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## **The ECB's monetary policy: Standard and non-standard measures**

ECB Central Banking Seminar  
Frankfurt am Main, 3 July 2019

***The views expressed in this presentation are those of the presenter and do not necessarily reflect those of the ECB or the Eurosystem***

- 1 The ECB's mandate and strategy**
- 2 The situation in 2014
- 3 The ECB's monetary policy measures since June 2014
- 4 Current monetary policy configuration

## Article 127 of the Treaty on the Functioning of the European Union :

The primary objective of the ESCB [Eurosystème] shall be to maintain **price stability**.

Without prejudice to the objective of **price stability**, the **ESCB** shall support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union as laid down in Article 3 of the Treaty on European Union.“



## The ECB's monetary policy strategy

**Quantitative definition of price stability**

**Medium-term orientation**

**The two-pillar approach**

- **Economic analysis**
- **Monetary analysis**

## Quantitative Definition of Price Stability (1998)

**Year-on-year increase** in the Harmonised Index of Consumer Prices (HICP) for the euro area of **below 2%** over the medium term.

## Clarification of the Strategy (2003)

The Governing Council will aim to maintain inflation rates **below, but close to, 2%** over the medium term

(NB: symmetry = both upside and downside deviations)

## Why 2%?

- Allows for cross-country inflation differentials to occur at positive euro area inflation rates.
- Zero inflation restricts central bank's room for maneuver in case of negative shocks (*Effective Lower Bound* problem).
- Possible upward bias in consumer price index (HICP).

## Why price stability over the medium-term?

Transmission of monetary policy impulse and economic shocks to prices subject to “**long and variable lags**”

(e.g.: M. Friedman, 1961)

Excessive **activism raises volatility** of output and **inflation** and may render monetary policy pro-cyclical

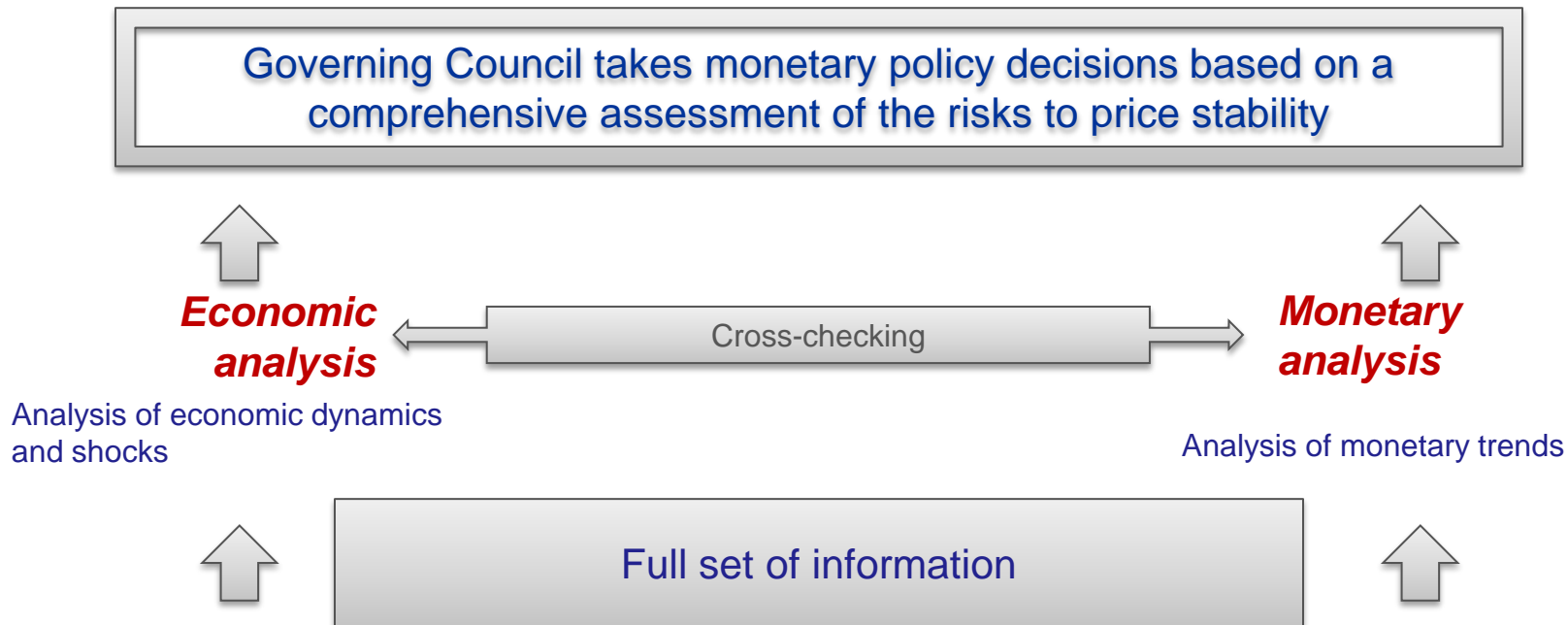
(e.g.: A. Orphanides and J.C. Williams, 2004)

**Medium-term orientation of monetary policy** is more conducive to macroeconomic stability

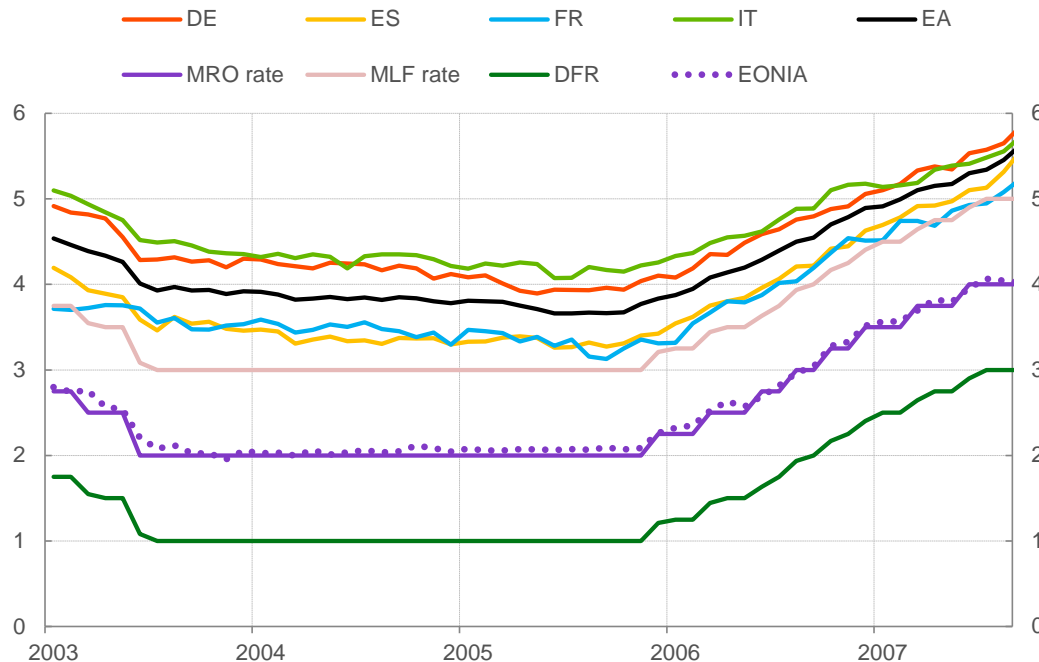
# The ECB's monetary policy strategy: two pillars

*“To sum up, a **cross-check** of the outcome of the economic analysis with the signals coming from the monetary analysis confirmed that an ample degree of monetary accommodation is still necessary for the continued sustained convergence of inflation to levels that are below, but close to, 2% over the medium term.”*

(Introductory Statement to the press conference on 6 June 2019)



## ECB key interest rates, EONIA and bank lending rates on loans to NFCs (percentages per annum)

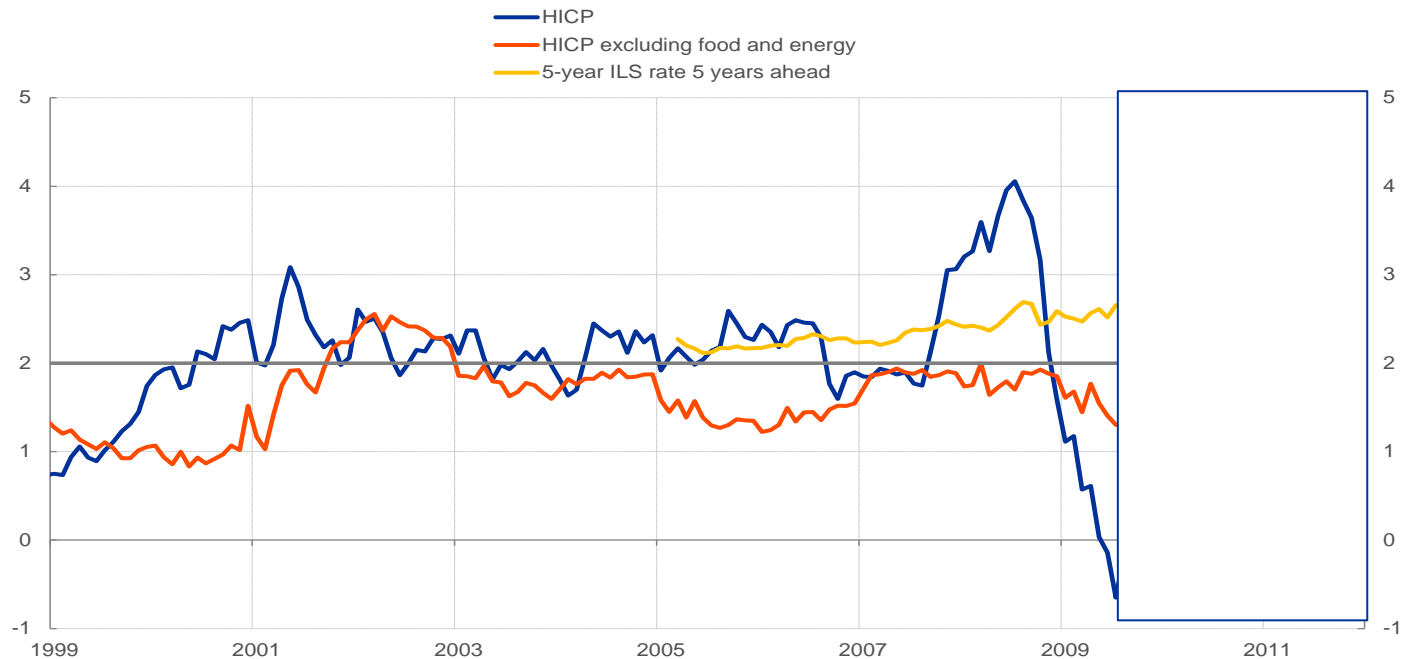


Source: ECB.

Notes: Monthly data. "MLF" stands for marginal lending facility, "MRO" stands for main refinancing operations, "DFR" is the rate on the deposit facility and "EONIA" is the euro overnight unsecured interbank rate. Bank lending rates are calculated by aggregating short- and long-term rates using a 24-month moving average of new business volumes.

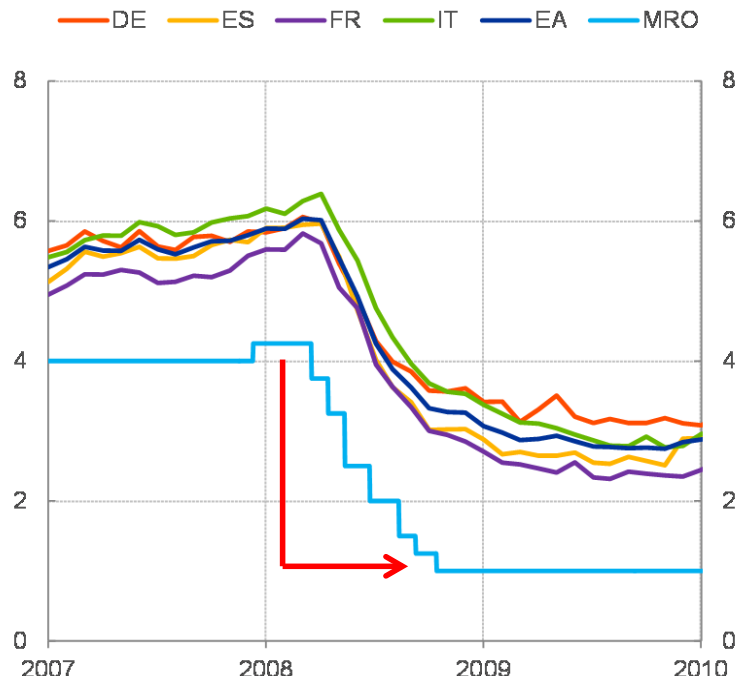


## Inflation market-based inflation expectations (percent)



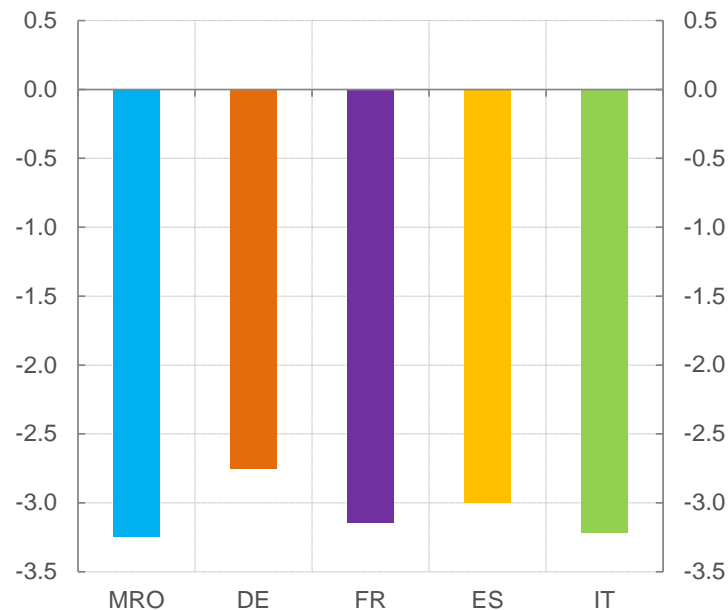
Source: ECB.  
Latest observation: December 2011.

## Bank lending rates for loans to non-financial corporates (NFCs) (percent)



## Change in MRO rate and bank lending rates to NFCs (percent)

Δ MRO and Δ Bank lending rates for NFC

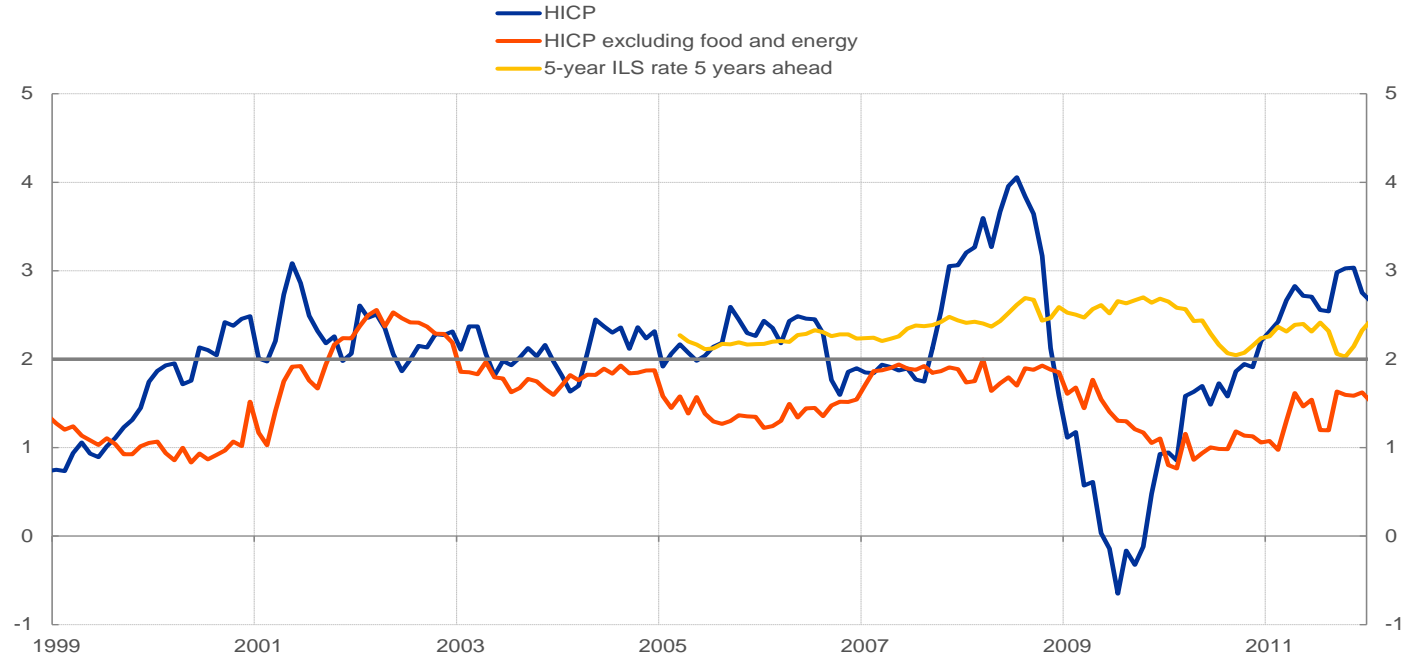


Sources: ECB, ECB calculations.

Notes: Lending rates are calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes.

Latest observation: May 2014.

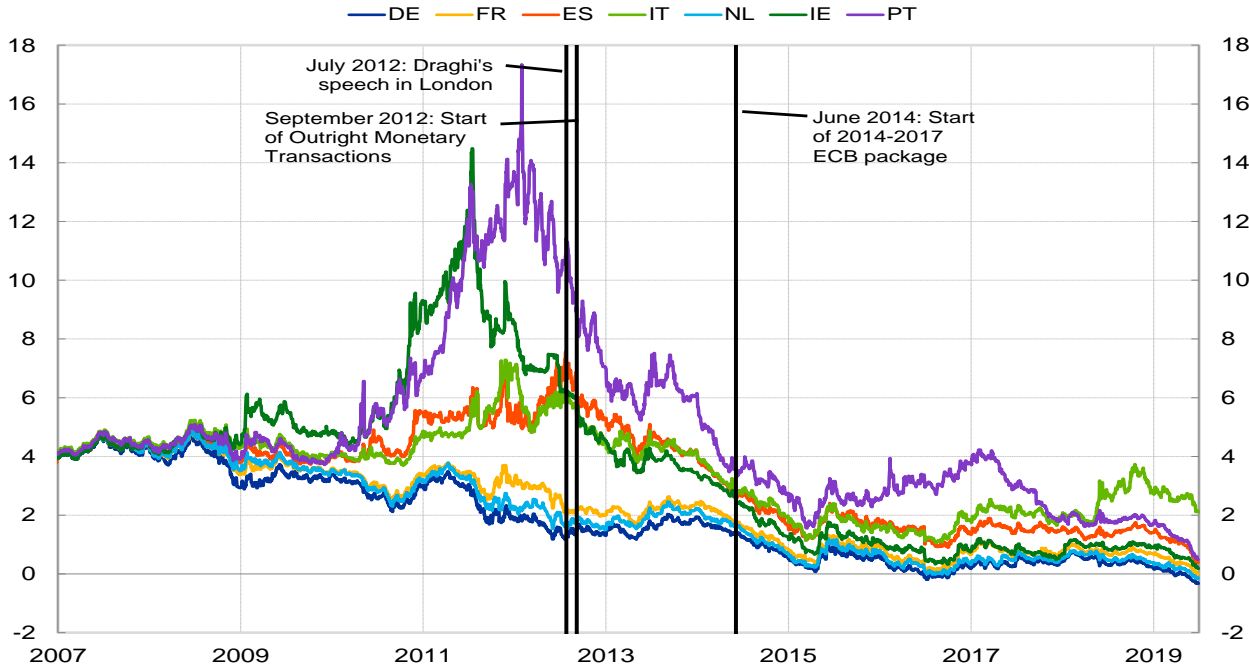
## Inflation market-based inflation expectations (percent)



Source: ECB.  
Latest observation: December 2011.

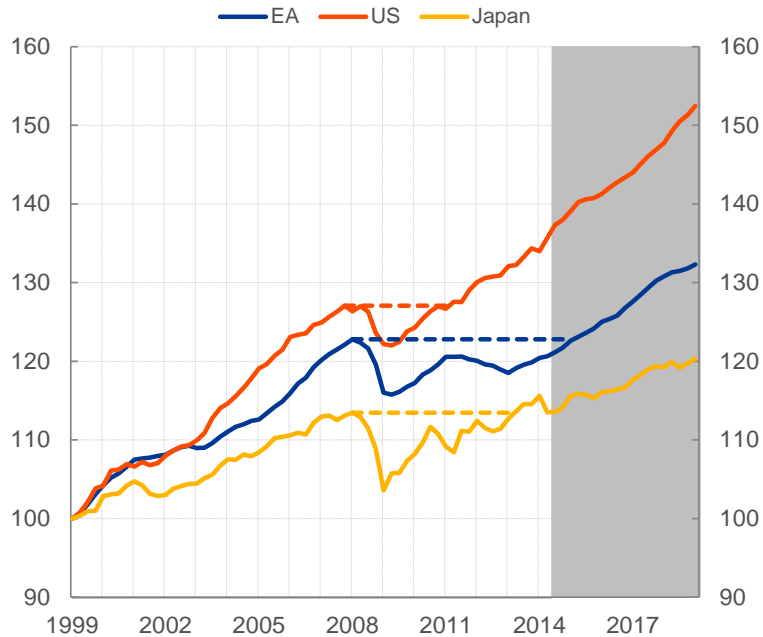
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## 10-year government bond yields (percentages per annum)



Sources: ECB, Thomson Reuters Datastream.  
Latest observation: 28 June 2019.

## Real GDP (index, 1999Q1=100)



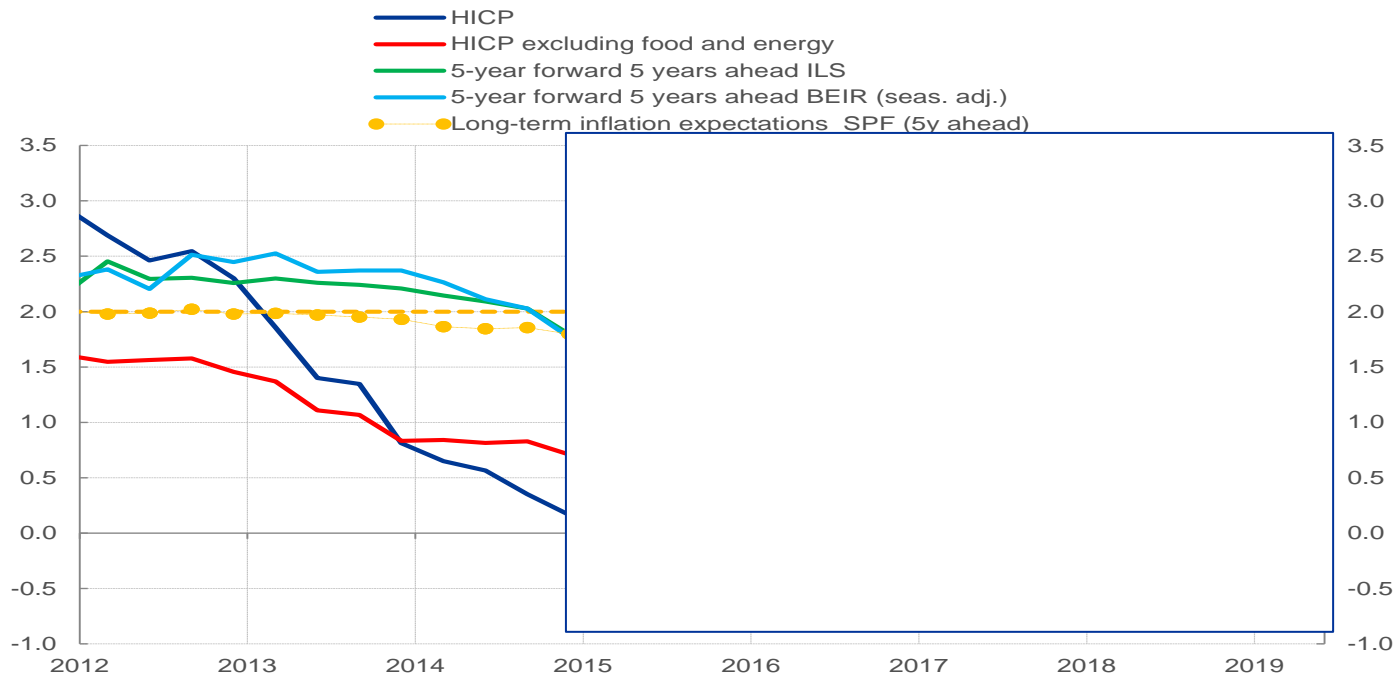
Sources: Eurostat, BEA, Cabinet Office, ECB calculations.

Notes: horizontal dotted lines represent pre-crisis peak real GDP level.

Latest observation: 2019 Q1.

## HICP inflation and inflation expectations

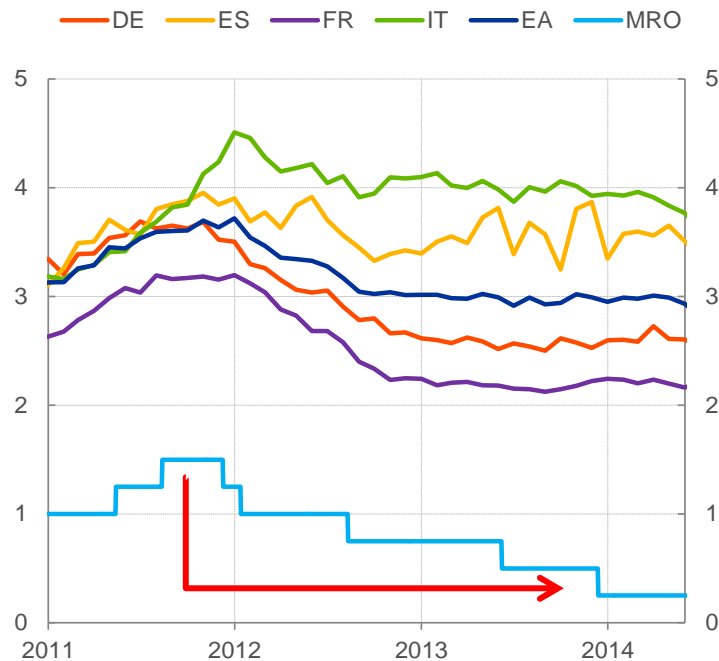
(percent)



Source: ECB.  
Latest observation: 2019Q2.

# Interest rate impulses no longer fully transmitted...

## Bank lending rates for loans to non-financial corporates (NFCs) (percent)

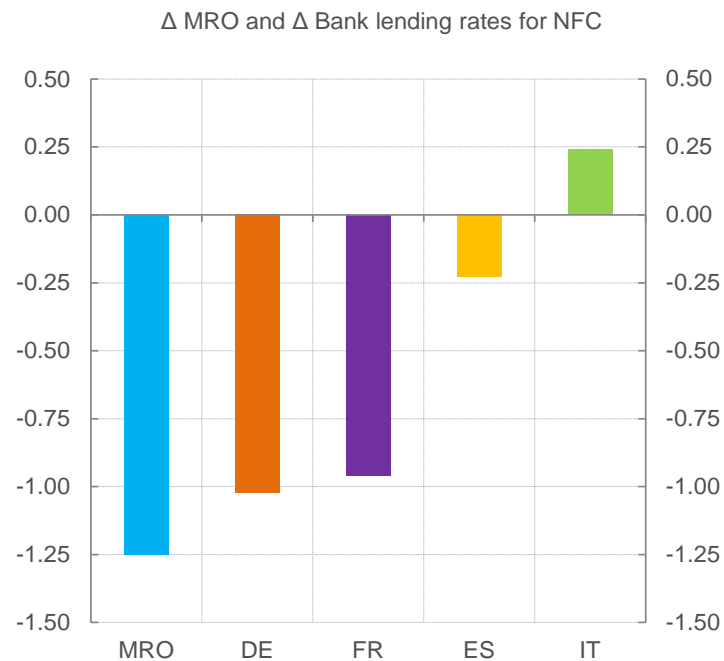


Sources: ECB, ECB calculations.

Notes: Lending rates are calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes.

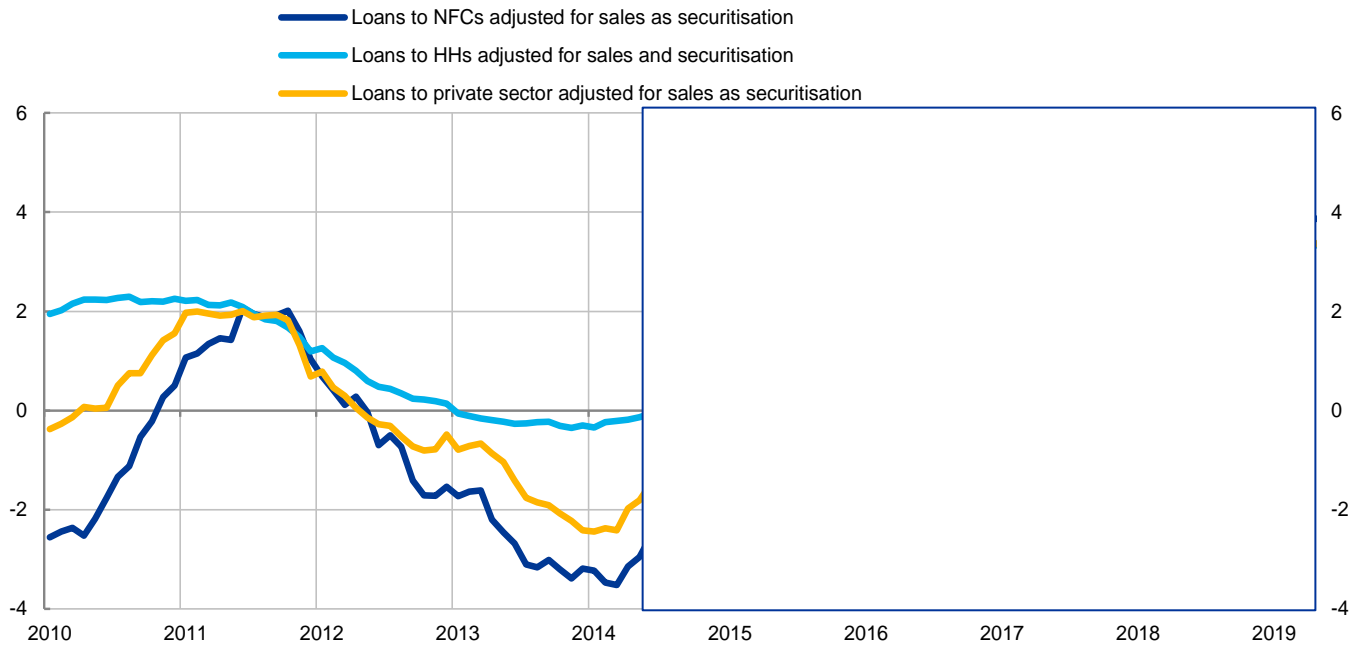
Latest observation: May 2014.

## Change in MRO rate and bank lending rates to NFCs (percent)





## MFI loans to the private sector (annual growth rates)



Source: ECB.

Notes: Monthly data. "NFCs" stands for non-financial corporations and "HHs" stands for households.

Latest observation: April 2019.

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## Policy instrument

Reductions in **main policy rates** counteract downside risks to price stability

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**Non-standard measures**  
complement/substitute  
reductions in main policy rate  
in the presence of...

...impairments in monetary  
policy transmission  
mechanism

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...limited room for further  
loosening via conventional  
policy instruments

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## 1. Negative interest rates

Breaking through the zero lower bound to anchor front end of term structure

## 2. Forward Guidance

Signaling the future course of monetary policy action (e.g. “[*The Governing Council*] expect[s] them to remain at their present levels at least through the first half of 2020, and in any case for as long as necessary.”)

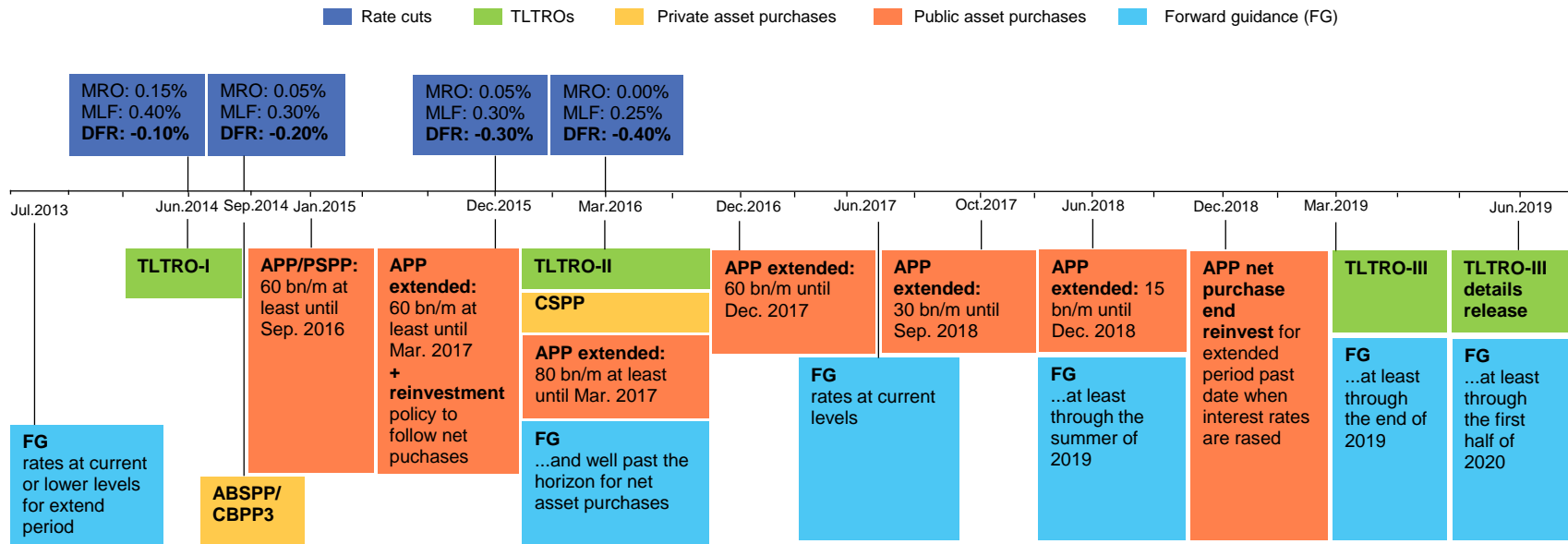
## 3. Credit Easing

Longer-term loans to banks with incentive mechanisms to ensure an effective pass-through to households and firms (e.g. “Targeted Longer-Term Refinancing Operations” - TLTROs)

## 4. Asset Purchase Programme

Purchases of securities to lower risk-free interest rates, compress risk premia across financial assets and encourage portfolio rebalancing towards lending to households and firms

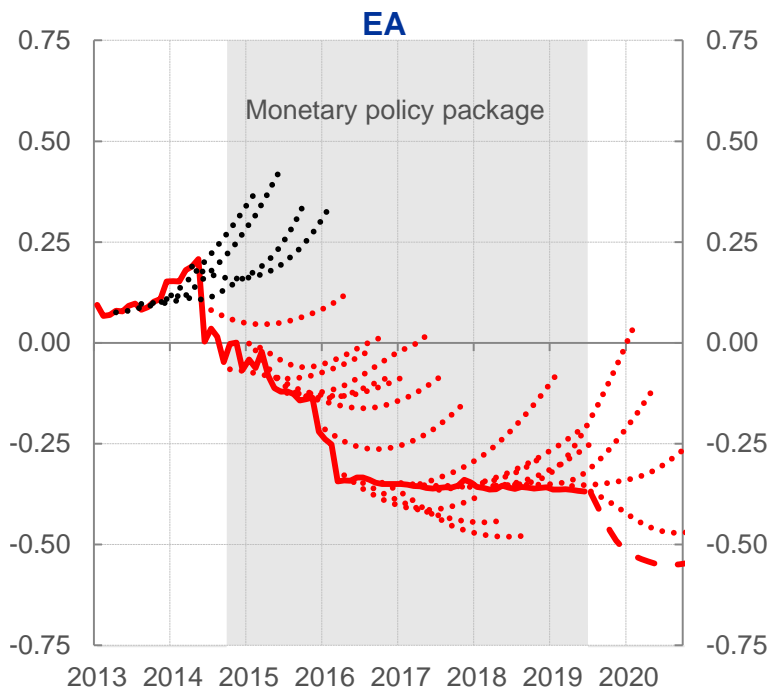
# The ECB's measures since June 2014



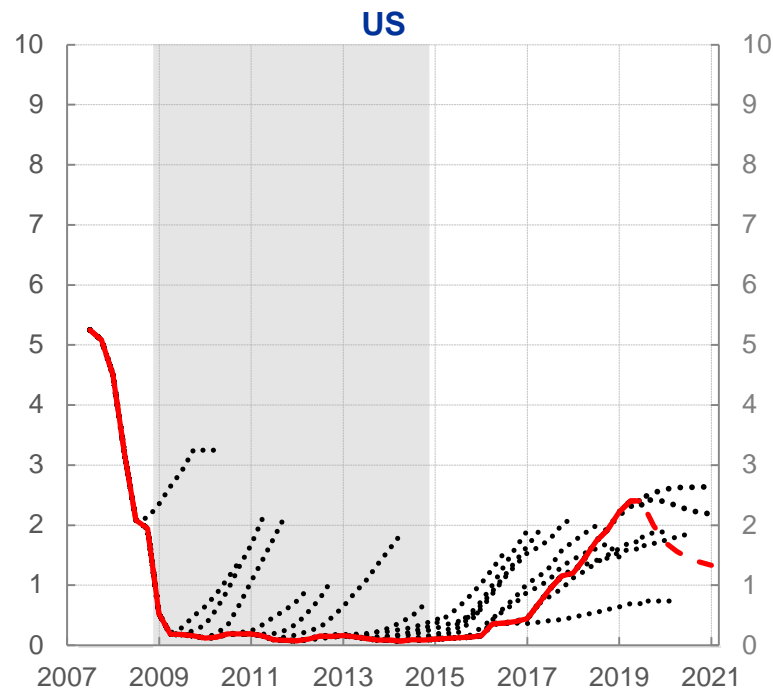
# 1) NIRP anchors the front-end of the term structure

## Expectations of future short-term rate throughout periods of non-standard measures

(percentages per annum)



Source: Bloomberg.  
Notes: Evolution of the OIS forward curve from pre-NIRP (black-dotted lines) to post-NIRP (red-dotted lines) period.  
Latest observation: 26 Jun 2019.

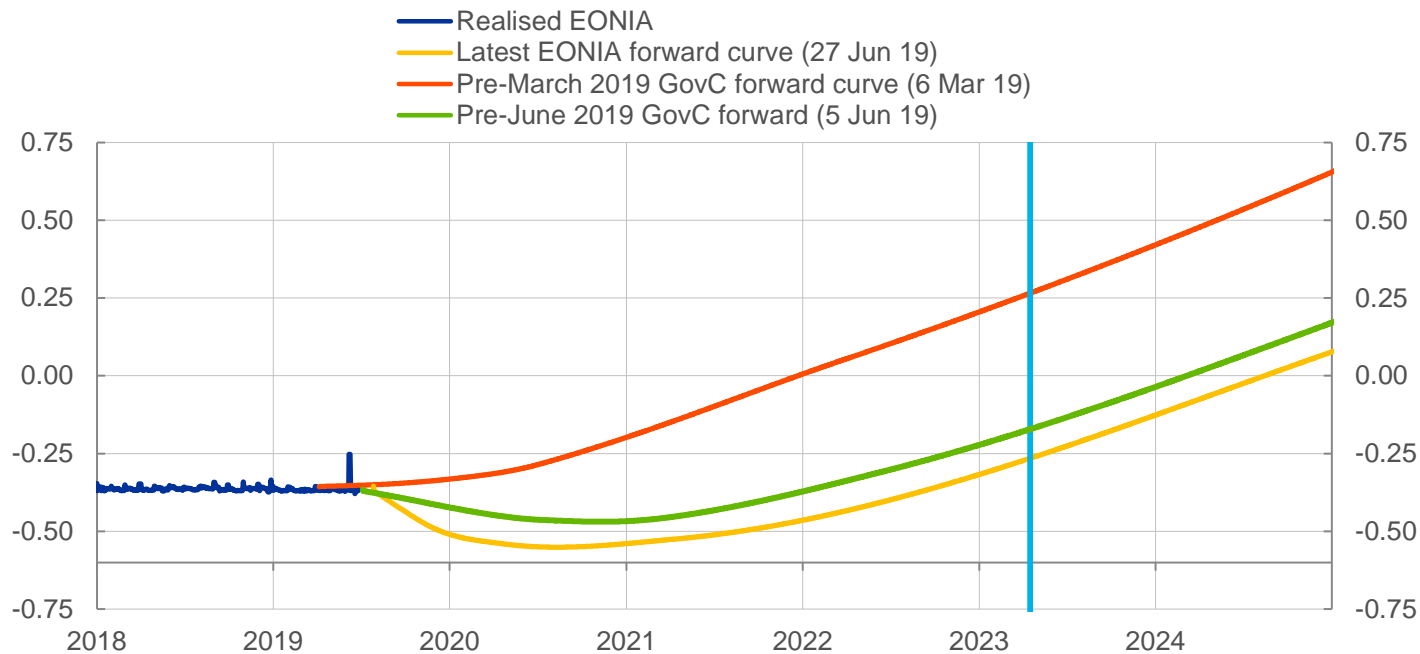


Source: Bloomberg  
Notes: Evolution of Federal Funds Rate futures curves.  
Latest observation: 26 Jun 2019.

## 2) Rate expectations effectively anchored through forward guidance

### EONIA and EONIA forward curve

(percent)

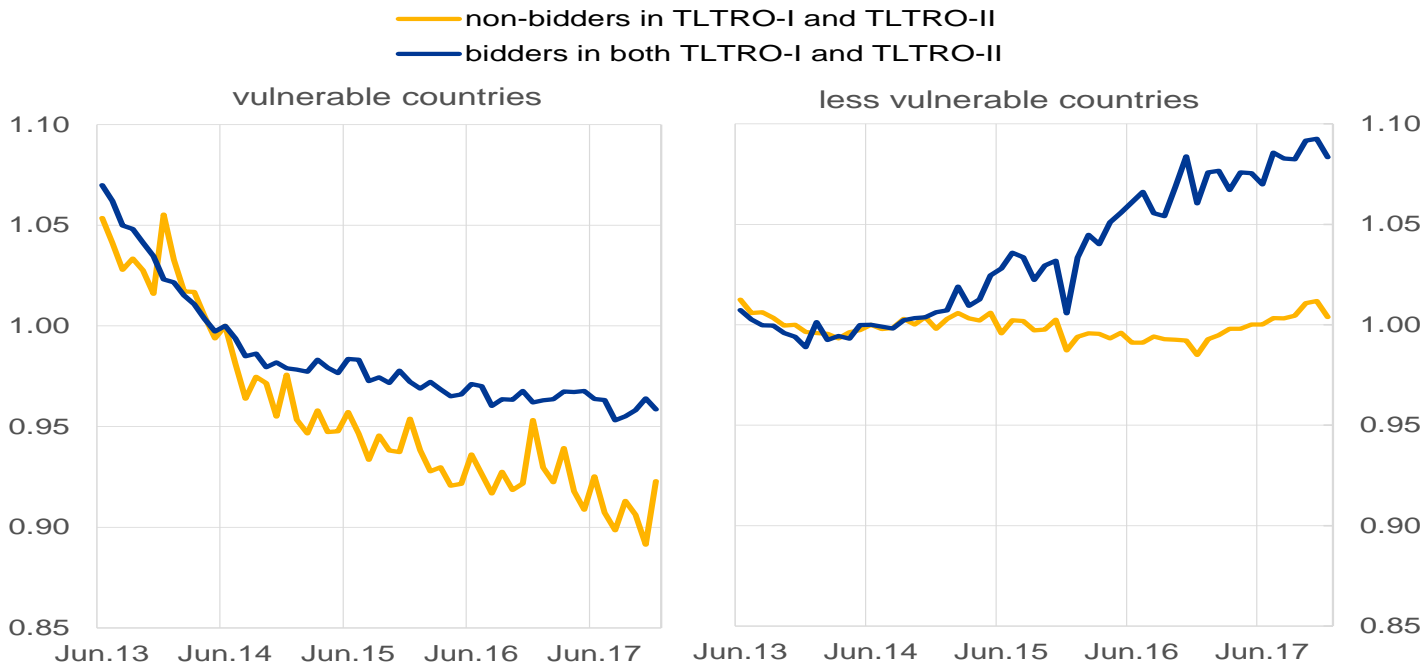


Source: Thomson Reuters, ECB staff calculations  
Latest observation: 27 June 2019.

### 3) TLTROs reinforce incentives for banks to lend on borrowed funds

#### Lending to NFCs by TLTRO-bidders and non-bidders

(index=1 in June 2014)



Source: ECB.

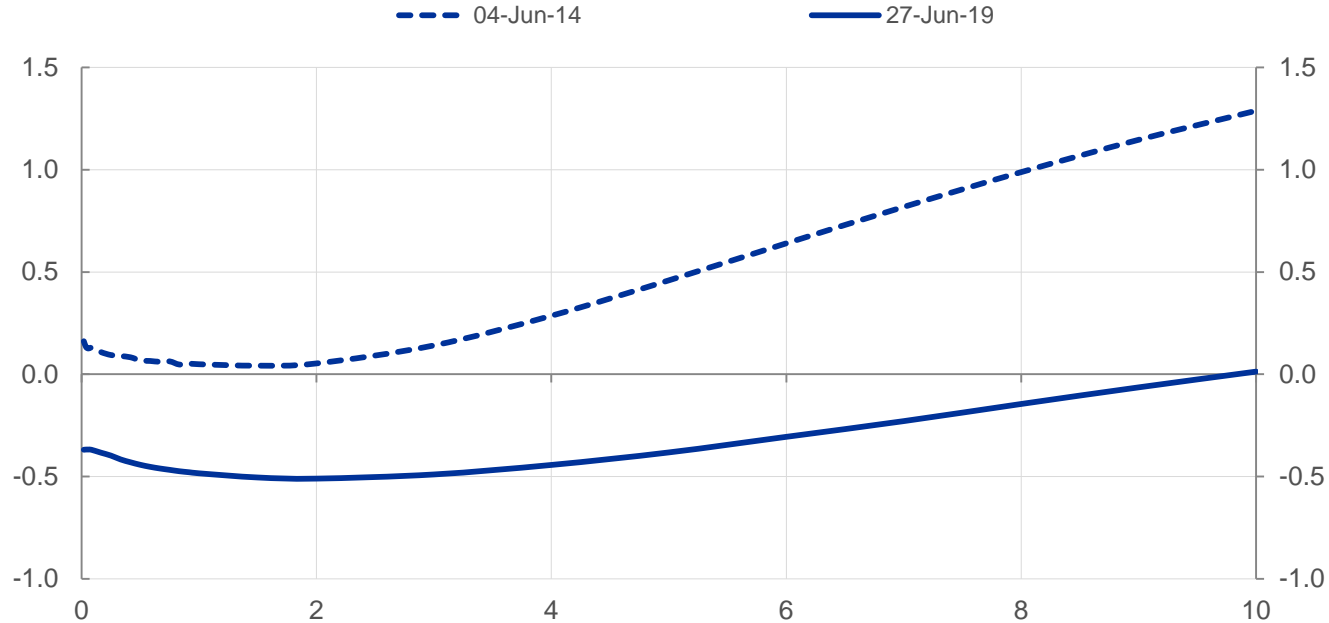
Notes: Notional stock of loans to non-financial corporations. It is constructed by adding the net flows of loans to NFCs to the stock of NFC loans as of June 2013. Depicted is the aggregate evolution for the group of banks that borrowed from both the TLTRO-I and II and the group of banks which did not access any of the two. Based on sample of euro area MFI for which individual balance sheet information is available. Vulnerable countries are Spain, Italy, Greece, Cyprus, Portugal and Slovenia. Less vulnerable countries are the remaining euro area countries. The series are not seasonally adjusted.

Latest observation is December 2017.



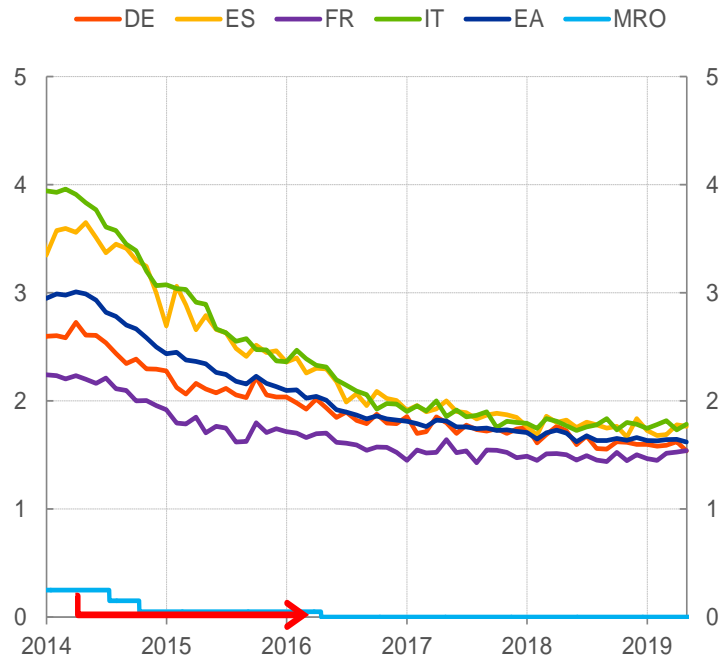
## 4) APP compresses term premia over the whole range of the yield curve

### OIS term structure (percentages per annum)



Sources: Reuters, ECB.  
Last observation: 27 June 2019.

## Bank lending rates for loans to non-financial corporates (NFCs) (percent)



Sources: ECB, ECB calculations.

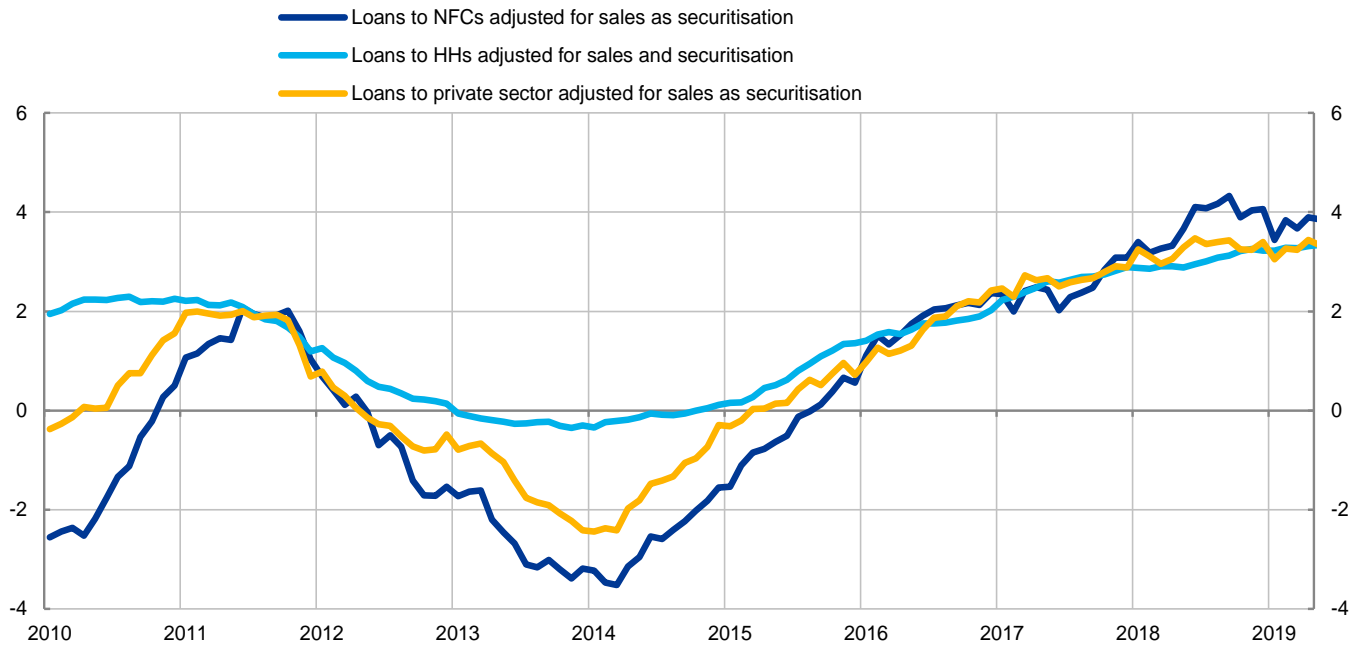
Notes: The indicator for the total cost of lending is calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes.

Latest observation: April 2019.

## Change in MRO rate and bank lending rates to NFCs (percent)



## MFI loans to the private sector (annual growth rates)



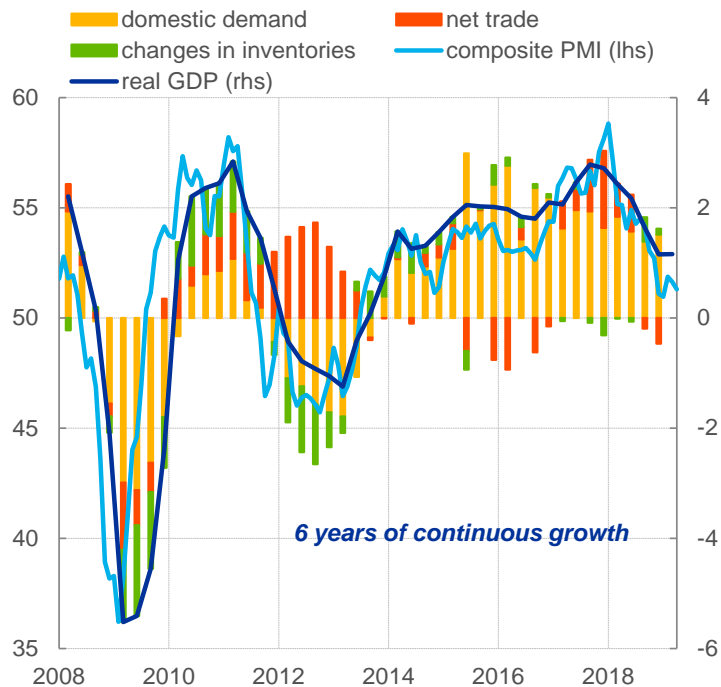
Source: ECB.

Notes: Monthly data. "NFCs" stands for non-financial corporations and "HHs" stands for households.

Latest observation: April 2019.

## Real GDP growth and main components

(percent / percentage points)

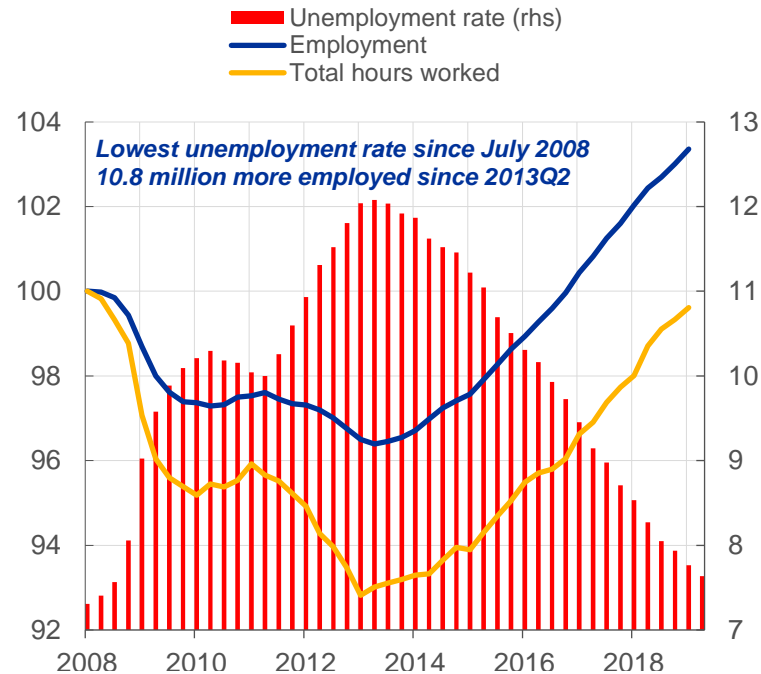


Sources: Eurostat, Markit, and ECB calculations.

Latest observation: 2019Q1 for real GDP, 2019Q1 for GDP components and April 2019 for PMI.

## Labour market indicators

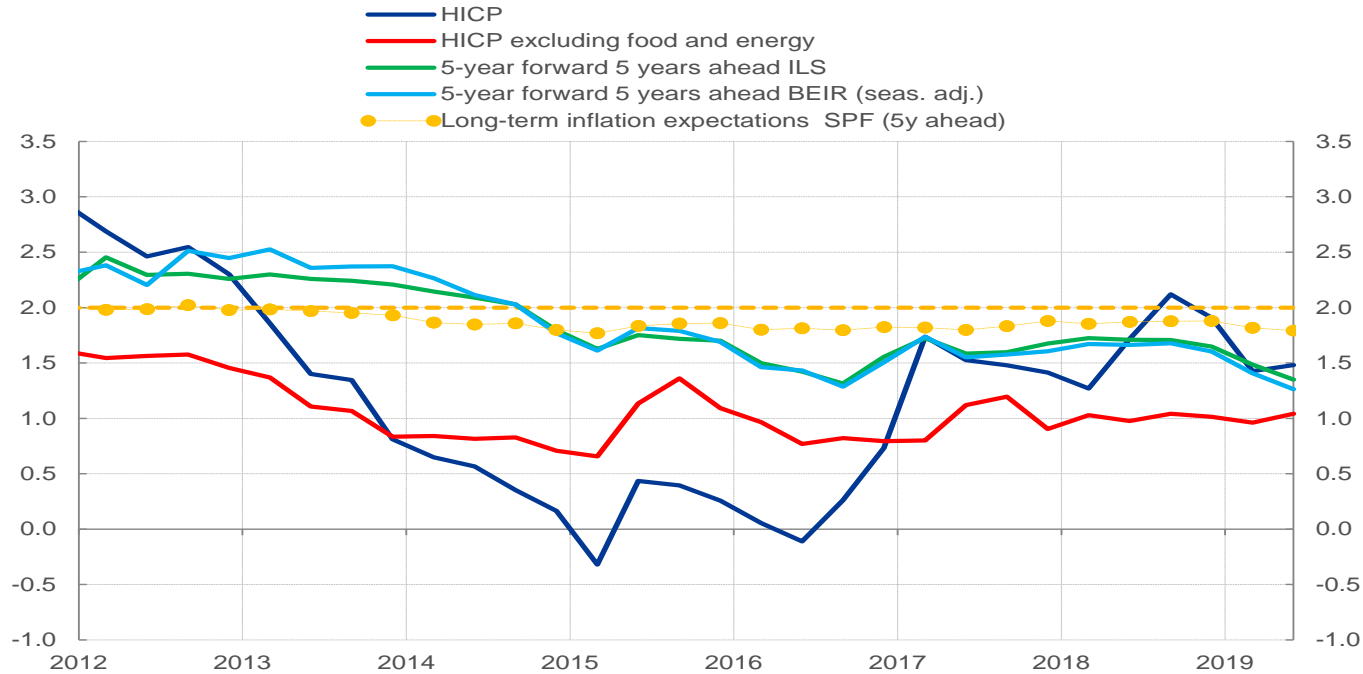
(Unemployment: percent; employment and total hours worked: index, 2008Q1=100)



Source: Eurostat, National accounts.

Latest observations: 2019Q1 for total hours worked and 2019Q2 for unemployment rate and employment.

## HICP inflation and inflation expectations (percent)

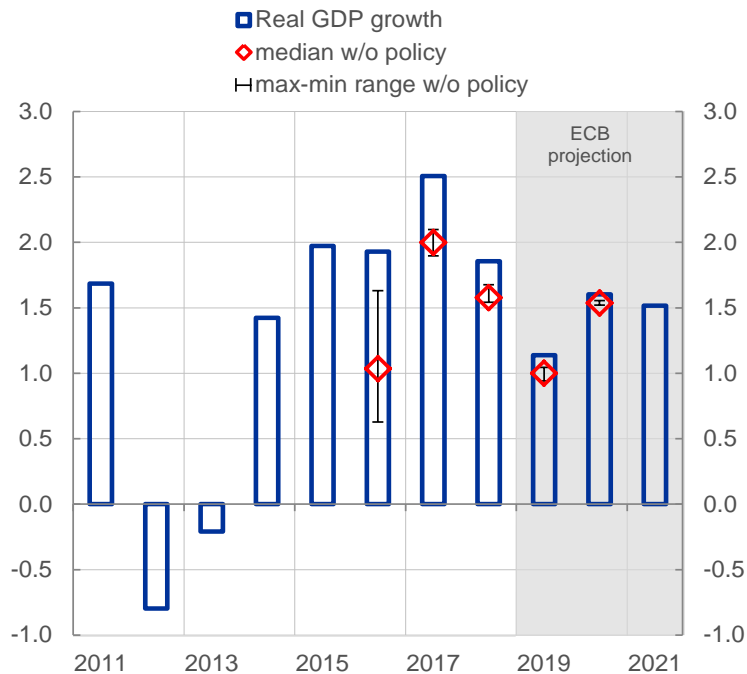


Source: ECB.  
Latest observation: 2019Q2.

# Effects of policy measures have been substantial

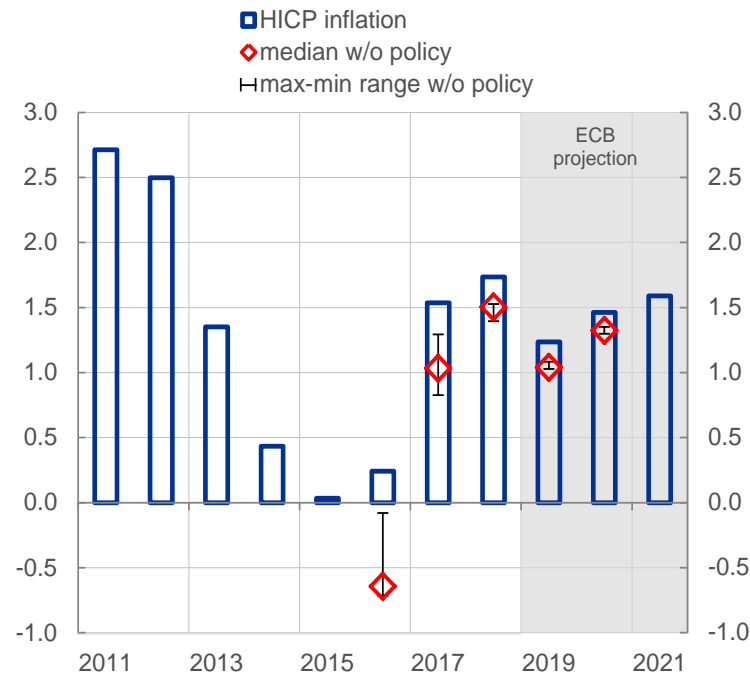
## Real GDP growth: actual, baseline projection and counterfactual without policy contribution

(year on year percentage change)



## HICP inflation: actual, baseline projection and counterfactual without policy contribution

(year on year percentage change)



Source: ECB computations.

Notes: HICP inflation and real GDP growth are based on the March 2019 MPE; the median and range reflect estimates of HICP inflation and real GDP growth over the projection horizon in the absence of monetary policy support.

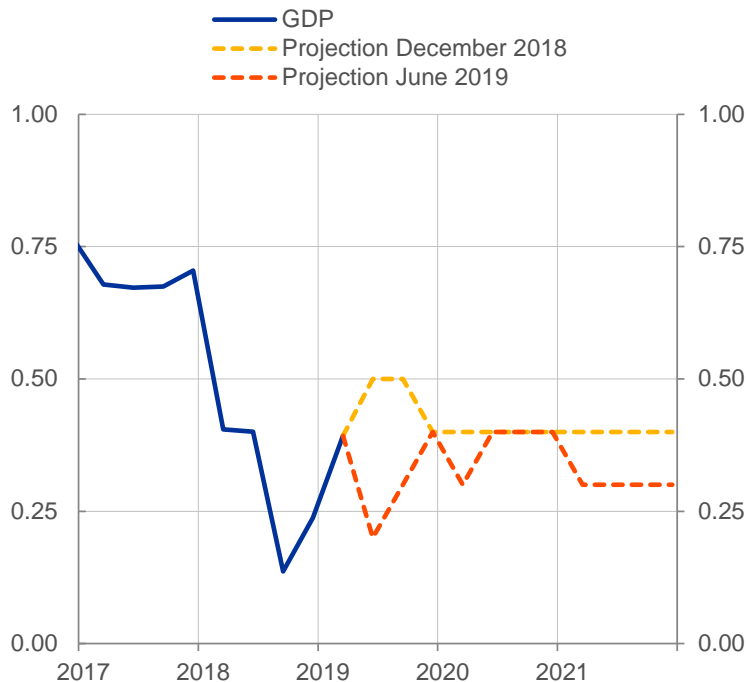
Latest observation: 2019Q12 for HICP and 2019Q41 for GDP.

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# Downward revision in projections

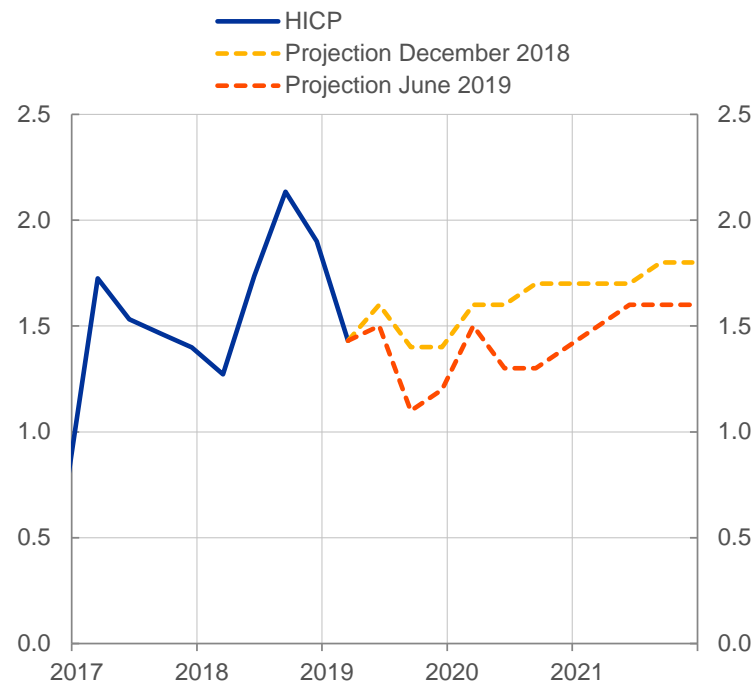
## Real GDP growth: June 2019 projection vs. December 2018 projection

(quarterly change in percent)



## HICP inflation: June 2019 projection vs. December 2018 projection

(year on year percentage change)



Source: ECB computations.

Notes: HICP inflation and real GDP growth are based on the March 2019 MPE; the median and range reflect estimates of HICP inflation and real GDP growth over the projection horizon in the absence of monetary policy support.

Latest observation: 2019Q12 for HICP and 2019Q41 for GDP.

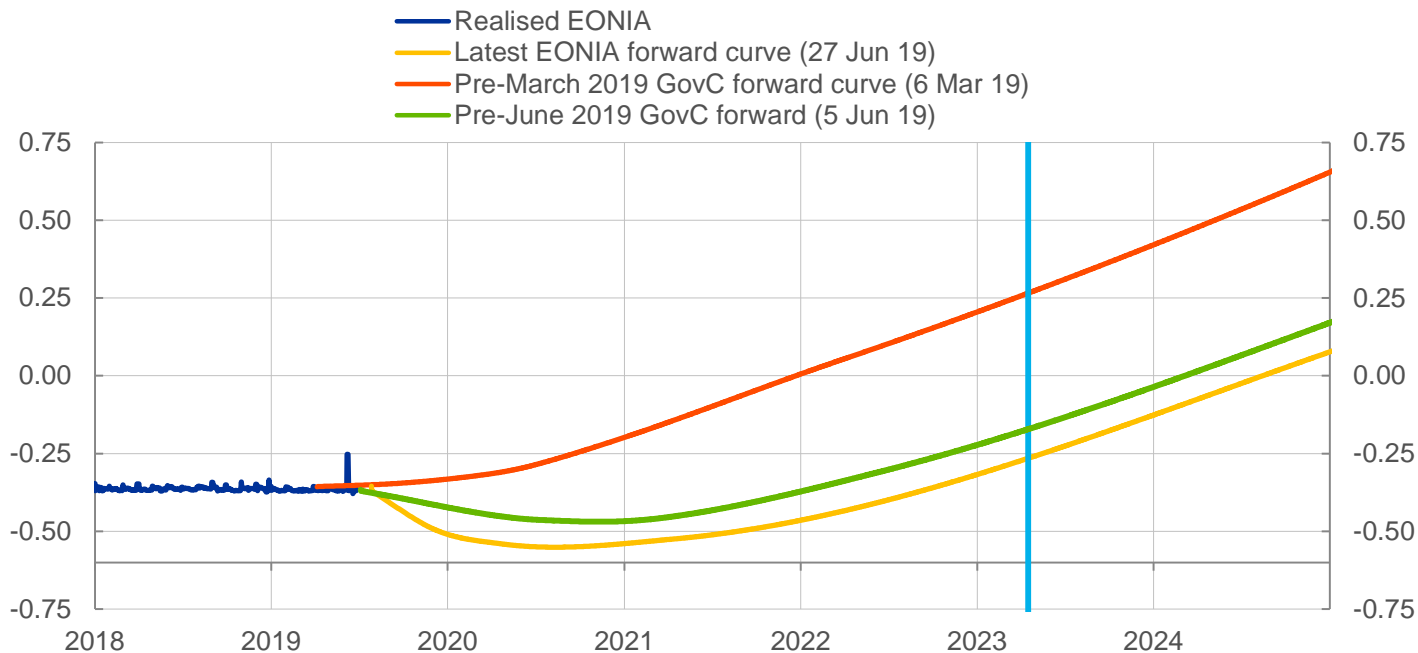


1. **Forward guidance:** We now expect [the key ECB interest rates] to remain at their present levels ***at least through the first half of 2020***, and in any case for as long ***as necessary to ensure the continued sustained convergence of inflation*** to levels that are below, but close to, 2% over the medium term.
2. **APP:** we intend to continue ***reinvesting, in full, the principal payments*** from maturing securities purchased under the asset purchase programme ***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.
3. **TLTRO-III:** the interest rate in each operation will be set at a level that is 10 basis points above the average rate applied in the Eurosystem's main refinancing operations over the life of the respective TLTRO. For banks whose eligible net lending exceeds a benchmark, the rate applied in TLTRO III will be lower, and can be as low as the average interest rate on the deposit facility prevailing over the life of the operation plus 10 basis points.

# 1) Forward guidance steer interest rate expectations

## EONIA and EONIA forward curve

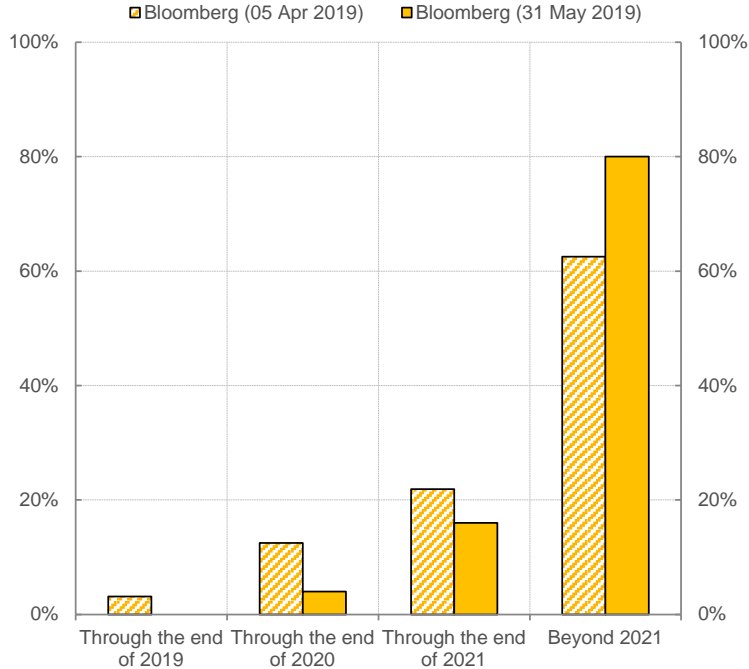
(percent)



Source: Thomson Reuters, ECB staff calculations  
Latest observation: 27 June 2019.

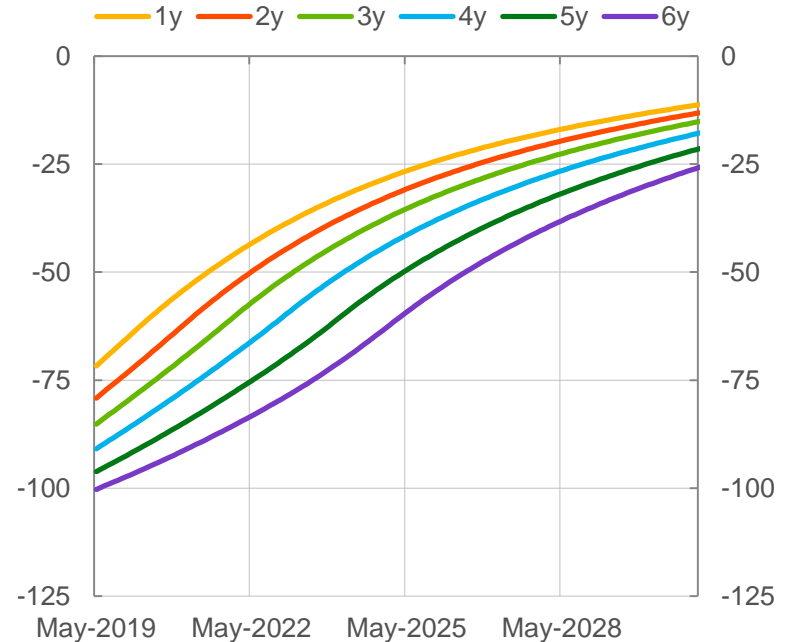
## 2) Reinvestments extract duration risk from the market

### Expectations for the horizon of full reinvestments (percent of respondents)



Source: Bloomberg (05 April 2019) and Bloomberg (31 May 2019).  
 Note: Answers to the question "How long after the end of net asset purchases do you expect the ECB will continue the reinvestment of maturing debt?". 32 respondents for Bloomberg (05 April 2019) and 25 respondents for Bloomberg (31 May 2019).

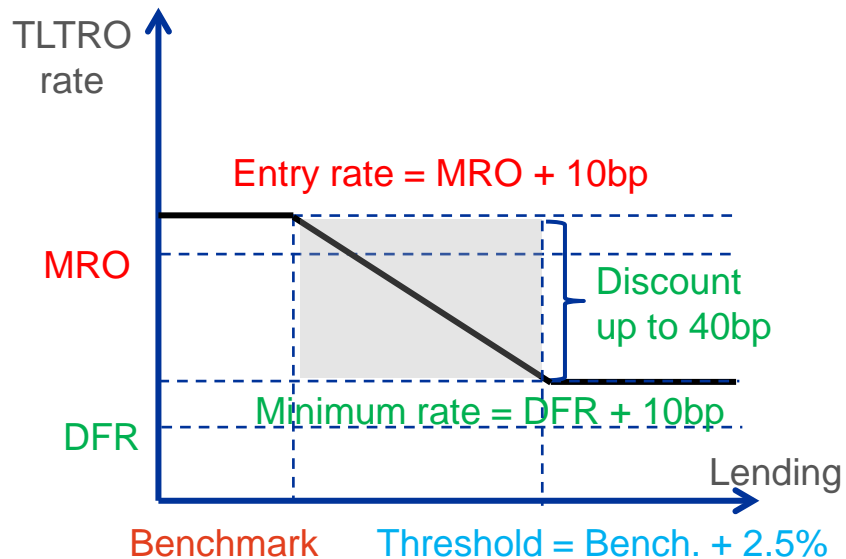
### Effect of different reinvestment scenarios on 10-year term premium (basis points)



Source: Eser, Lemke, Nyholm, Radde, and Vladu (2019), ECB Working Paper, forthcoming.  
 Notes: The chart shows the impact of the term premium compression over time, for different APP reinvestment horizons as indicated in the legend. The reinvestment horizon is defined relative to the end of net asset purchases. The marginal impact of each additional year of reinvestment is given by the distance between the scenario curves. Estimates are based on a no-arbitrage term structure model incorporating the relative bond supply held by price-sensitive investors ("free-float"). Results are based on projected free-floats in May 2019.  
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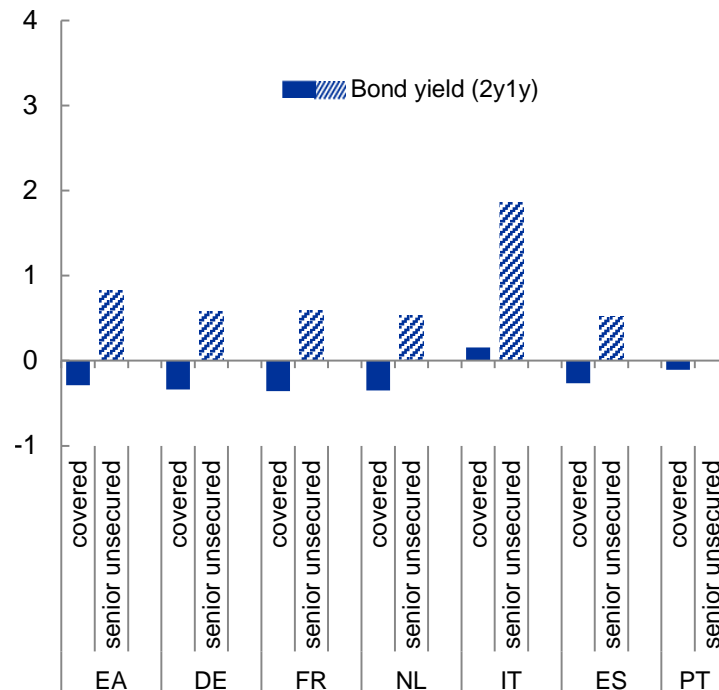
### 3) TLTRO-III with accommodative pricing

#### TLTRO-III interest rate schedule



Source: ECB.

#### Interest rates on alternative funding sources for banks (percent)



Source: ECB, ECB calculations.

Notes: No senior unsecured bonds are available for PT. Bond yields are 2-year forward rates in 1 year. Latest observation: 21 June 2019.

- **Determination in case of contingencies:** Looking ahead, the Governing Council is determined to act in case of adverse contingencies and also stands ready to adjust all of its instruments, as appropriate, to ensure that inflation continues to move towards the Governing Council's inflation aim in a sustained manner.
- **Monitoring bank-based transmission:** The Governing Council also assessed that, at this point in time, the positive contribution of negative interest rates to the accommodative monetary policy stance and to the sustained convergence of inflation is not undermined by possible side effects on bank-based intermediation. However, we will continue to monitor carefully the bank-based transmission channel of monetary policy and the case for mitigating measures.

**Thank you**