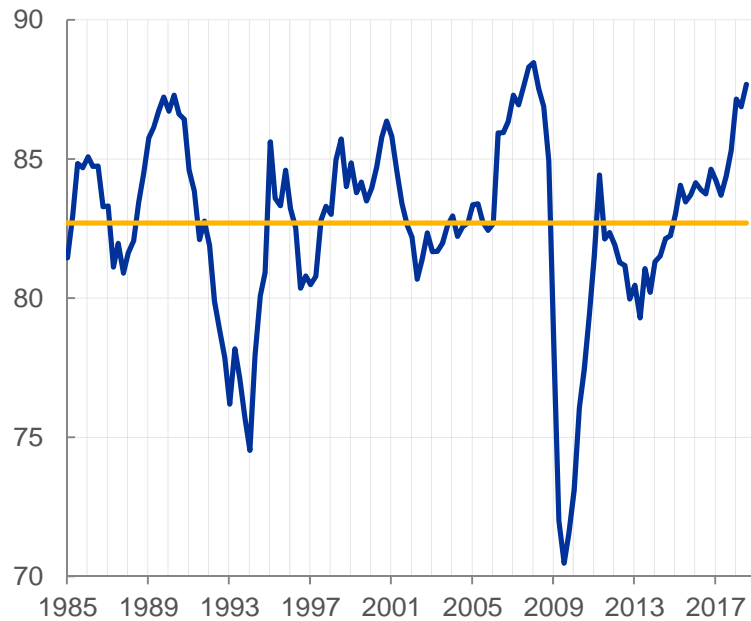


Source: Eurostat.
 Latest observation: July 2018.

Business investment

Capacity utilisation

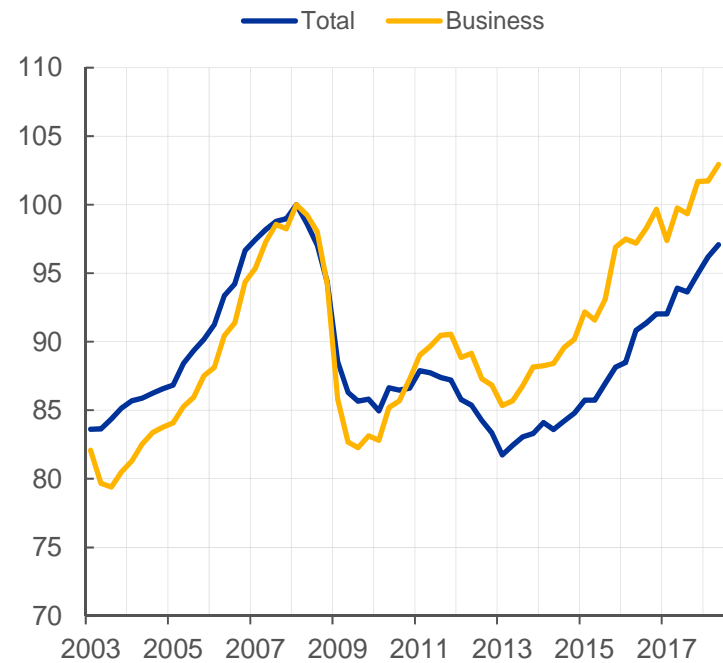
(capital goods sector, percentage)



Sources: DG-ECFIN, ECB calculations.
Note: Long-term average refers to the period since 1985.
Latest observation: 2018Q3.

Real investment

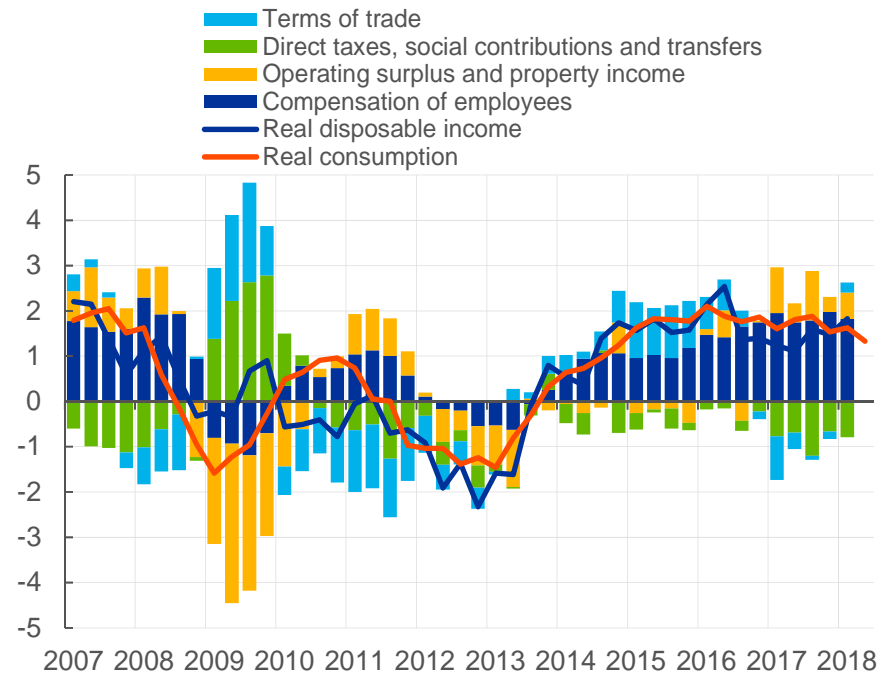
(2008Q1=100)



Sources: September 2018 MPE, ECB calculations.
Note: Series are adjusted for the estimated impact of the Netherlands in 2015 and Ireland in 2016. Latest observation: 2018Q2.

Private consumption

Disposable income and consumption (annual percentage changes)



Sources: Eurostat, ECB calculations.

Notes: All income components are deflated with the GDP deflator. The contribution from the terms of trade is proxied by the differential in the GDP and consumption deflator. Consumption and total disposable income are deflated with the consumption deflator.

Latest observations: 2018Q1 for income, 2018Q2 for consumption.

The ECB's forward guidance before the 14 June 2018 Governing Council

Key ECB interest rates

- expected to remain at present levels for an extended period of time
- and well past horizon of **net asset purchases**

Asset Purchase Programme (APP)

- **net asset purchases** intended to continue at monthly pace of €30 billion, until end-Sep 2018
- or beyond, if necessary & in any case until GovC sees sustained adjustment in path of inflation (SAPI) consistent with inflation aim
- Eurosystem will reinvest principal payments from maturing securities for an extended period of time after end of net purchases, and in any case for as long as necessary

Criteria for sustained adjustment in the path of inflation (SAPI)

Convergence

- Headline inflation on course to reach levels below, but close to, 2% in the medium term

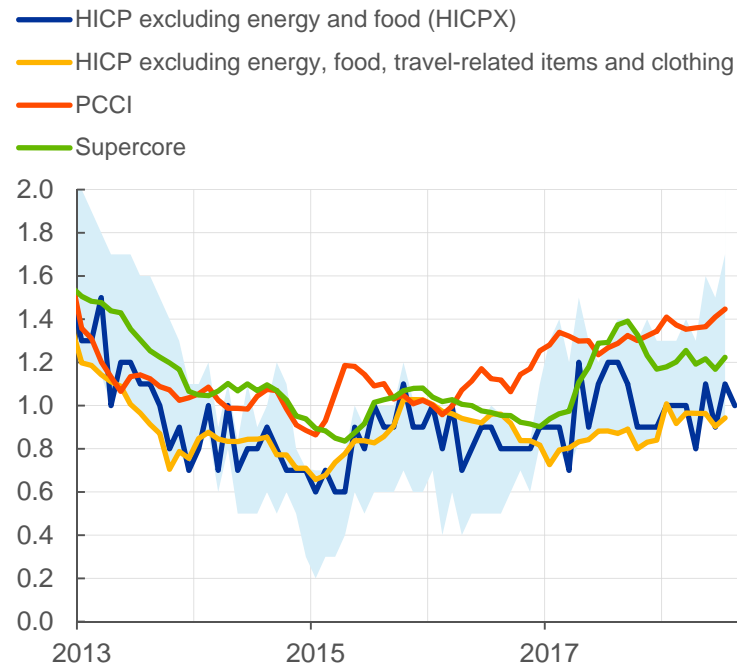
Confidence

- Sufficient confidence in durable stabilisation of inflation around these levels

Resilience

- Resilience of inflation convergence even after the end of net asset purchases.

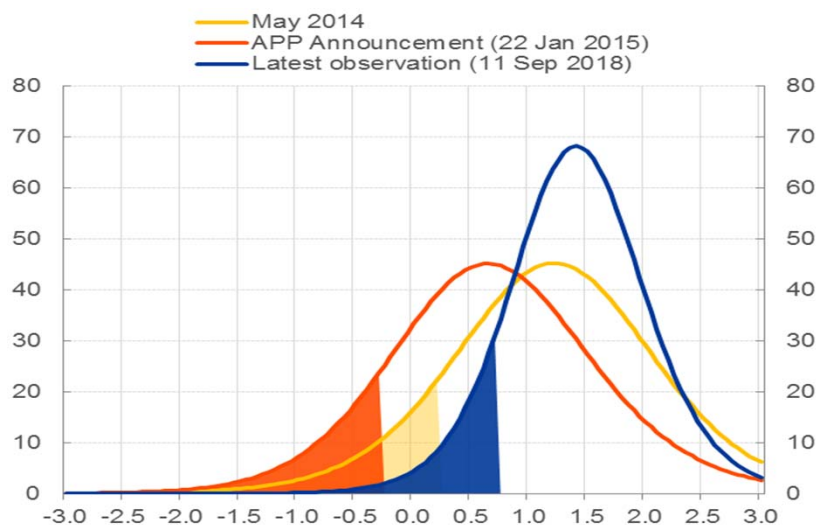
Measures of underlying inflation (annual percentage changes)



Sources: Eurostat, ECB calculations.

Note: The permanent and common component of inflation (PCCI, formerly known as U2core) corresponds to a dynamic factor model based on the full 93 HICP items from each of 12 countries. Supercore (slightly revised methodology) is based only on those items in HICP excluding energy and food that are sensitive to slack as measured by the output gap. The range includes exclusion-based measures, trimmed means and a weighted median. Latest observations: August 2018 (flash estimate) for HICP excluding energy and food (HICPX) and July 2018 for the rest.

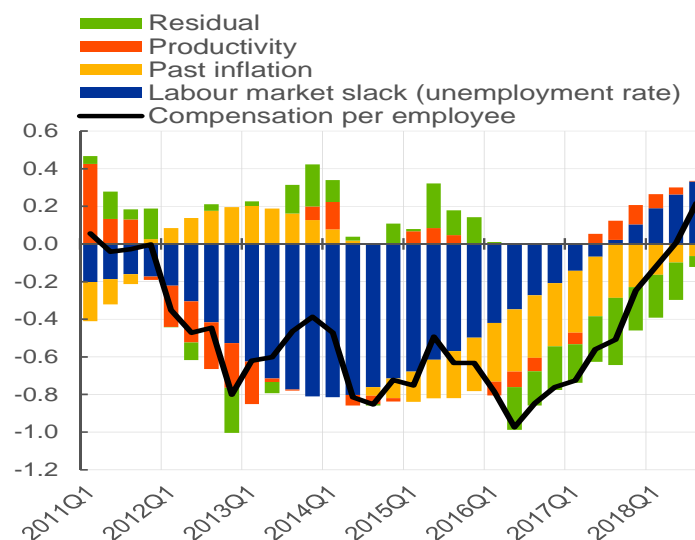
Option implied probability density function of euro area inflation over the next five years



Sources: Bloomberg, Reuters, and ECB calculations.

Notes: Density functions are computed from 5-year maturity zero-coupon inflation option floors under the assumption of risk neutrality. Shaded areas indicate a probability mass of 15% assigned to the inflation rate over the next 5 years.

Euro area wage Phillips curve decomposition (deviations from mean in y-o-y growth terms; percentage point contributions)



Sources: Eurostat, ECB staff calculations based on June 2018 BMPE.

Notes: Contributions are calculated based on an equation in which the annualised quarterly growth of compensation per employee is regressed against its own lag, the lagged unemployment rate, productivity growth, the four-quarter moving average of headline inflation and a constant. Estimation sample: 1999Q1 until 2018Q1. Contributions are derived as in Yellen, J.L. (2015), "Inflation Dynamics and Monetary Policy", Speech at the Philip Gamble Memorial Lecture, University of Massachusetts, Amherst, September 24.

The ECB's current forward guidance (13 September 2018)

Key ECB interest rates

- expected to remain at their present levels at least through the summer of 2019
- and, in any case, for as long as necessary to ensure the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term

Asset purchase programme (APP)

- Reduce the monthly pace of net asset purchases to €15 billion (from previously €30 billion) from October until end-December 2018
- Anticipate that, subject to incoming data confirming the medium-term inflation outlook, net purchases will end after December 2018
- Reinvest principal payments from maturing securities for an extended period of time after the end of net purchases, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation