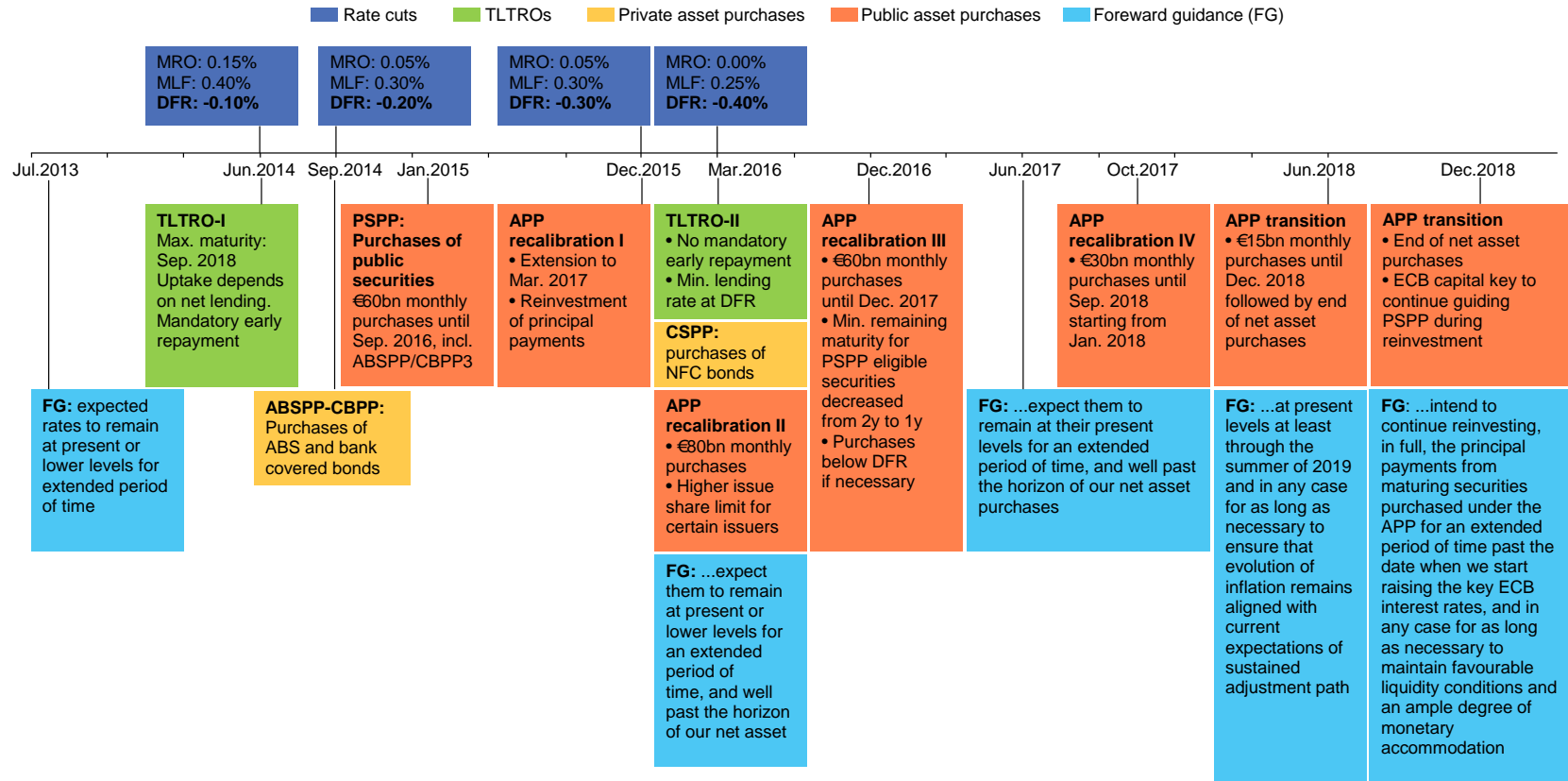**Peter Praet**
Member of the Executive Board

Economic situation and outlook

Frankfurt Main Finance Breakfast

20 February 2019

Rate cuts:

MRO: 0.15%	MRO: 0.05%	MRO: 0.05%	MRO: 0.00%
MLF: 0.40%	MLF: 0.30%	MLF: 0.30%	MLF: 0.25%
DFR: -0.10%	**DFR: -0.20%**	**DFR: -0.30%**	**DFR: -0.40%**

Timeline: Jul.2013 | Jun.2014 | Sep.2014 | Jan.2015 | Dec.2015 | Mar.2016 | Dec.2016 | Jun.2017 | Oct.2017 | Jun.2018 | Dec.2018

TLTRO-I
Max. maturity: Sep. 2018 Uptake depends on net lending. Mandatory early repayment

PSPP: Purchases of public securities
€60bn monthly purchases until Sep. 2016, incl. ABSPP/CBPP3

APP recalibration I
• Extension to Mar. 2017
• Reinvestment of principal payments

TLTRO-II
• No mandatory early repayment
• Min. lending rate at DFR

CSPP:
purchases of NFC bonds

APP recalibration III
• €60bn monthly purchases until Dec. 2017
• Min. remaining maturity for PSPP eligible securities decreased from 2y to 1y
• Purchases below DFR if necessary

APP recalibration IV
• €30bn monthly purchases until Sep. 2018 starting from Jan. 2018

APP transition
• €15bn monthly purchases until Dec. 2018 followed by end of net asset purchases

APP transition
• End of net asset purchases
• ECB capital key to continue guiding PSPP during reinvestment

FG: expected rates to remain at present or lower levels for extended period of time

ABSPP-CBPP:
Purchases of ABS and bank covered bonds

APP recalibration II
• €80bn monthly purchases
• Higher issue share limit for certain issuers

FG: ...expect them to remain at present or lower levels for an extended period of time, and well past the horizon of our net asset

FG: ...expect them to remain at their present levels for an extended period of time, and well past the horizon of our net asset purchases

FG: ...at present levels at least through the summer of 2019 and in any case for as long as necessary to ensure that evolution of inflation remains aligned with current expectations of sustained adjustment path

FG: ...intend to continue reinvesting, in full, the principal payments from maturing securities purchased under the APP for an extended period of time past the date when we start raising the key ECB interest rates, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary accommodation
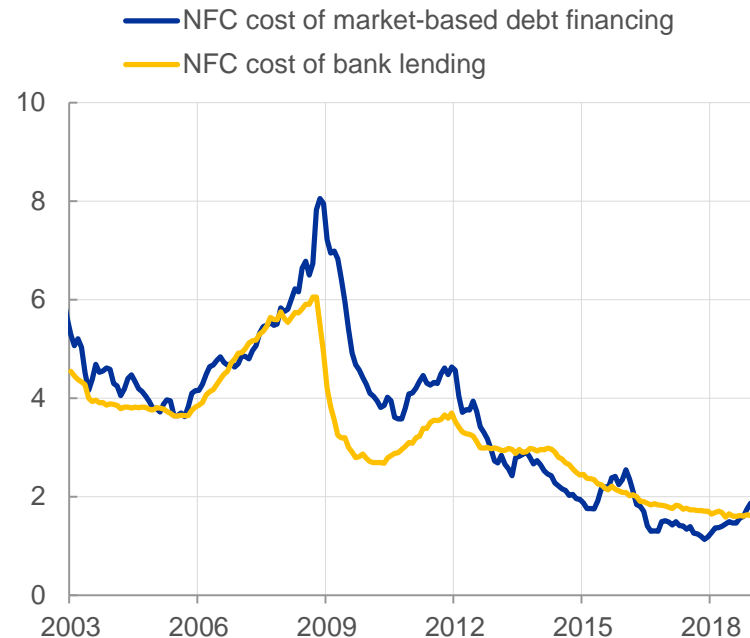
Outright monetary transactions (OMT) – announced in August 2012, yet to be activated
Transactions in secondary sovereign bond markets, subject to strict and effective conditionality
Aim: safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy

EONIA forward curves estimated from OIS
(% per annum)
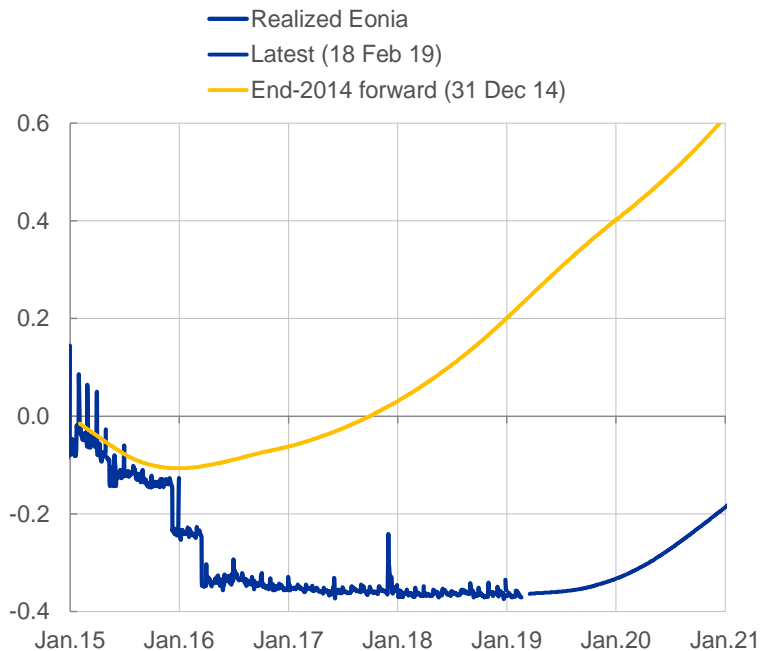
- Realized Eonia
- Latest (18 Feb 19)
- End-2014 forward (31 Dec 14)

Nominal cost of debt financing for euro area NFCs by component (% per annum)

- NFC cost of market-based debt financing
- NFC cost of bank lending

From the January 2019 Introductory Statement

Calendar-based forward guidance

Interest rates

o *We **continue to expect** [the key ECB interest rates] to remain **at their present levels at least through the summer of 2019…***

Reinvestments

o *We intend to **continue reinvesting**, in full, the principal payments from maturing securities purchased under the APP **for an extended period of time past the date when we start raising the key ECB interest rates…***

State-contingent forward guidance

Interest rates

o *We **continue to expect** [the key ECB interest rates] … 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.*

Reinvestments

o *We intend to **continue reinvesting**, in full, the principal payments from maturing securities purchased under the APP … in any case **for as long as necessary** to maintain favourable liquidity conditions and an ample degree of monetary accommodation.*

EONIA forward curve estimated from OIS

(% per annum)

Realized EONIA
Pre-Dec 2018 GovC forward curve (11 Dec 18)
Post-Dec 2018 GovC forward curve (13 Dec 18)
Latest EONIA forward curve (18 Feb 19)
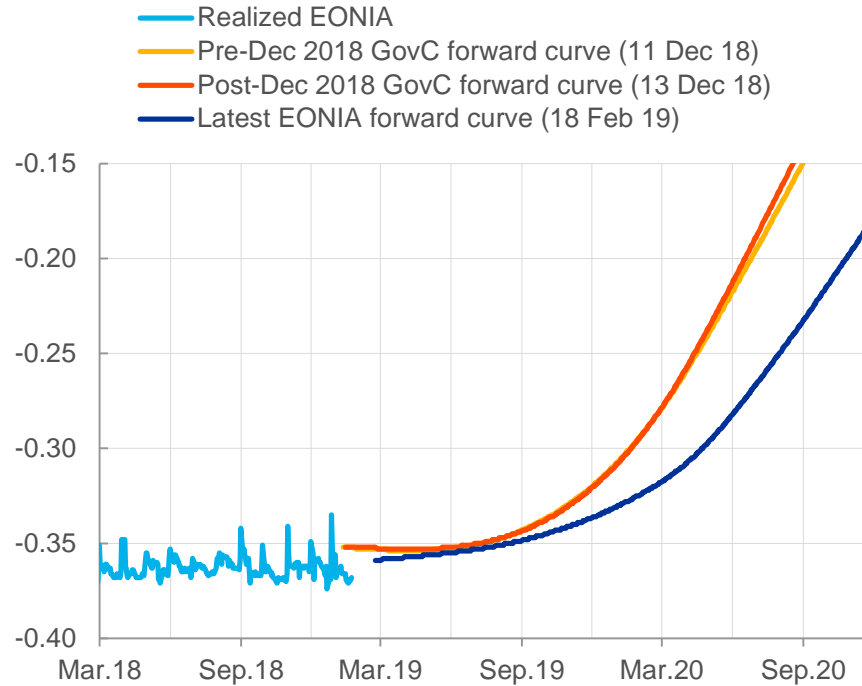
Sources: Thomson Reuters, ECB calculations.
Latest observation: 18 February 2019 for realized EONIA.

Global PMI composite output and global GDP growth

(lhs: diffusion index; rhs: q-o-q % changes)
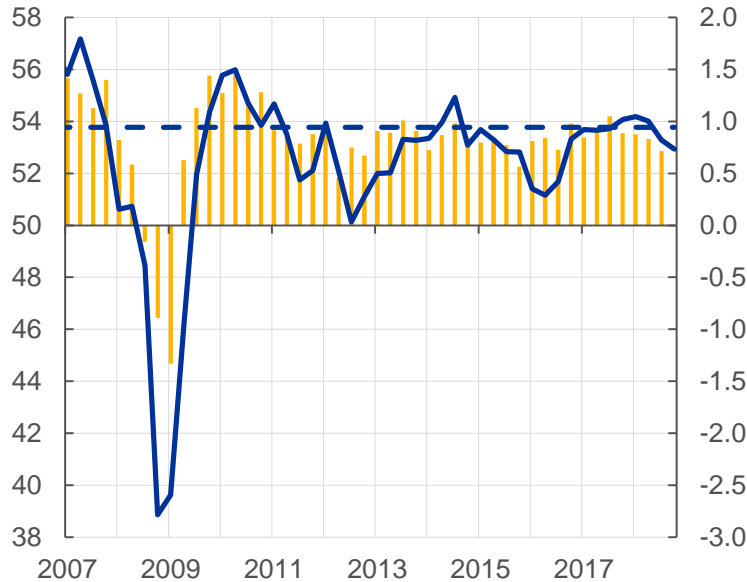
Sources: Markit, ECB calculations.
Note: Long-term average refers to 1999 onwards. Latest observation: 2018Q4 for PMI and 2018Q3 for global GDP.

Composite output PMIs: euro area, advanced economies and EMEs

(diffusion index; SA; monthly data)
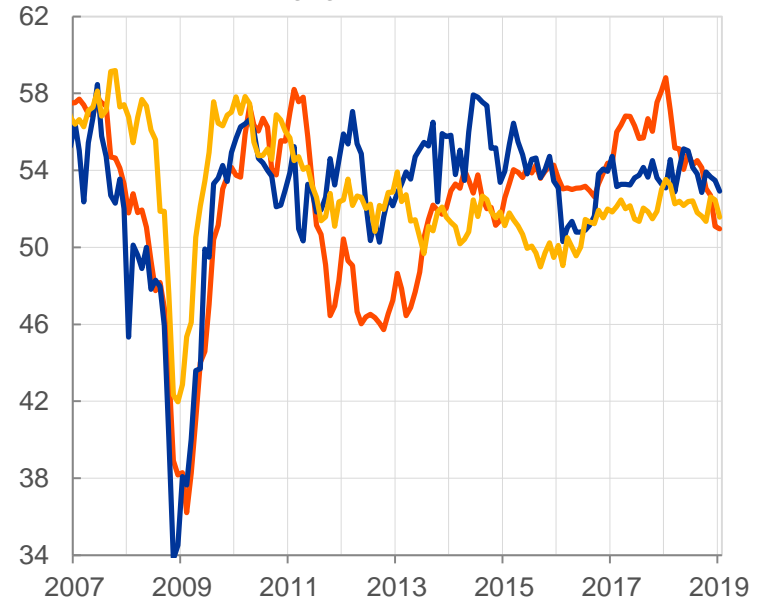
Sources: Markit, Haver Analytics, ECB calculations.
Latest observation: January 2019.

Industrial production
(annual % changes)

Manufacturing new orders
(diffusion index, 50 = no change)
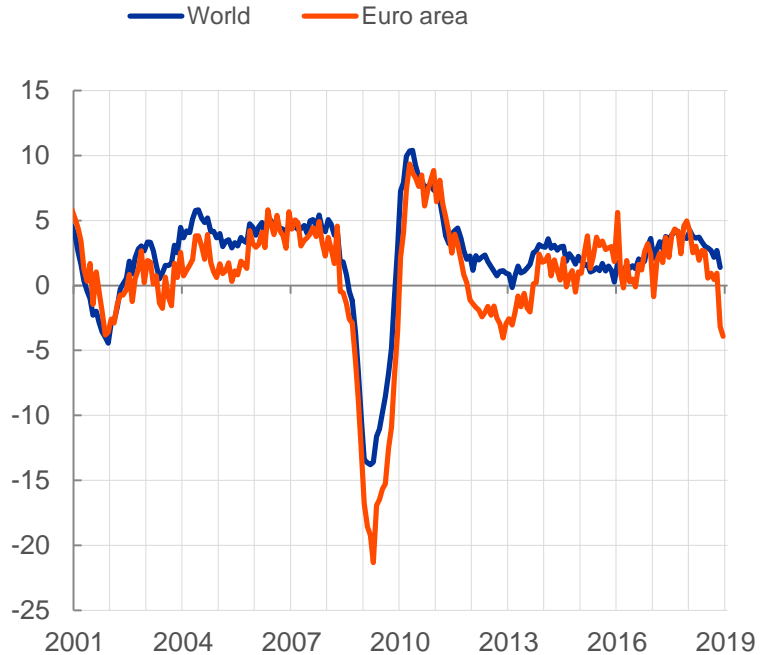
Sources: Eurostat, Haver Analytics.
Last observations: November 2018 for world, and December 2018 for euro area.
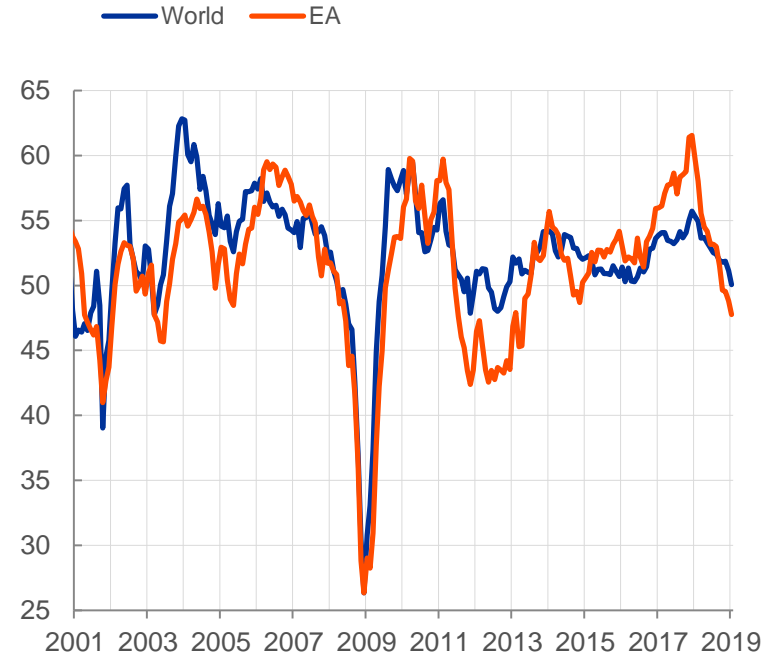
Source: Markit.
Last observation: January 2019.

Real private consumption and disposable income (annual % changes, pp contributions)

Legend:
- Terms of trade
- Direct taxes, social contributions and transfers
- Operating surplus and property income
- Compensation of employees
- Real disposable income
- Real consumption
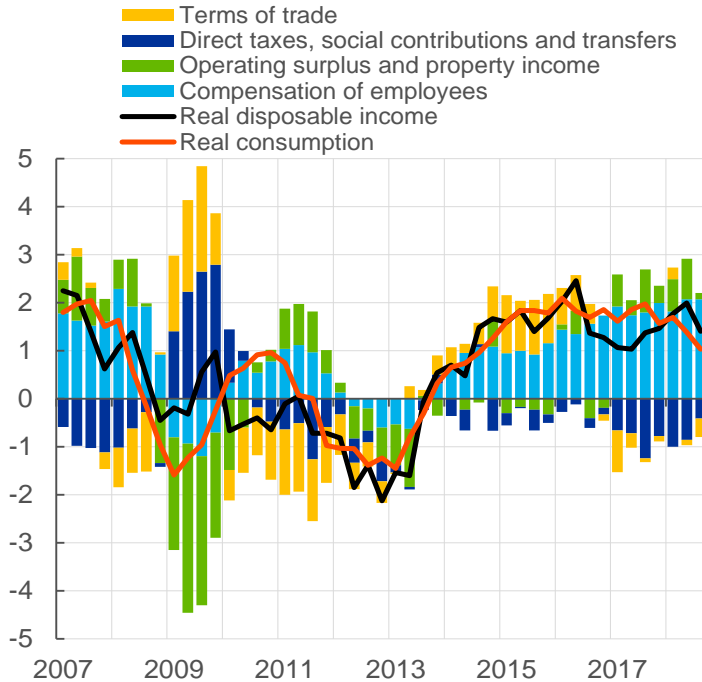
Sources: Eurostat, ECB calculations.
Notes: All income components are deflated with the GDP deflator. The contribution from the terms of trade is proxied using the difference between the GDP and consumption deflators. Consumption and total disposable income are deflated with the consumption deflator. Latest observation: 2018Q3.

Compensation of employees (annual % changes, pp contributions)

Legend:
- Compensation per employee
- Employees
- Nominal compensation of employees
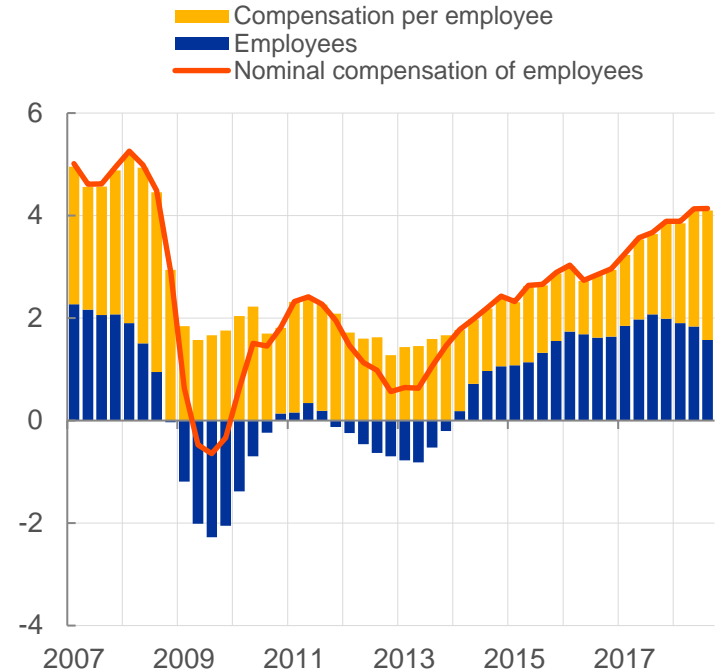
Sources: Eurostat, ECB calculations.
Latest observation: 2018Q3.

Euro area goods exports by destination
(real, 3m-3m quarterly % changes, pp contributions)

Legend:
- United States
- Other
- Non-euro area Europe
- Total
- Brazil, Russia, China and Turkey
- Asia (excluding CN)
- Intra-euro area
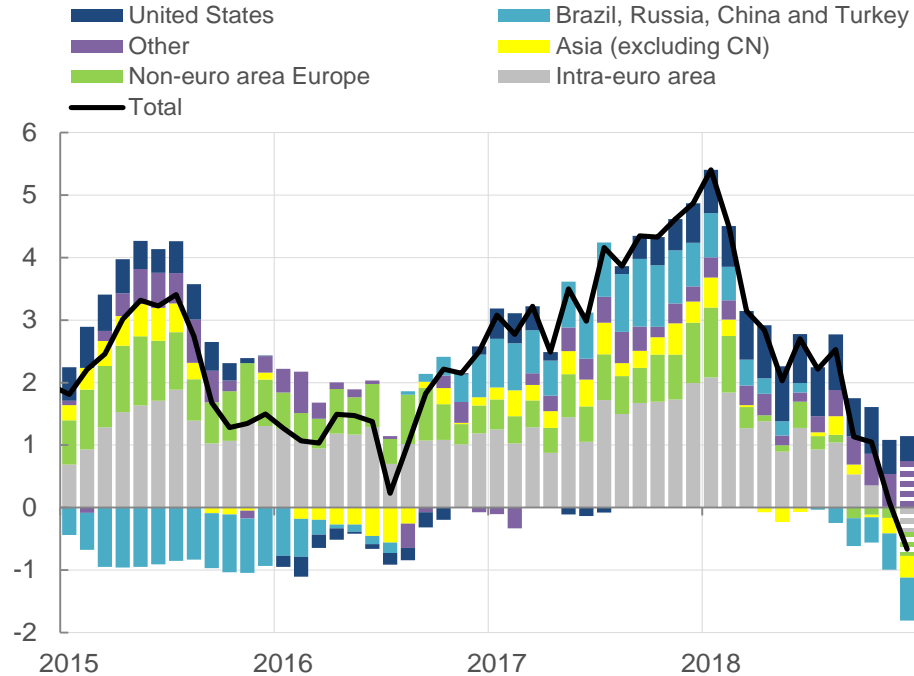
Sources: Eurostat (External trade statistics) and ECB staff calculations.
Note: The dashed bars have been computed by imputing the average of previous three months contributions. Latest observations: November 2018. December available for United States, Asia (excl. CN) and Brazil, Russia, China and Turkey.

Global and euro area trading partners' imports

(real, 3m-3m annual % changes, pp contributions)
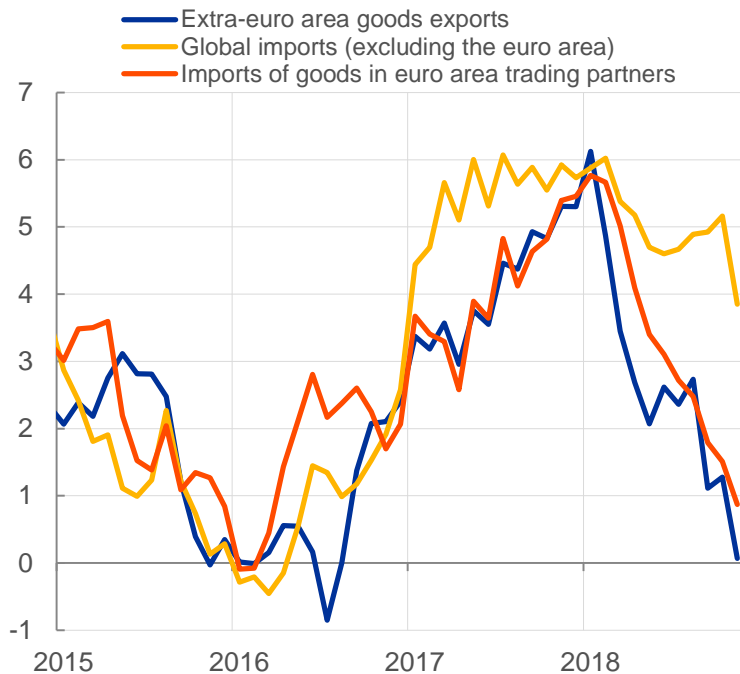
Sources: Eurostat (External trade), CPB and ECB staff calculations. Last observation: November 2018 .Imports of goods in euro area trading partner is constructed with euro area partners' imports weighted with respective euro area trade shares.

Extra euro area goods exports by destination

(real, 3m-3m quarterly % changes, pp contributions)
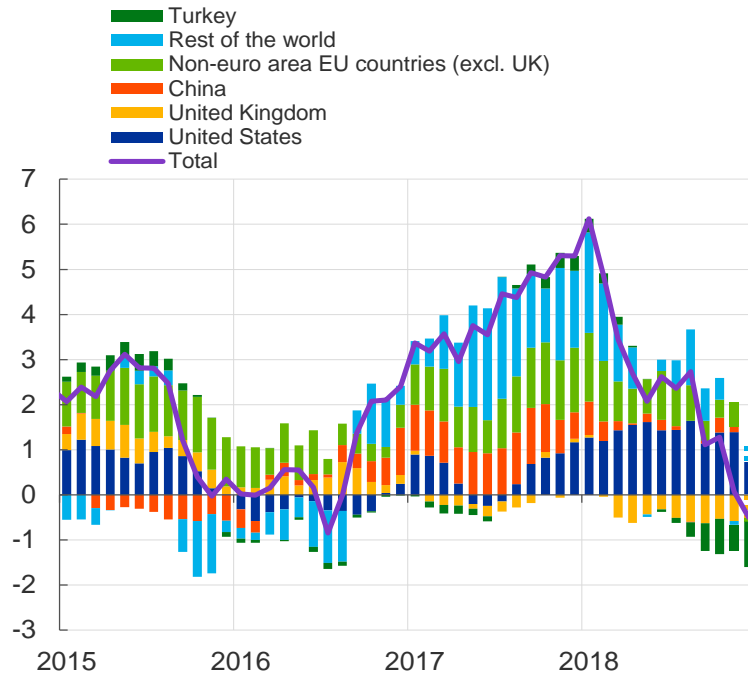
Sources: Eurostat (External trade), ECB staff calculations.
Note: The dashed bars have been computed by imputing the average of previous three months contributions. Latest observations: November 2018. December for United States, China and Turkey.

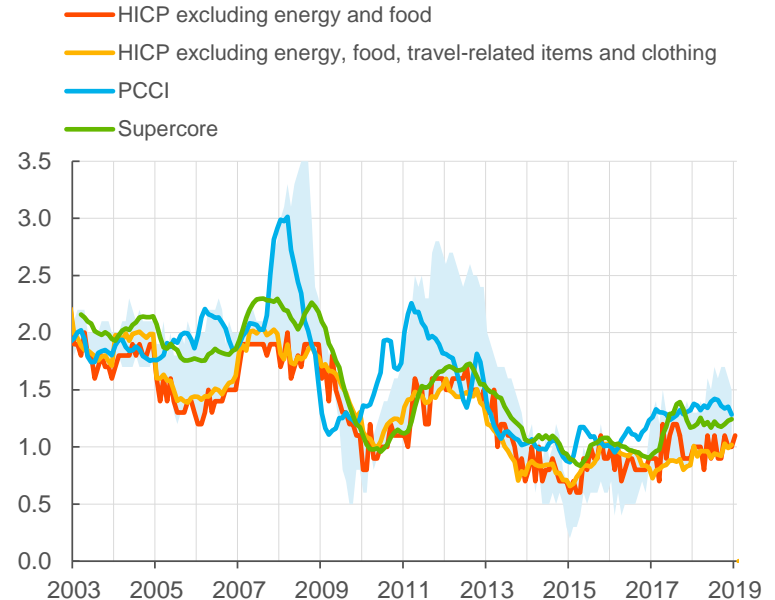## HICP and HICP excluding energy and food
(annual % changes)
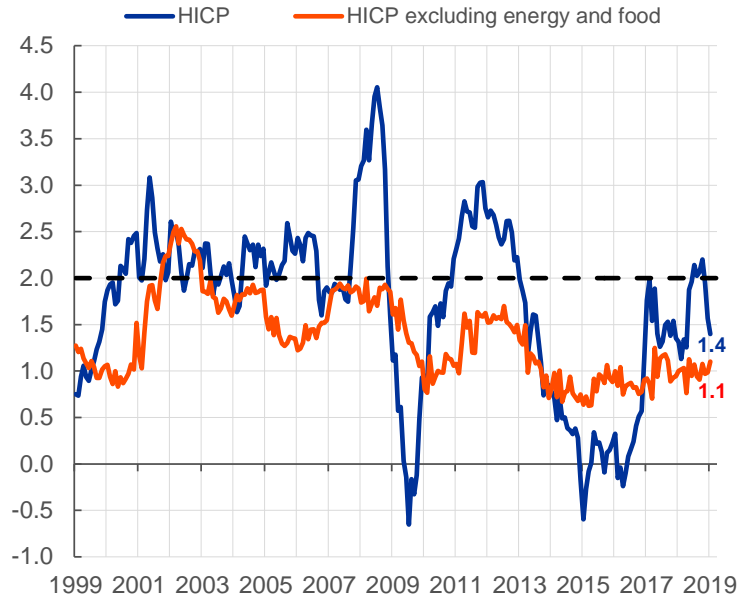
Source: Eurostat.
Latest observation: January 2019 (flash estimates).

Measures of underlying inflation
(annual % changes)

Sources: Eurostat, ECB calculations.
Notes: PCCI (permanent and common component of inflation) estimated in a dynamic factor model based on the full 93 HICP items from each of 12 countries. Supercore is based only on those items in HICP excluding energy and food that are sensitive to the output gap. The range includes exclusion-based measures, trimmed means and a weighted median. Latest observation: January 2019 (flash estimate) for HICP excluding energy and food and December 2018 for the rest.

Wage Phillips curve
(x-axis: %; y-axis: annual % changes)
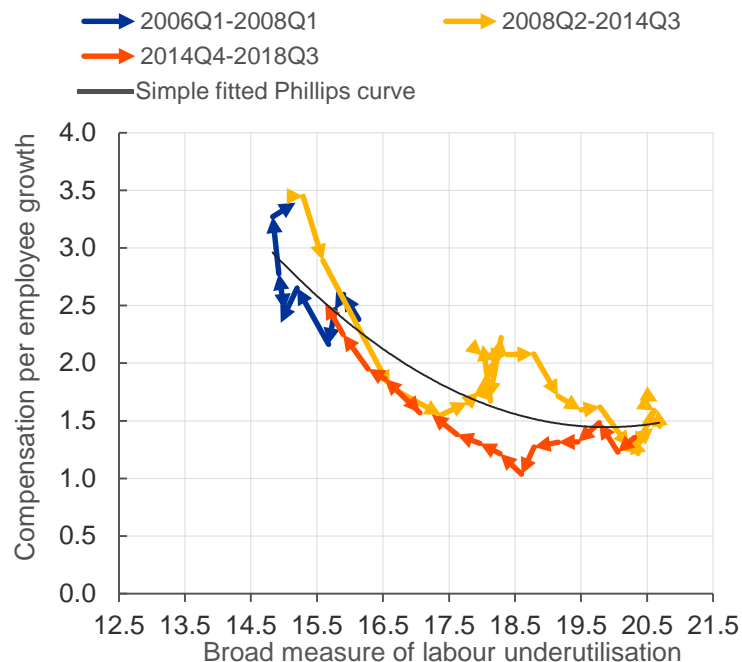
Sources: Eurostat, ECB calculations.
Note: Broad measure of labour underutilisation is the ratio of the (i) total unemployed, (ii) underemployed part-time workers who currently have jobs, although not at the optimal weekly hours they would like, and (iii) inactive persons marginally attached to the labour market, to the labour force plus all marginally attached workers. The broad unemployment rate forecast assumes that the difference between the broad and standard unemployment rate declines at the same pace as observed in the past 4 quarters. The black line represents a simple fitted Phillips curve. The fitted curve is based on data for 2006Q1 to 2018Q3.

Compensation per employee and HICP excluding energy and food (annual % changes)
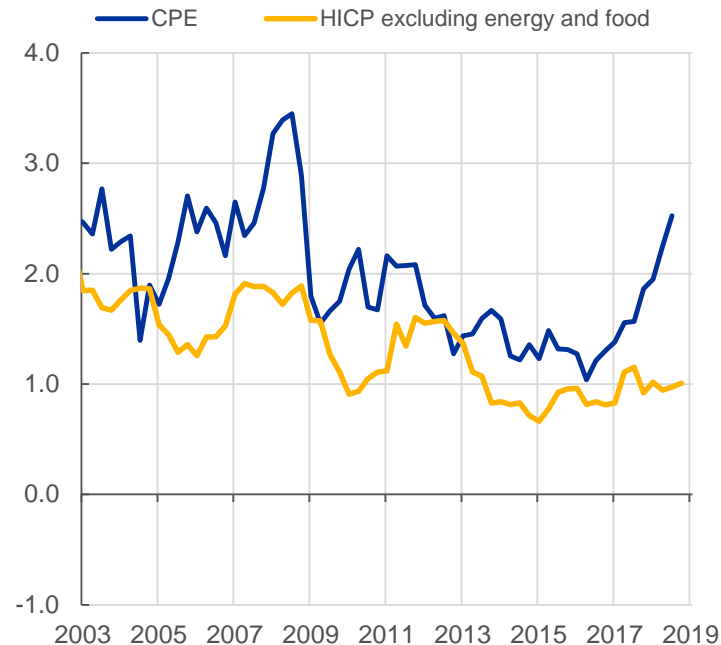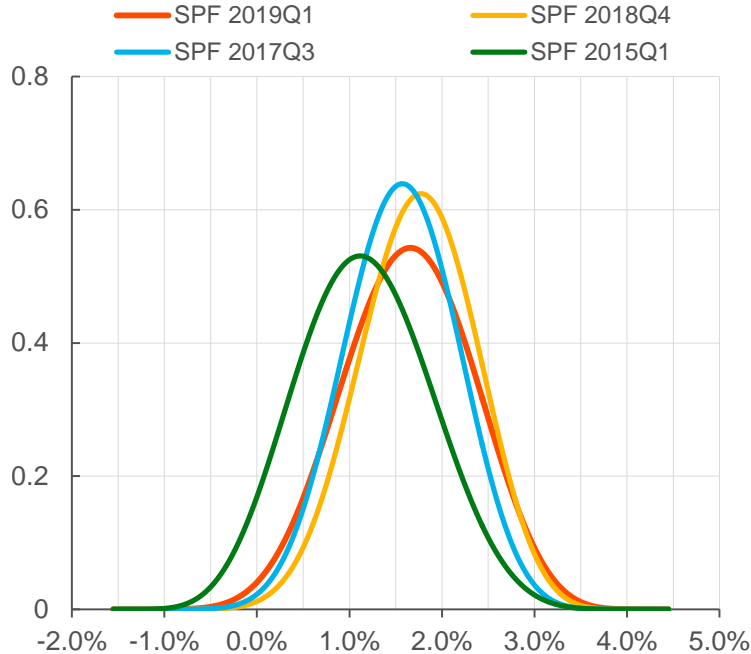

Sources: Eurostat, ECB staff calculations.
Latest observations: 2018Q4 for HICP excluding energy and food and 2018Q3 for compensation per employee.
Note: Based on quarterly data.

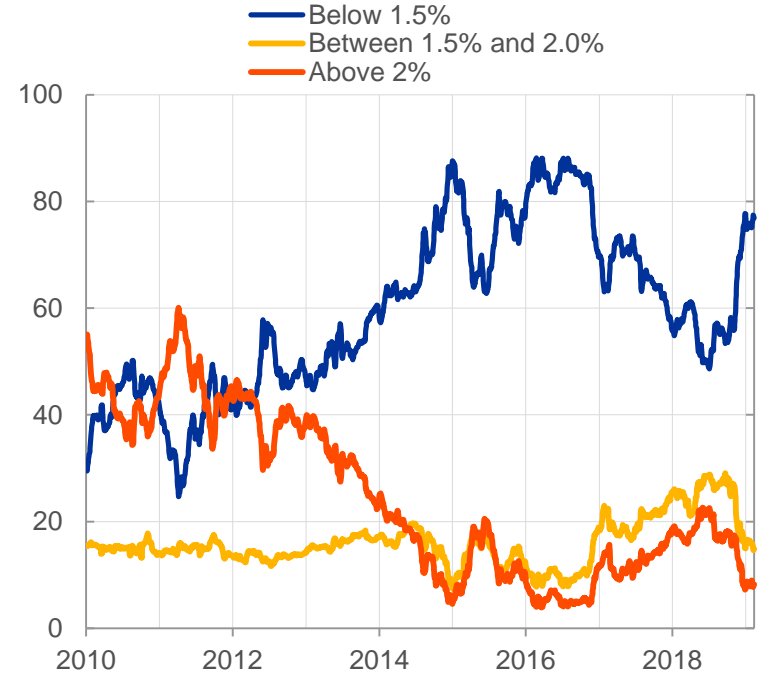## Survey-implied probability density function of euro area inflation in two years time (y-axis: density; x-axis: annual % changes)

Sources: ECB Survey of Professional Forecasters, ECB staff calculations, Survey of Professional Forecasters (SPF).
Latest observation: 2019Q1 SPF.

Option-implied risk-neutral probabilities of average inflation over the next 5 years (%)

Sources: Bloomberg, Thomson Reuters, ECB calculations.
Notes: Probabilities implied by five-year zero-coupon inflation options, smoothed over five business days. Risk-neutral probabilities may differ significantly from physical, or true, probabilities. Latest observation: 18 February 2019.