EUROPEAN CENTRAL BANK

EUROSYSTEM

**Philip R. Lane**

Member of the Executive Board

# The economic outlook for the euro area

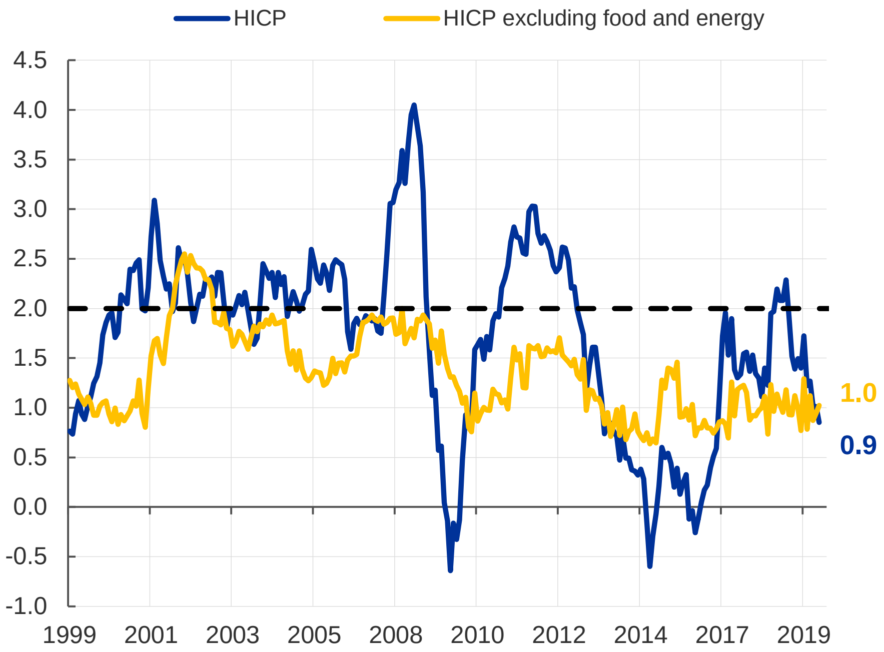
The Brookings Institution

Washington D.C.

16 October 2019

## HICP and HICP excluding food and energy

(year-on-year percentage change)

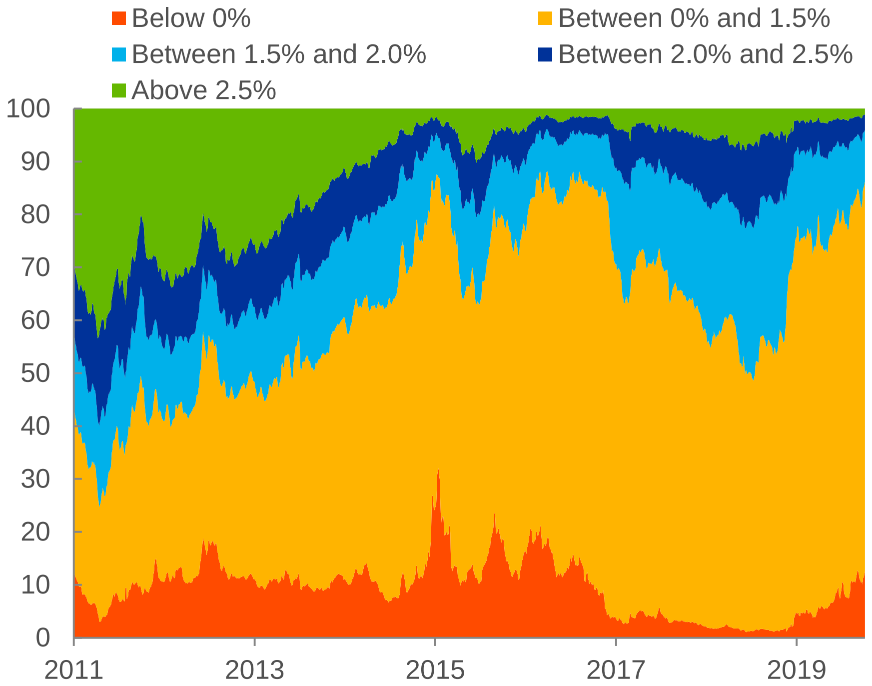



Sources: Eurostat.
Last observation: September 2019 (flash estimates).

# Indicators of market-based inflation expectations

## Option-implied distribution of average inflation over the next five years

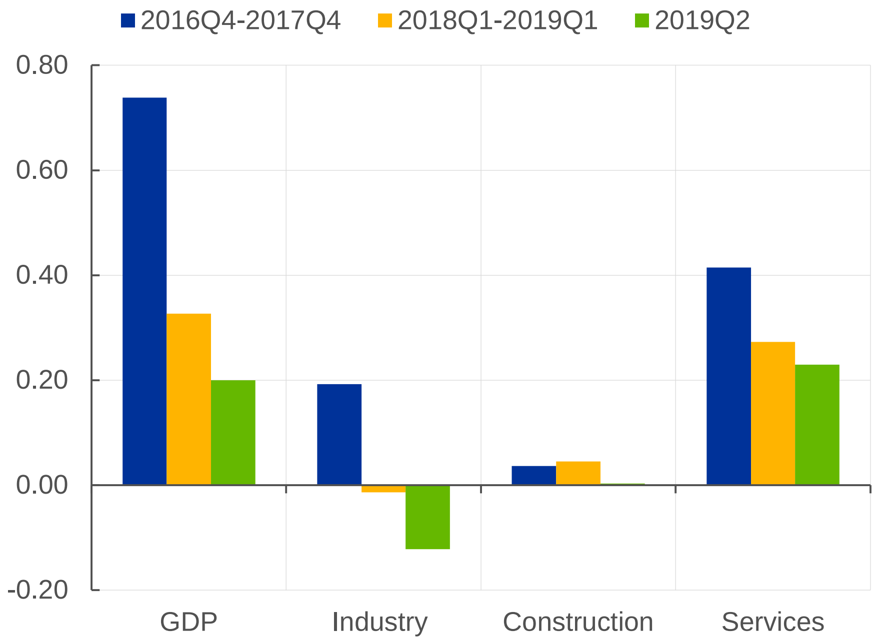
(percentages)




Sources: Bloomberg, Thomson Reuters and ECB staff calculations.
Notes: Probabilities implied by five-year zero-coupon inflation options, are smoothed over five business days. Risk-neutral probabilities may differ significantly from physical, or actual, probabilities.
Latest observation: 4 October 2019.

## Supply breakdown

(quarter-on-quarter; percentage changes changes; pp contributions)

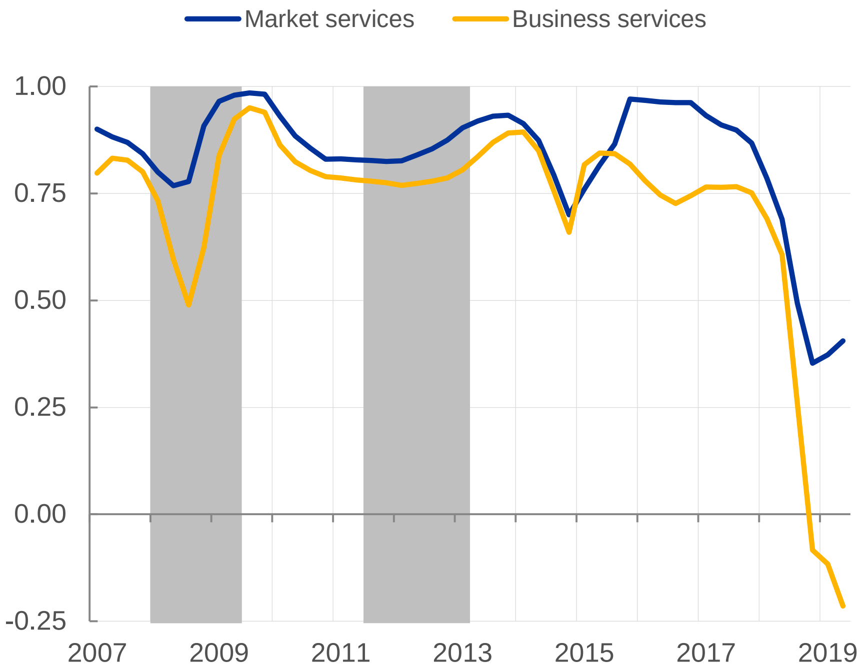



Source: Eurostat, ECB Staff calculations.
Note: The contributions of agriculture and taxes less subsidies on production are not shown.
Last observation: 2019Q2.

# Manufacturing and services activity

## Manufacturing-services activity

(5-year rolling-window correlations)




Sources: Eurostat, ECB staff calculations.
Note: Correlations are computed for year-on-year growth rates with manufacturing value added. Shaded areas indicate the CEPR recession periods (2008Q3-2009Q2, 2011Q3-2013Q1). Business services comprises H52, H53, J62, J63, M69_702, M71, M73, N78, N80, N81.2 and N82 and accounts for about 14% of total value added.
Latest observation: 2019Q2.



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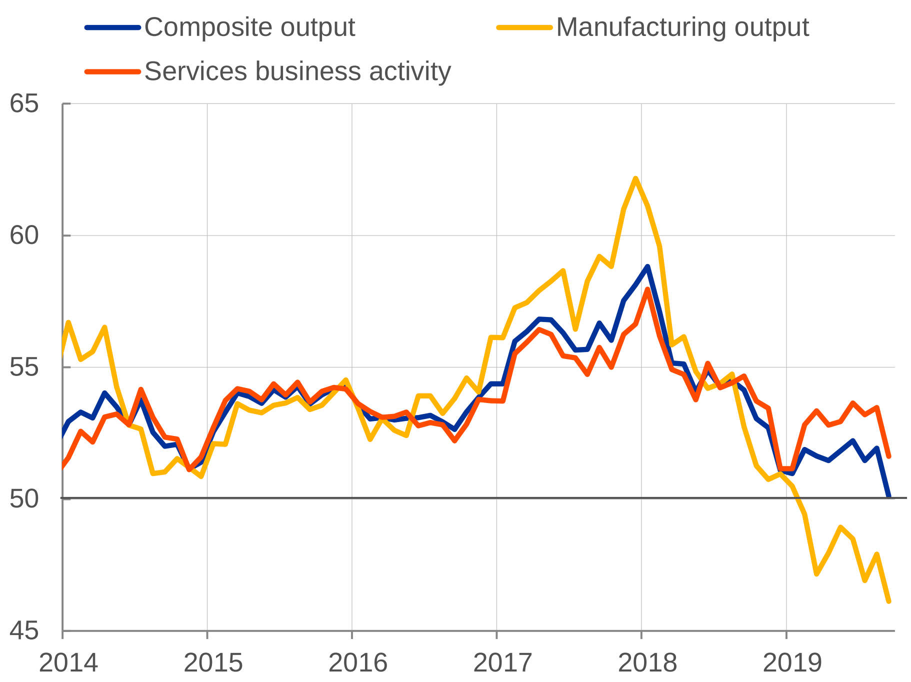
# Development of purchasing managers' index

## Purchasing managers' index of manufacturing and services output

(diffusion index)




Source: Markit.
Note: For each variable, the index is the sum of the percentage of higher responses and half the percentage of no change responses. The indices vary between 0 and 100, with a reading above 50 indicating an overall increase compared to the previous month, and below 50 an overall decrease.
Latest observation: September 2019.



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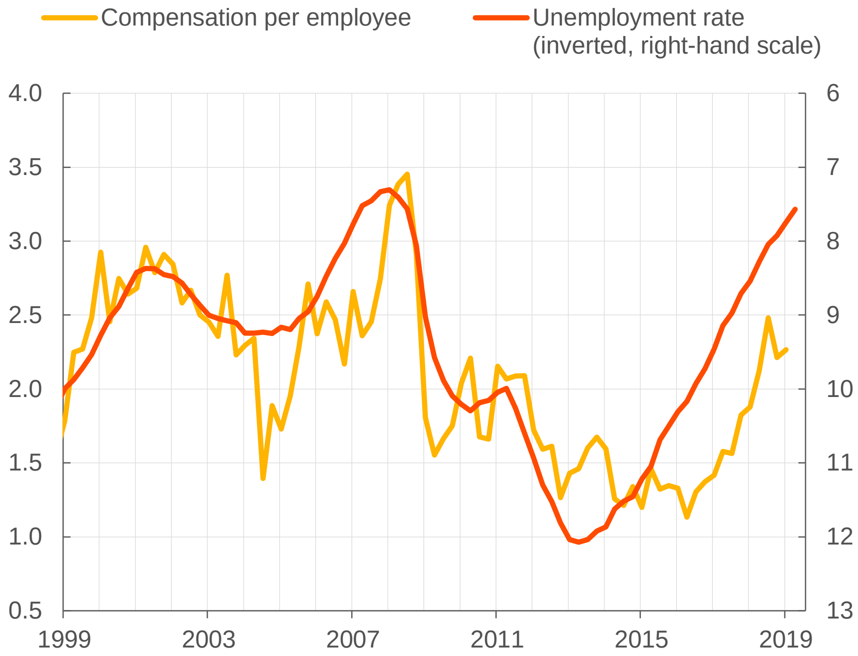
## Unemployment rate and wages

(lhs; year-on-year percentage change, rhs; percentage)




Sources: Eurostat and ECB staff calculations.
Latest observation: 2019Q1 for compensation per employee and 2019Q2 for unemployment.



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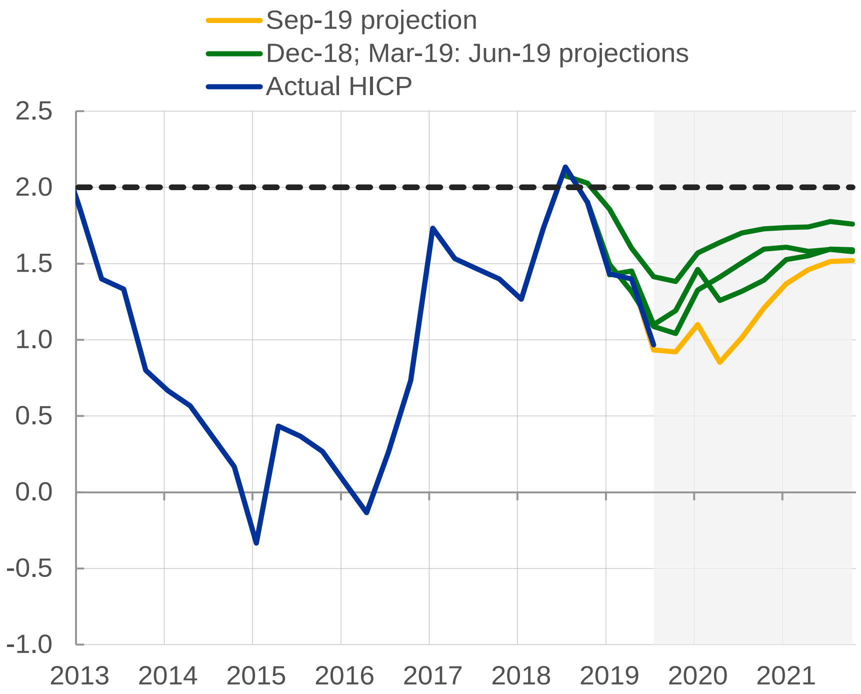
# Actual and projected inflation

## Actual and projected HICP inflation

(year-on-year percentage change)




Sources: ECB and Euro system staff macroeconomic projections.
Note: The grey area indicates the current projection period.
Last observation: Q3 2019.



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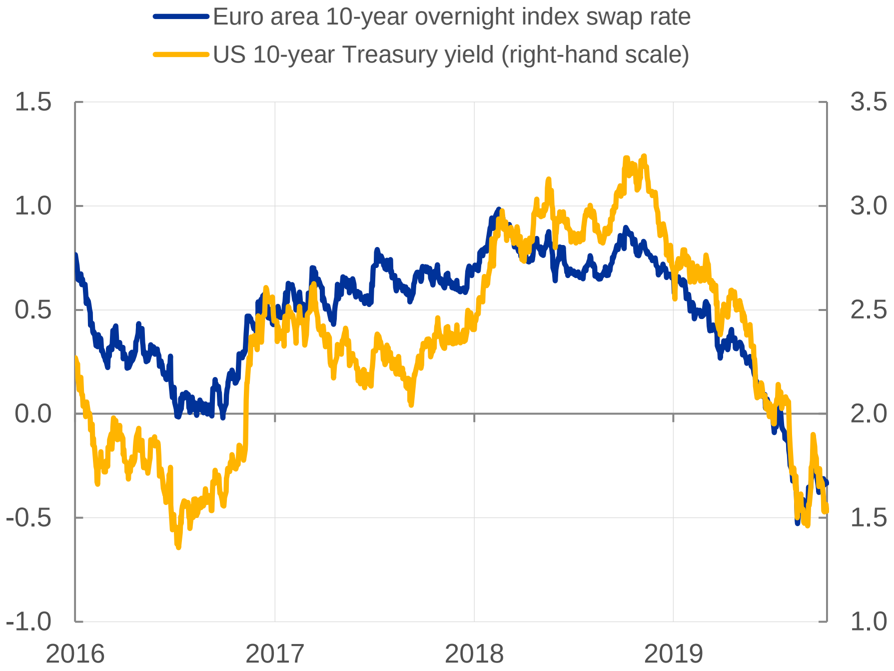
# Euro area and US longer-term yields

## Euro area and US long-term yields

(percentage per annum)




Sources: Bloomberg and ECB.
Latest observation: 8 October 2019.

# Monetary policy decisions 12 September 2019

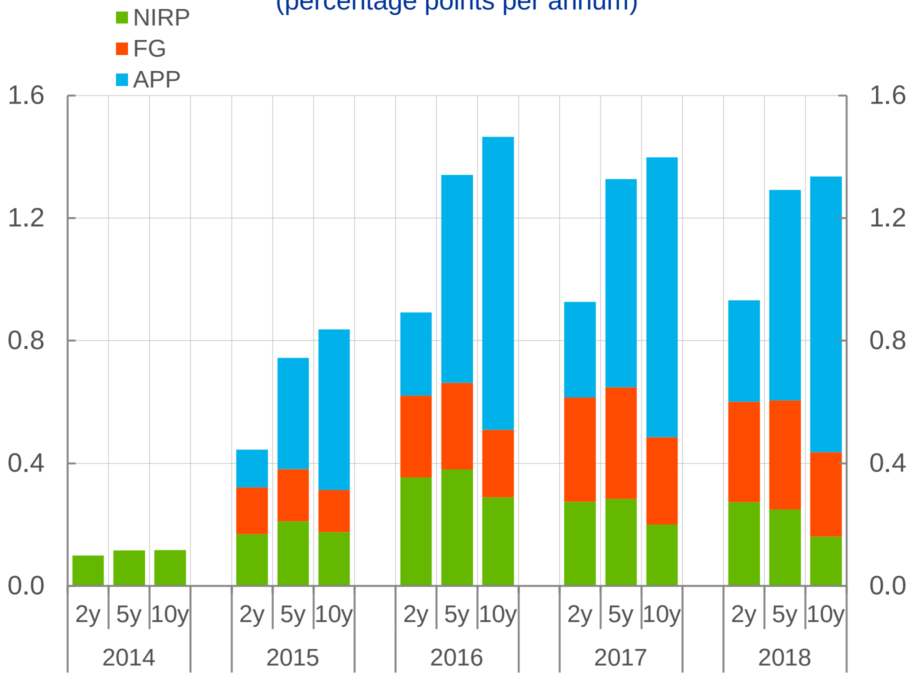
**The Governing Council decided to:**

- lower the DFR by 10bps
- strengthen the forward guidance on rates: "*we expect the key ECB interest rates to remain at their present or lower levels until we have seen the inflation outlook robustly converge to a level sufficiently close to, but below, 2% within our projection horizon, and such convergence has been consistently reflected in underlying inflation dynamics*"
- restart net purchases at a monthly pace of €20 billion, expecting them to run for as long as necessary to reinforce the accommodative impact of our policy rates, and to end shortly before we start raising the key ECB interest rates
- reconfirmed the forward guidance on reinvestments
- change the modalities of the TLTRO-III: removing the 10bps spread and extending maturity to 3 years
- introduce a two-tier system for reserve remuneration

# Term structure effects of the ECB's policy measures 2014-2018

**Impact of ECB non-standard measures on the term structure of interest rates 2014-18**

(percentage points per annum)

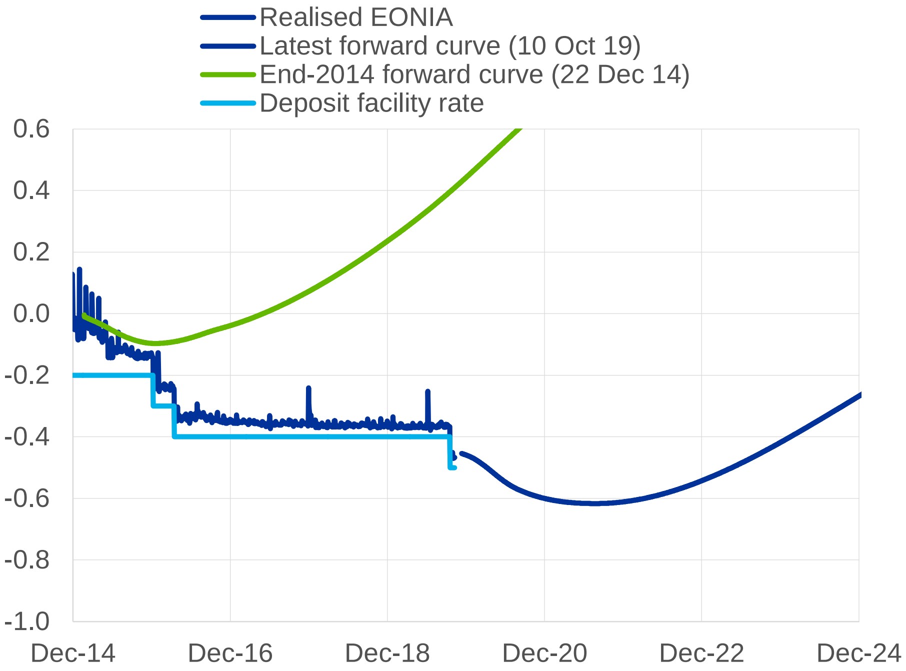



Source: Rostagno, Altavilla, Carboni, Lemke, Motto, Saint-Guilhem, Yiangou (2019), forthcoming.
Notes: NIRP = negative interest rate policy; FG = forward guidance; APP = asset purchase programme. The chart shows the impact of ECB non-standard measures on the GDP-weighted aggregate of euro area sovereign bond yields. The APP impact is due to Eser, Lemke, Nyholm, Radde, and Vladu (2019). The impact of NIRP and forward guidance is derived from counterfactual analysis of OIS forwards based on option-implied densities.

# Actual and expected short-term rates

## EONIA forward curves and deposit facility rate

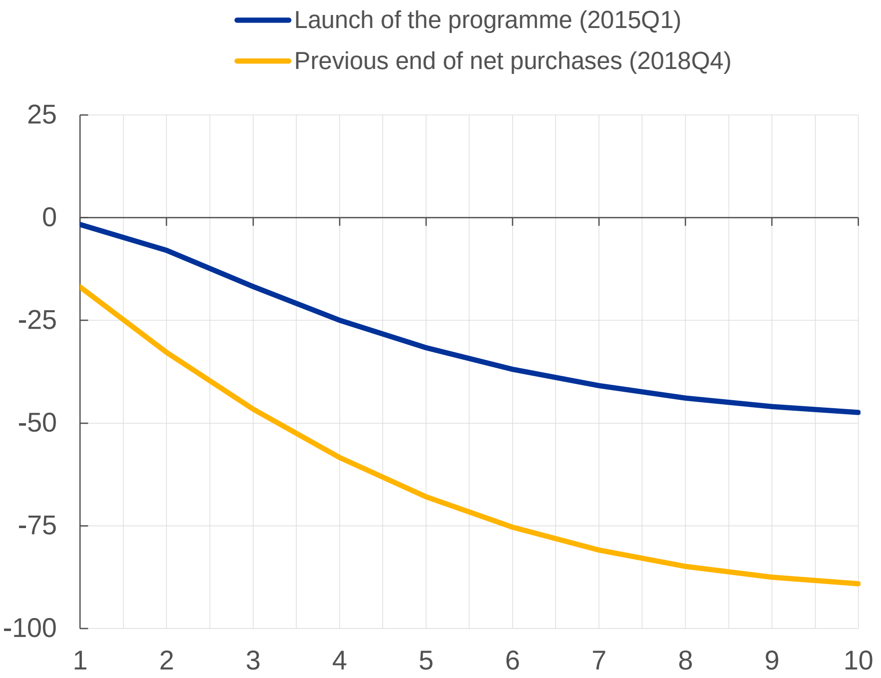
(percentages per annum)




Sources: Thomson Reuters and ECB calculations.
Last observation: 10 October 2019.

## Term premia impact across maturities

(basis points)

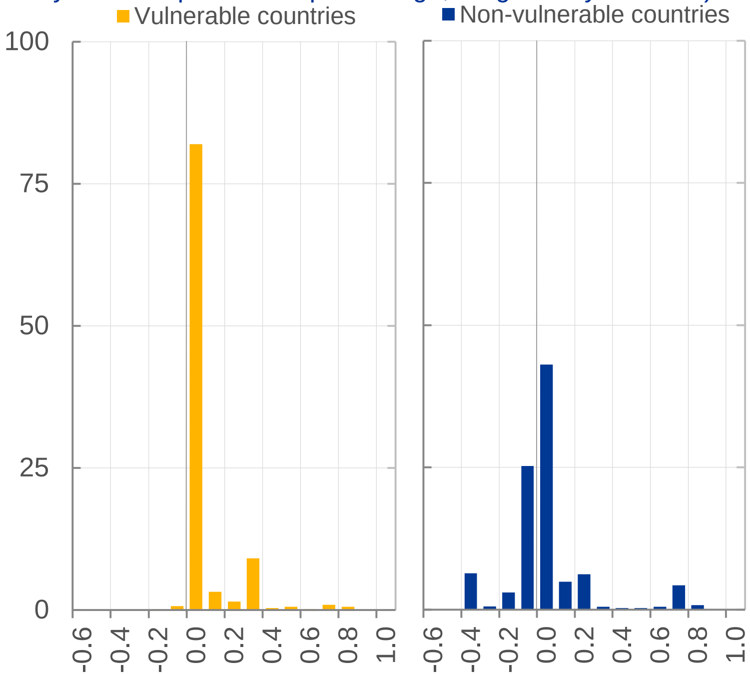



Source: Based on Eser, Lemke, Nyholm, Radde and Vladu (2019).
Notes: The chart shows by how much the term premium component of sovereign euro area yields with maturities of one year to ten years are estimated to be compressed due to the APP, at the time of the launch of the APP (Q1 2015), as well as the previous end of net purchases in December 2018.

# Negative rate pass-through

## Distribution of NFC deposit rates across MFIs in July 2019

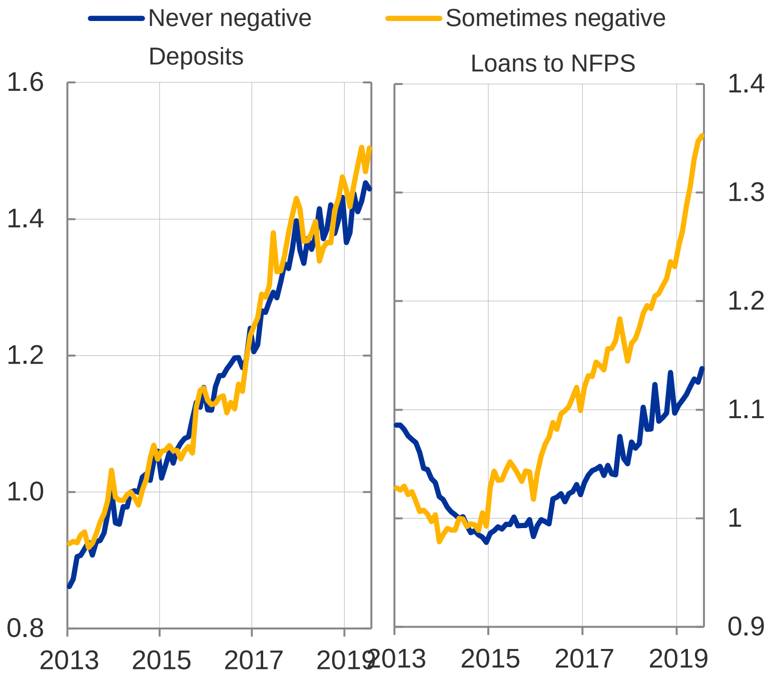
(x-axis: deposit rates in percentage per annum,
y-axis: frequencies in percentage, weighted by volumes)




Sources: ECB, ECB staff calculations.
Notes: Deposit rates on outstanding amounts as reported by individual banks for each of the available product categories, weighted by outstanding amounts. Vulnerable countries include IT, ES, PT, GR, IE, SI, CY. Non-vulnerable countries include the remaining euro area members. Latest observation: July 2019.

## Volumes of bank deposits and loans comparing banks that charge negative rates to those that do not

(total volumes; May 2014 = 1)




Source: Altavilla, Burlon, Giannetti and Holton (2019).
Notes: The chart refers to banks in all euro area countries. Information on deposit rates charged at the individual bank level is based on iMIR data, while data on loan and deposit volumes are based on iBSI data. Total volumes for loans and deposits are normalised to the level in May 2014. NFPS stands for non-financial private sector.
Latest observation: July 2019.



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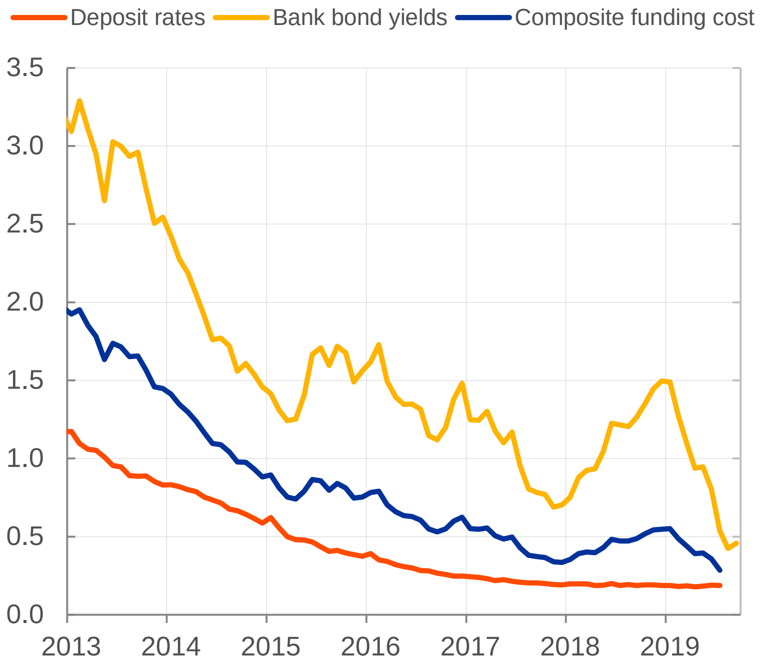
# Bank funding costs and lending rates

## Composite bank funding costs

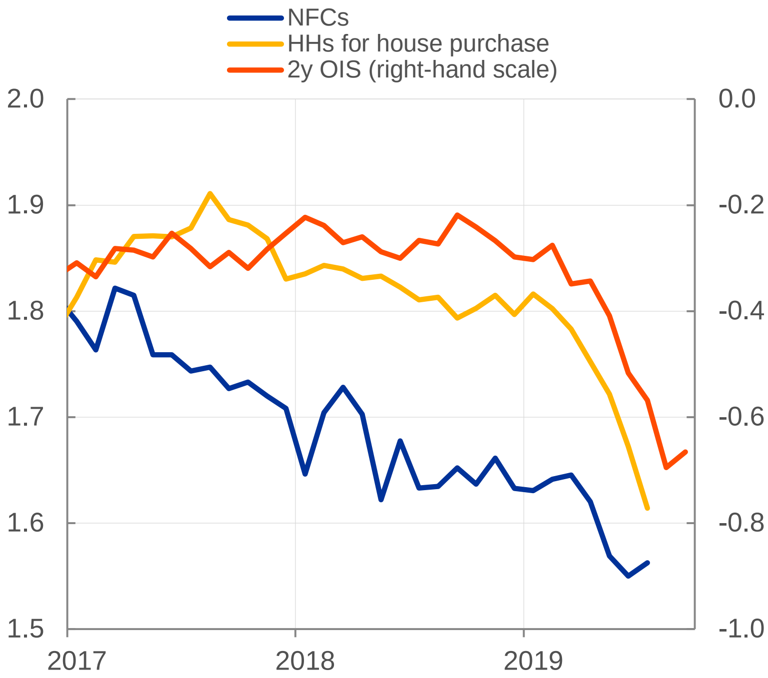
(percentage per annum)




Sources: Markit iBoxx, ECB.
Notes: Composite funding rates are the weighted cost of deposits and market debt funding. Deposit rates are on new business and bond yields include both high yield and investment grade debt. Latest observations for composite and deposit rates: July 2019; for bond yields: 8 October 2019.

## Composite lending rates and 2y OIS

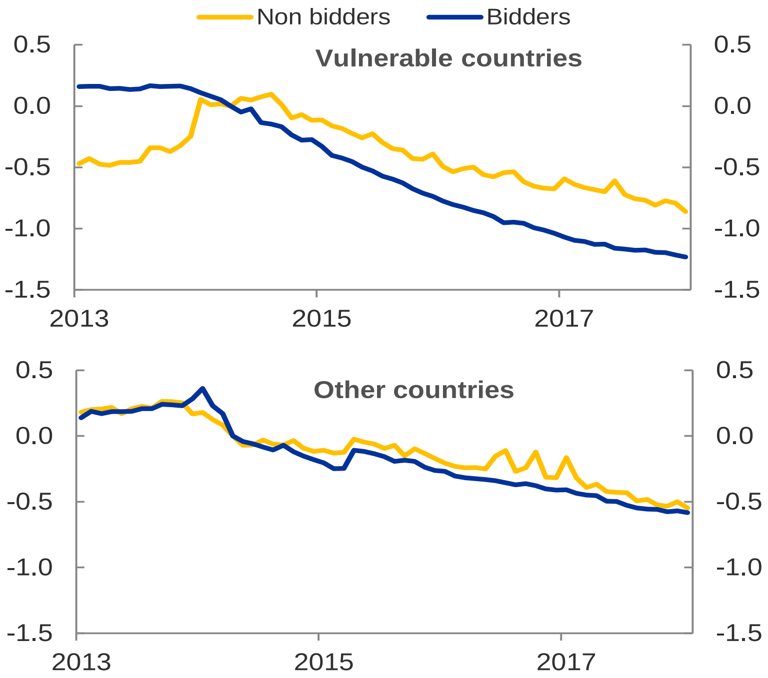
(percentage per annum)




Sources: ECB, ECB staff calculations.
Latest observations: July 2019 for lending rates;10 September 2019 for OIS.

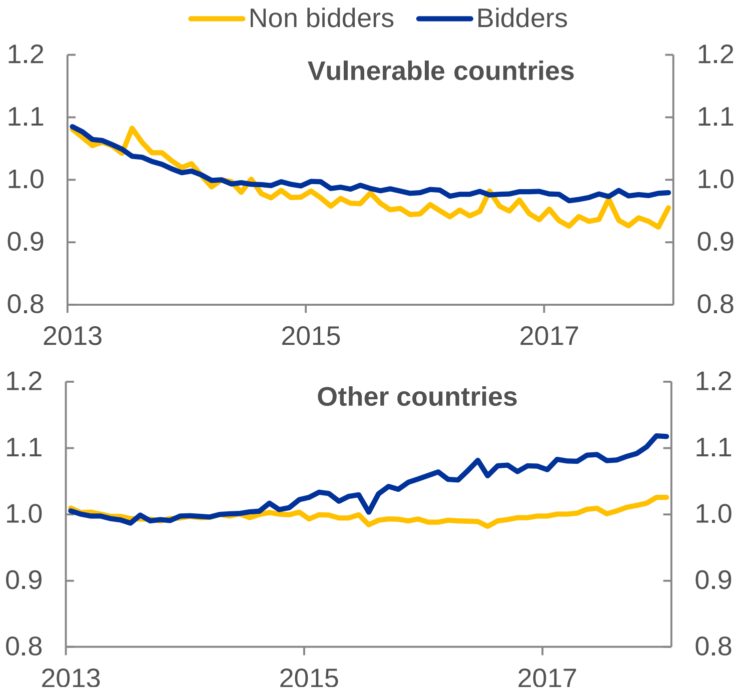
# Impact of TLTRO on lending rates and lending volumes

## Impact of TLTRO on lending rates
(percentage points, deviations from September 2014)




Sources: ECB iMIR and ECB staff calculations.
Notes: NFC lending rates are on outstanding loans to non-financial corporations weighted by volume. The chart shows average rates across bidders and non-bidders in deviation from rates in September 2014. “Vulnerable countries” are Ireland, Greece, Spain, Italy, Cyprus, Portugal and Slovenia. “Other countries” are all the remaining euro area countries. Last observation: June 2018.

## Impact of TLTRO on lending volumes
(notional stock, September 2014=1)

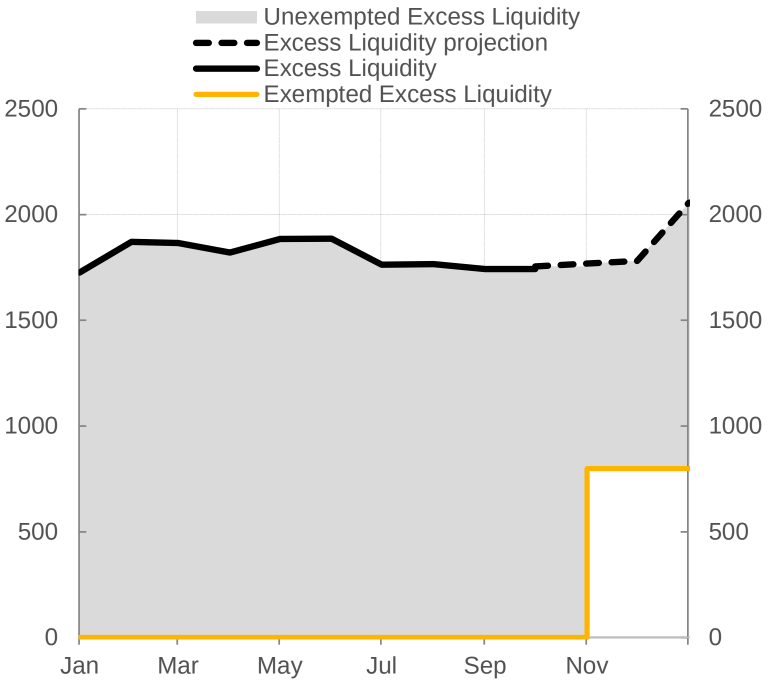



Sources: ECB iBSI and ECB staff calculations.
Notes: The chart shows the notional stock of loans to NFCs across bidders and non-bidders relative to September 2014. “Vulnerable countries” are Ireland, Greece, Spain, Italy, Cyprus, Portugal and Slovenia. “Other countries” are all the remaining euro area countries. Last observation: June 2018.

# A tiering system for the remuneration of reserves

## Excess liquidity projection and calibration of a two-tier system

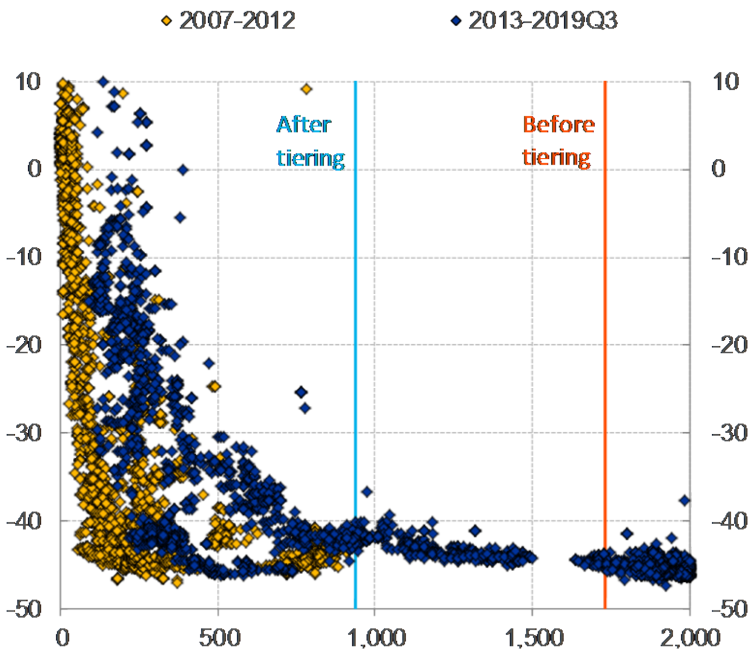
(€ bn)




Source: ECB staff calculations.
Notes: The solid black line denotes realized excess liquidity and the dotted black line denotes projected excess liquidity including the predicted take-up for TLTRO-III (recalibrated at the September Governing Council meeting) and the renewed net asset purchases of EUR 20bn per month. The exempt excess liquidity is based on a two-tier system with an MRR multiplier of 6 in line with the Governing Council's September.
Latest observation: September 2019.

## Relationship between excess liquidity and the EONIA - MRO spread

(horizontal: €bn; vertical: basis points)

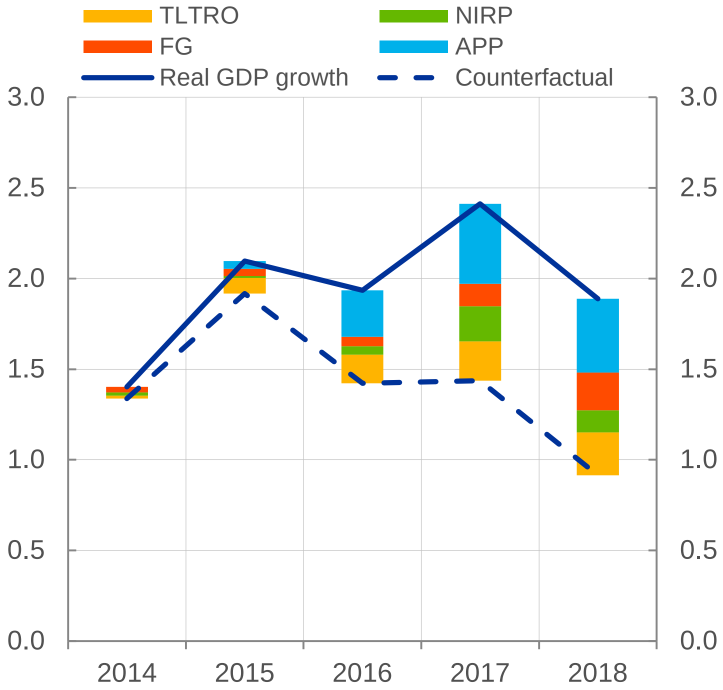



Source: ECB.
Notes: The EONIA-MRO spread is normalised to the width of the corridor (50bps), where the normalisation is calculated as $\frac{50\ bps}{Corridor} * Spread$ of EONIA to MRO.
Latest observation: September 2019.

# Contribution of ECB non-standard measures to growth and inflation

## Contribution of ECB non-standard measures to real GDP growth 2014-18

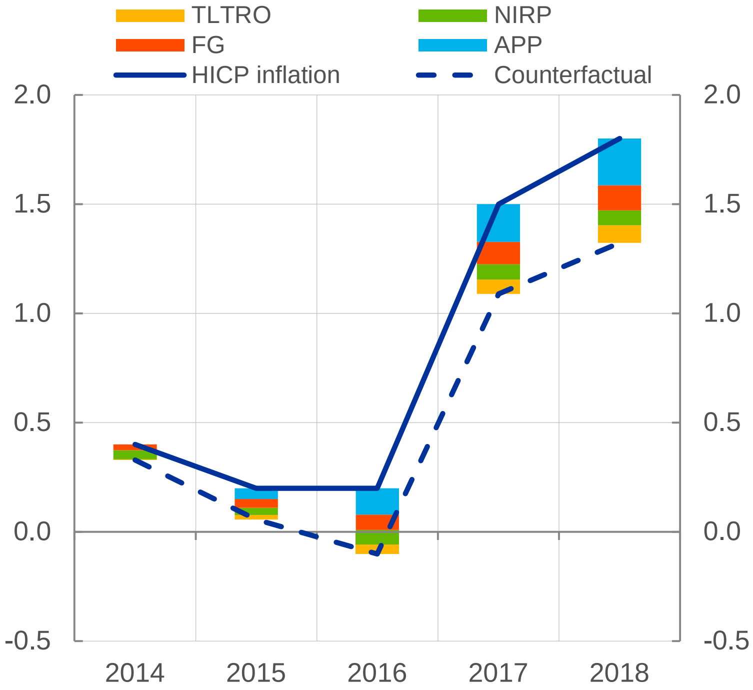
(percentage per annum)




Source: Rostagno, Altavilla, Carboni, Lemke, Motto, Saint-Guilhem, Yiangou (2019), forthcoming.
Notes: The chart shows the impact of ECB non-standard measures on macro variables based on a macroeconomic model with financial variables conditioning on the yield curve impact shown on the previous slide

## Contribution of ECB non-standard measures to HICP inflation 2014-18

(percentage per annum)




Source: Rostagno, Altavilla, Carboni, Lemke, Motto, Saint-Guilhem, Yiangou (2019), forthcoming.
Notes: The chart shows the impact of ECB non-standard measures on macro variables based on a macroeconomic model with financial variables conditioning on the yield curve impact shown on the previous slide.

# Conclusions

- the euro area is facing a more extended slowdown than previously expected
- the convergence of inflation towards the inflation aim has recently slowed and partly reversed
- the ECB’s monetary policy measures remain effective in fostering a reacceleration of growth and, thereby, inflation convergence
- a highly accommodative stance of monetary policy will be necessary for a prolonged period of time
- the more fiscal policy contributes to boosting long-term growth potential and providing cyclical stabilisation, the quicker will be the effects of monetary policy interventions on the economy and inflation



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