



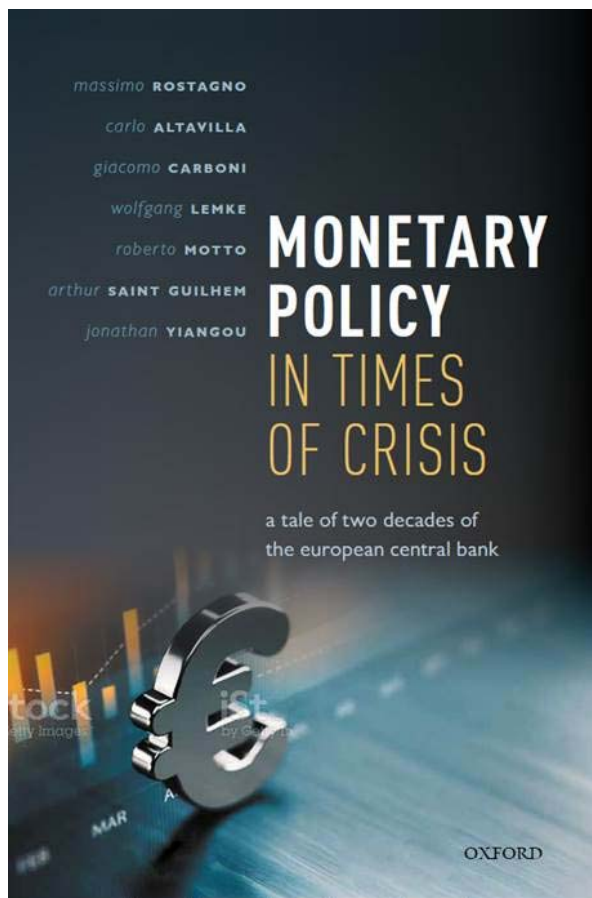
**“Monetary Policy in Times of Crisis - A Tale of Two Decades  
of the European Central Bank”**

**Tuesday 16 November 2021**  
1 – 2.15 p.m.

**WEBINAR**

**by Roberto Motto, senior adviser at the ECB’s Monetary Policy Department**

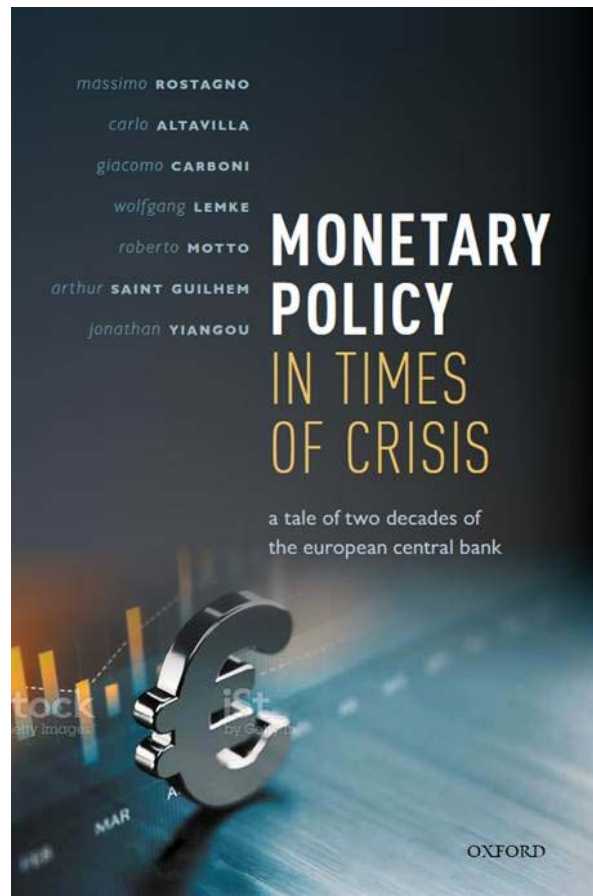
**Introduction by Jef Boeckx, first adviser Economics and Research Department  
National Bank of Belgium**



### Why a book on the ECB's monetary policy?

- Twenty-year anniversary of the ECB
- Inside perspective of ECB staff
- Blend of narrative and selected in-depth analytics
- Analysis of ECB's unconventional measures
- Background analysis for 2020-21 ECB's strategy review

The views expressed in the book and in this presentation are those of the authors and do not necessarily reflect the views of the European Central Bank or the Eurosystem

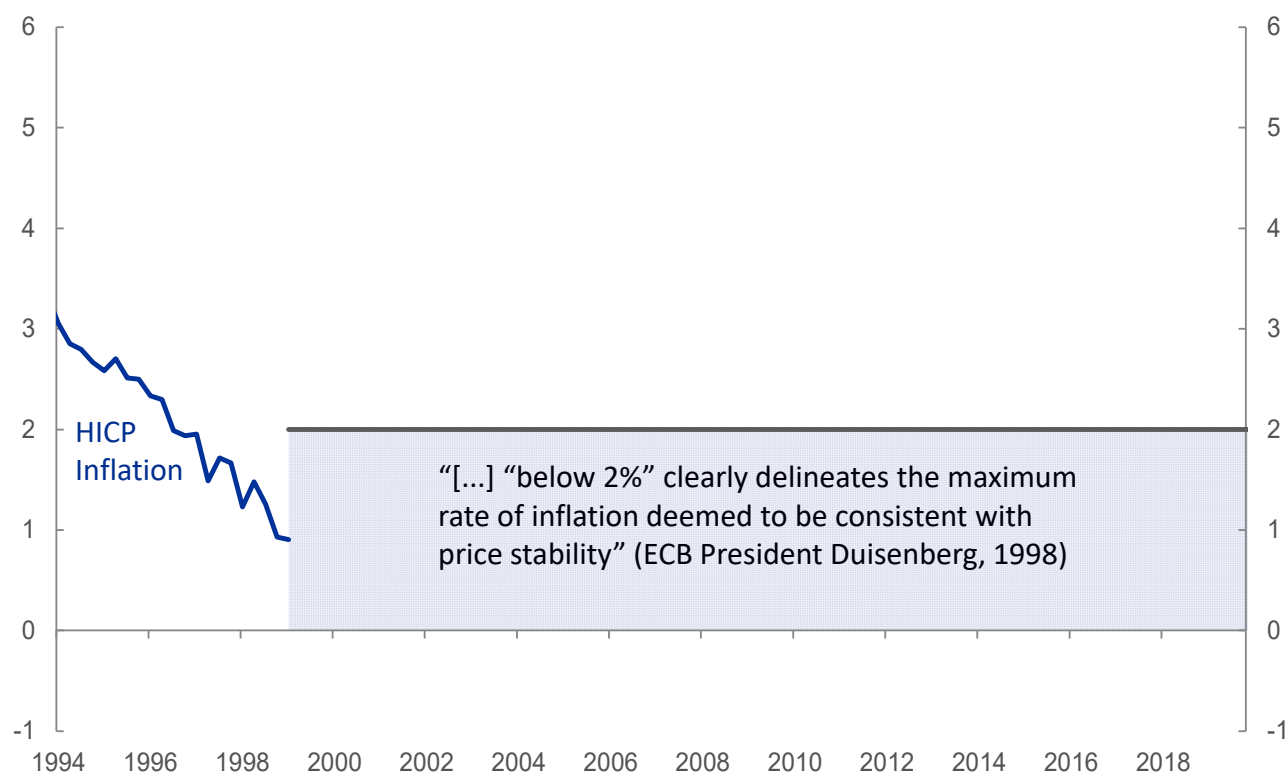


### Content of the book

1. The Foundations
2. The ECB Strategy and Its Critics
3. Strategy in Action
4. The Crisis
5. The Second Regime: Deflation Risks
6. A Combined Arms Strategy

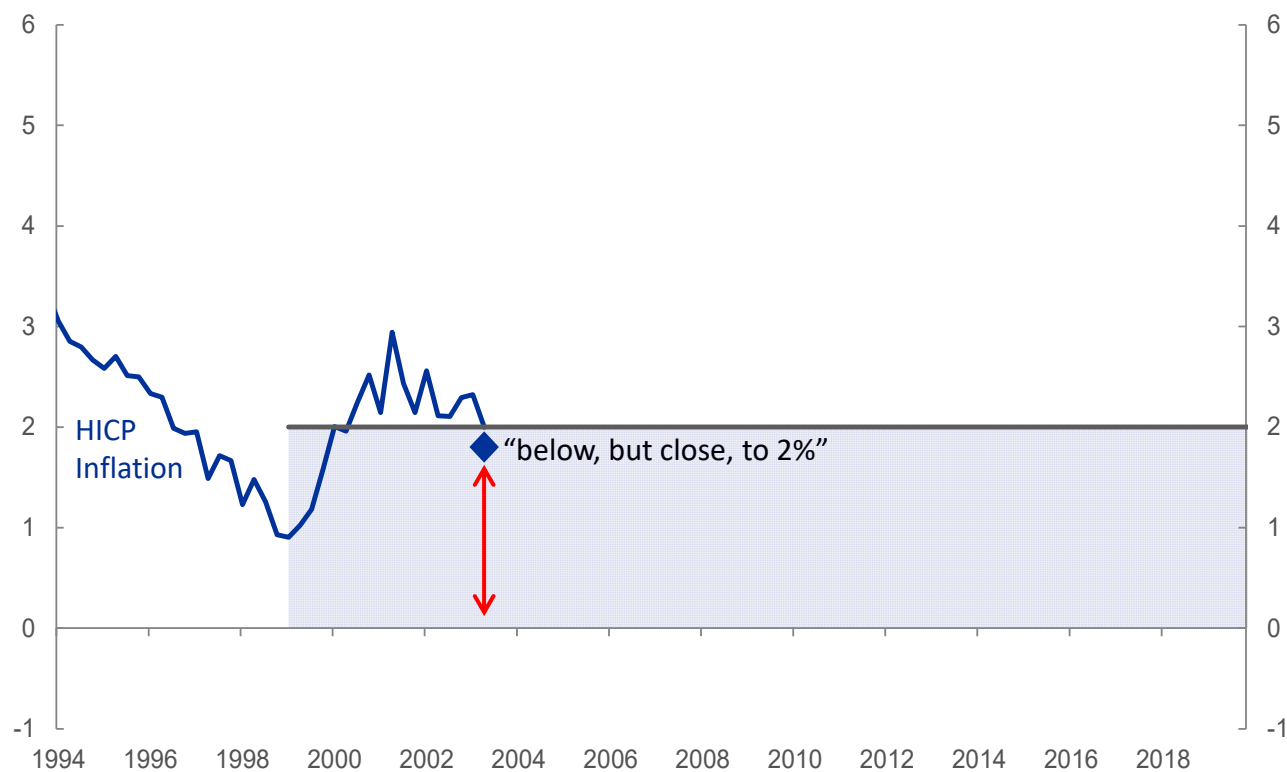
## 1998: Price stability range with hard ceiling of 2%

... locking in low inflation after decades of high inflation in many euro area countries



Notes: Annual % change.

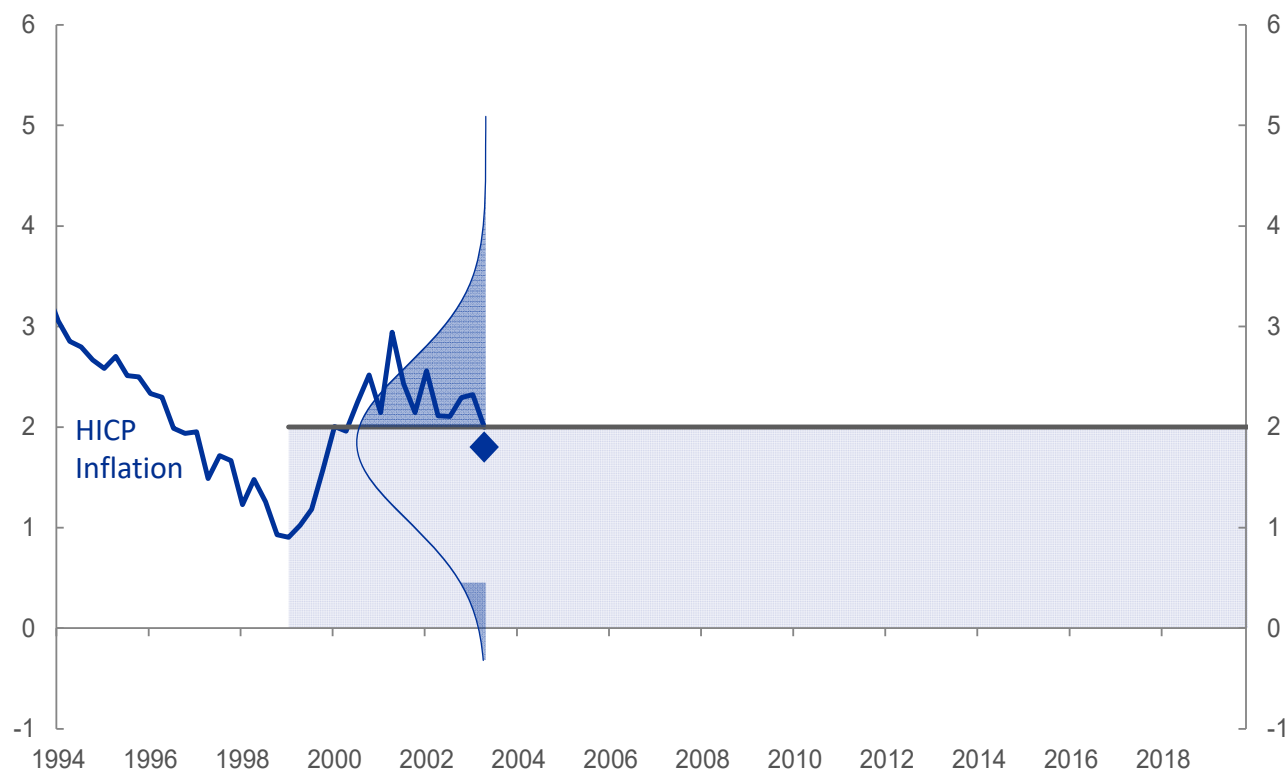
## 2003: Price stability definition supplemented with aim of below, but close, to 2% ... creating a safety margin above zero



Notes: Annual % change.

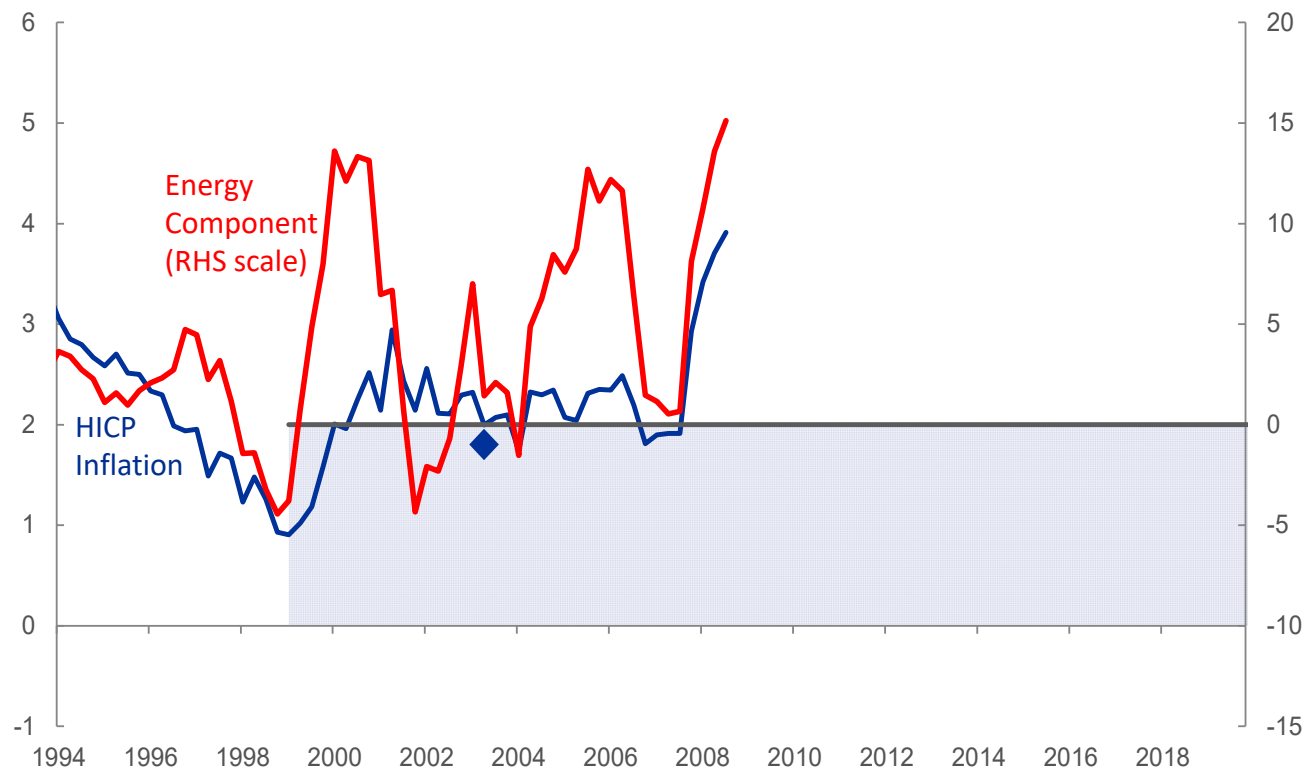
## 2003: Price stability definition supplemented with aim of below, but close, to 2%

... may have given rise to (perceived) asymmetry



Notes: Annual % change.

## 1<sup>st</sup> regime, coinciding with 1<sup>st</sup> decade: prevalence of one-sided cost-push shocks ... driving inflation to the 2% edge

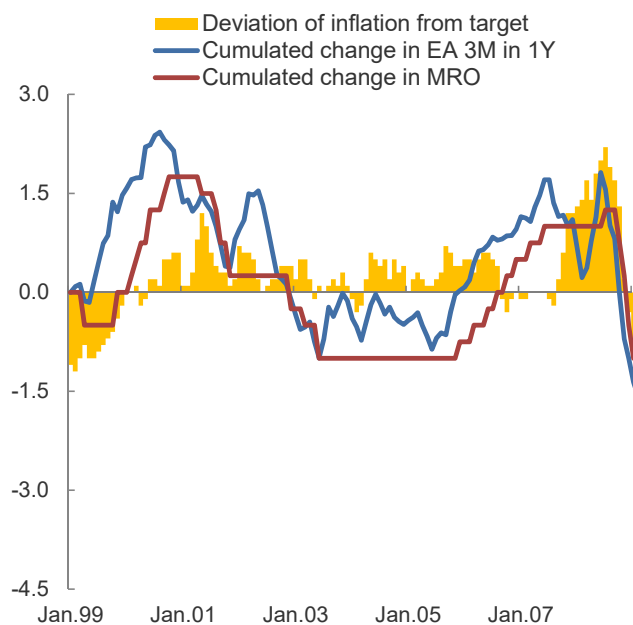


Notes: Annual % change.

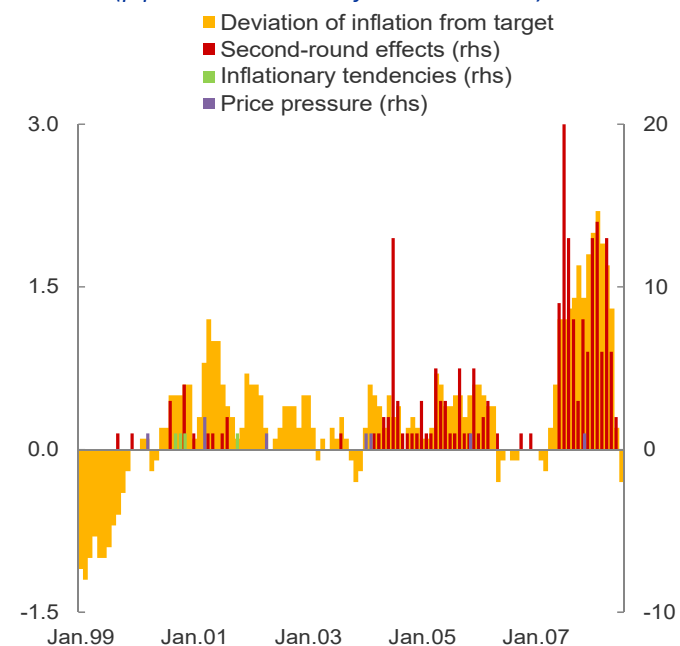
## The framework acted as stabilising mechanism

... expectations of strong policy reaction, which allowed actual policy to be patient

Cumulated change in EA near-term rates and inflation overruns  
(percentage points)



References to inflation risks in ECB communication and inflation overruns  
(p.p. lhs and number of occurrences rhs)

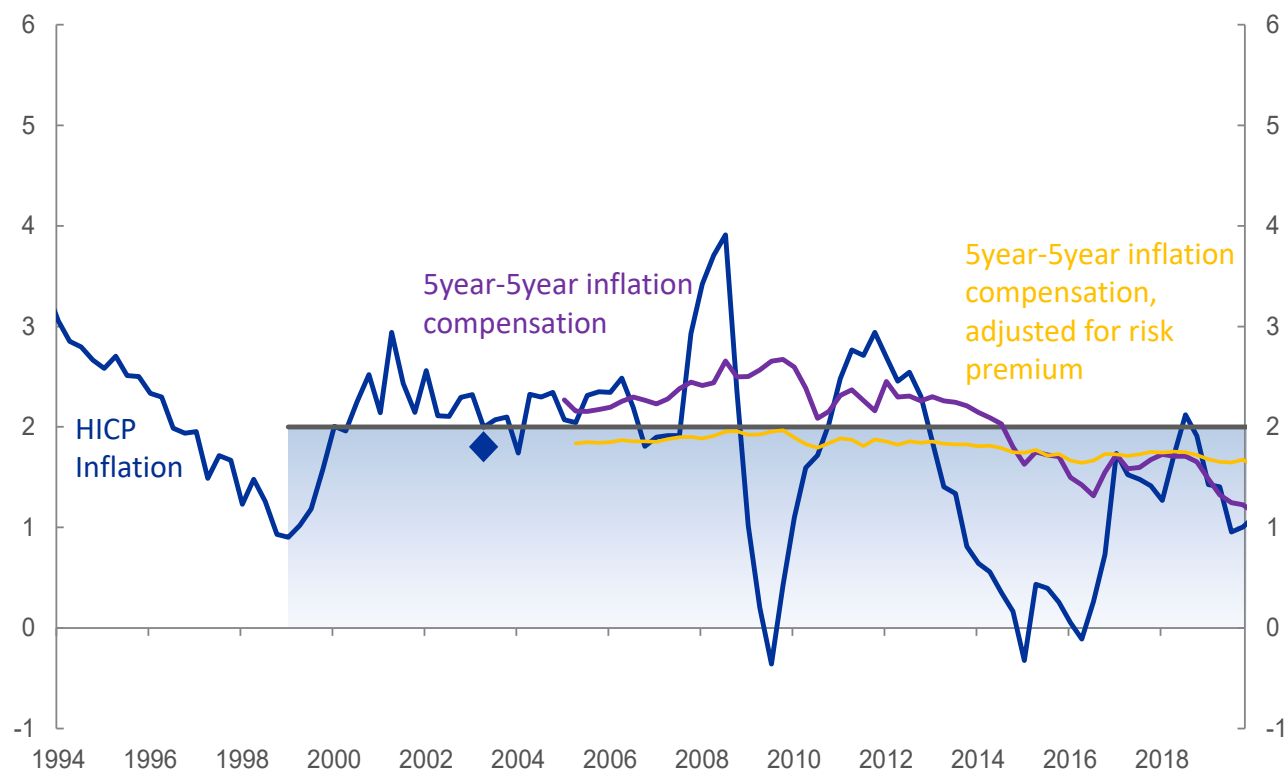


Notes: The red, green and purple bars in the RHS chart report the number of occurrences of the phrases “second round effects”, “inflationary tendencies”, and “price pressures” in the Introductory Statement to the Press Conference (with Q&A) over the period 1999-2008. For each occurrence, an additional filter is applied by checking neighbouring words to ensure that it refers to upside inflationary pressure. Latest observation: December 2008.



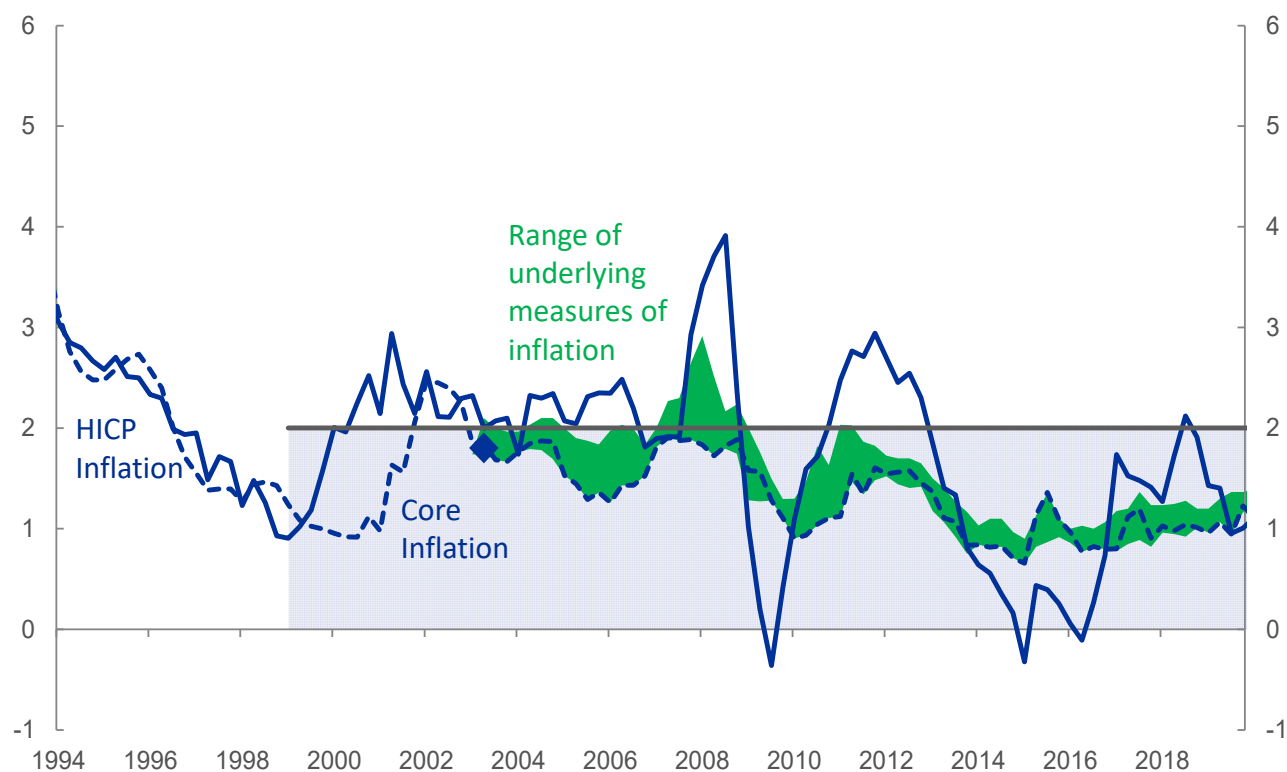
## The framework acted as stabilising mechanism

... inflation expectations remained strongly anchored



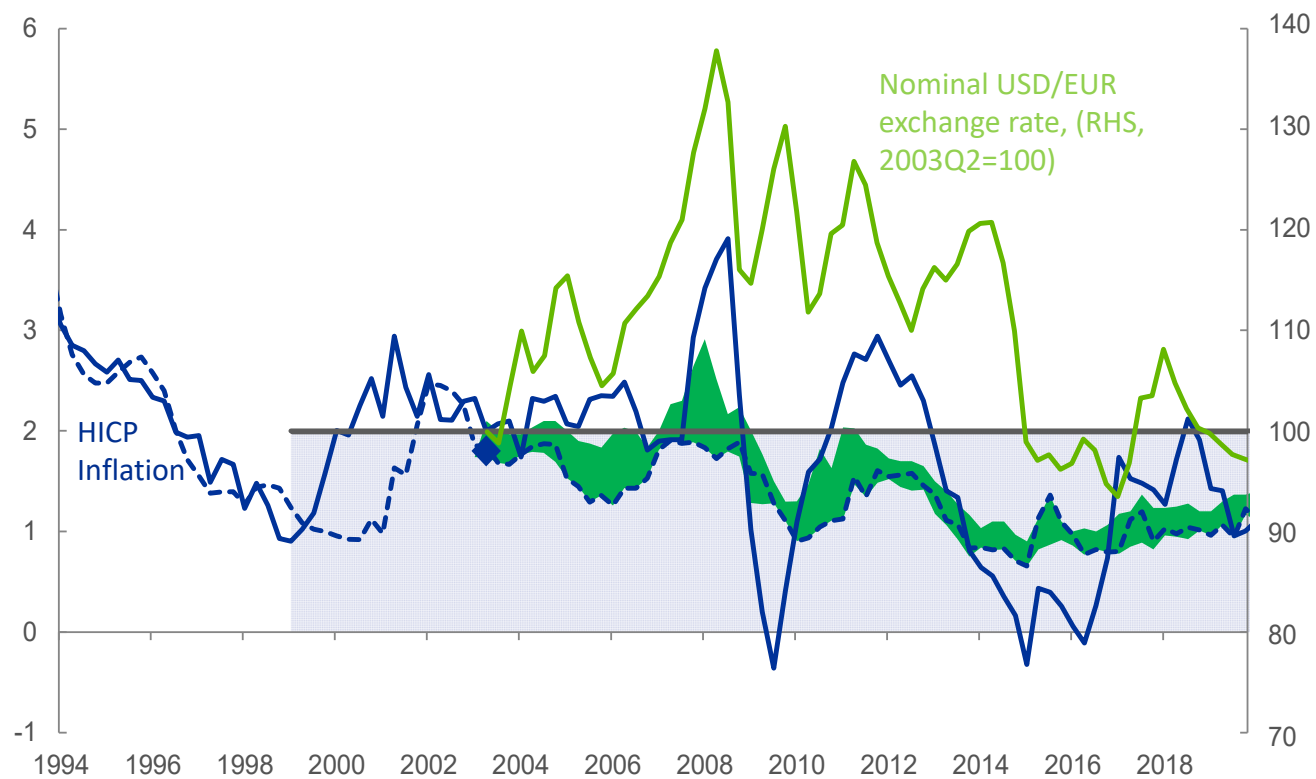
Notes: Annual % change.  
Latest observation: end-2019.

**But, over time, core inflation had to make space and adjust downward**  
... such that overall inflation could remain close to 2%



Notes: Annual % change. The green range includes measures of underlying inflation, i.e. HICP inflation excluding food and energy, HICP inflation excluding food, energy, travel-related items and clothing, PCCI (formerly U2 core) and Super-core. Latest observation: end-2019.

## The euro appreciation played a significant role in the adjustment of EA inflation ... reflecting monetary restriction relative to the US

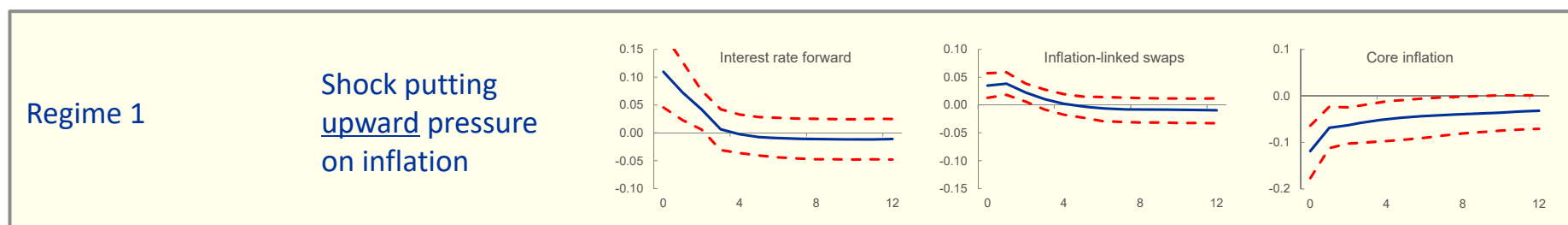


Notes: Annual % change.  
Latest observation: end-2019.

## 1<sup>st</sup> regime: econometric analysis supports our narrative

... expectations of strong policy reaction, little change in inflation expectations, decline in core

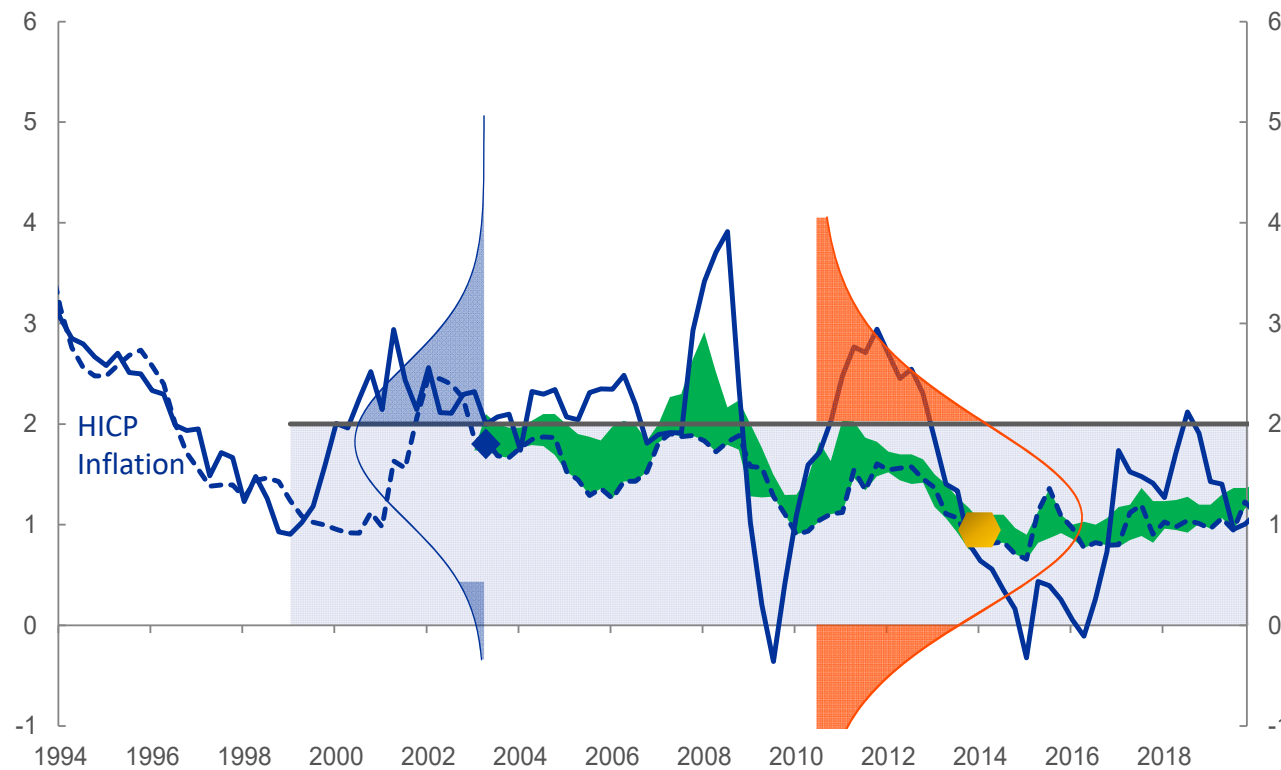
Impulse response functions to cost-push shock in the two regimes



Notes: Horizontal axis: months after the shock. Vertical axis: percentage points. The variables of the threshold-based VAR are HICP energy and core inflation, 3-m in 1-year nominal forward rate, term spread, 10-year ILS. The threshold that separates the two regimes is governed by the value of headline inflation, below or above 2%. The sample period spans from 2004 until 2018, at monthly frequency.

## 2<sup>nd</sup> regime, largely crisis period: prevalence of disinflationary shocks

... ceiling ceased to bind, lack of clear floor in price stability definition, lower bound on policy rate

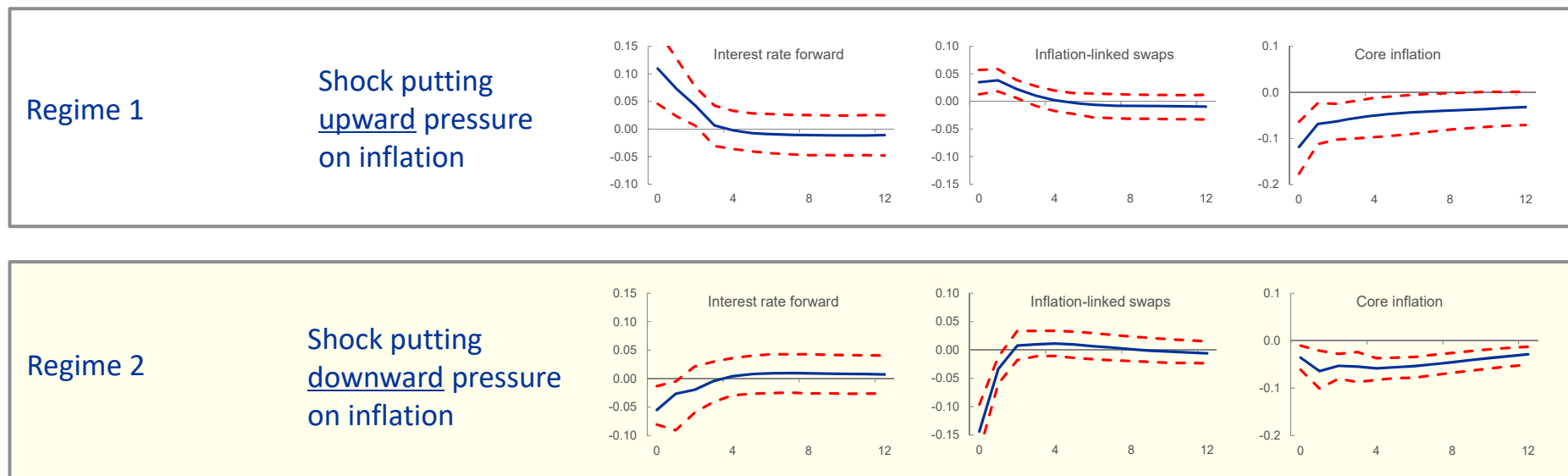


Notes: Annual % change.  
Latest observation: end-2019.

## 2<sup>nd</sup> regime: econometric analysis supports our narrative

... expectations of weak policy reaction, decline in inflation expectations, core follows headline

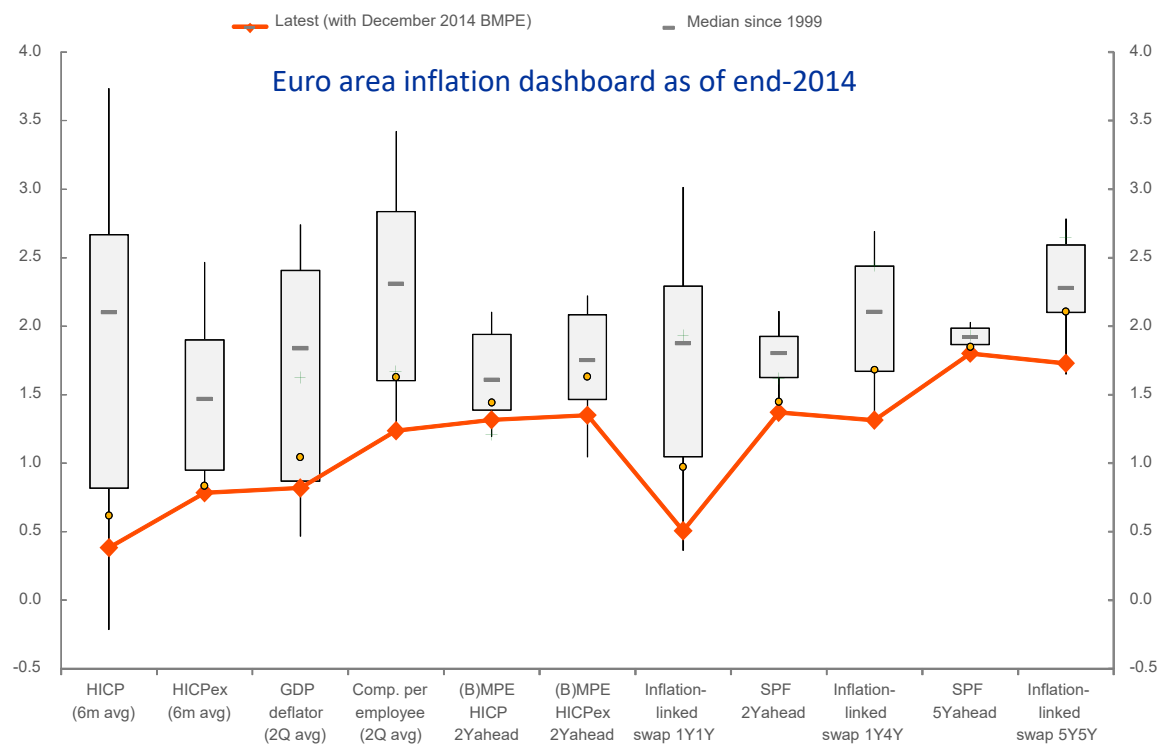
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## By 2014, deflation risks

... as reflected in broad-based assessment of inflation indicators



Notes: Year-on-year % change. The box plots cover the 10th-90th percentiles of historical distributions since 1999.

## ECB's strong policy response became necessary: a combined arms strategy

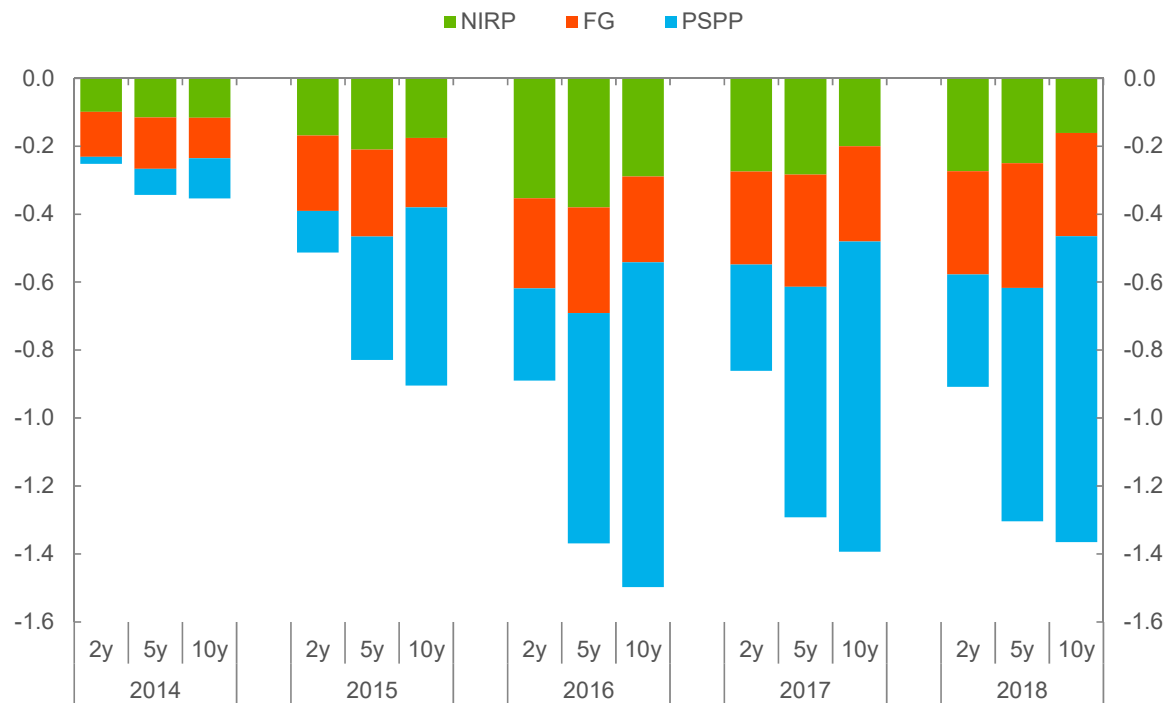
... a combination of policy measures highly complementary among them

- **Negative rate policy (NIRP)**
  - Alleviating the lower bound on policy rates and shifting down interest rates at all maturities
- **Purchases of private- and public-sector assets (APP)**
  - Pushing down medium- and long-term interest rates
- **Forward guidance (FG)**
  - Orienting expectations of the ECB's purchase and policy rate policies
- **Targeted longer-term refinancing operations (TLTRO)**
  - Compressing cost components of loan creation and influencing banks' lending rates & volumes



# ECB's policy measures have lowered interest rates at all maturities

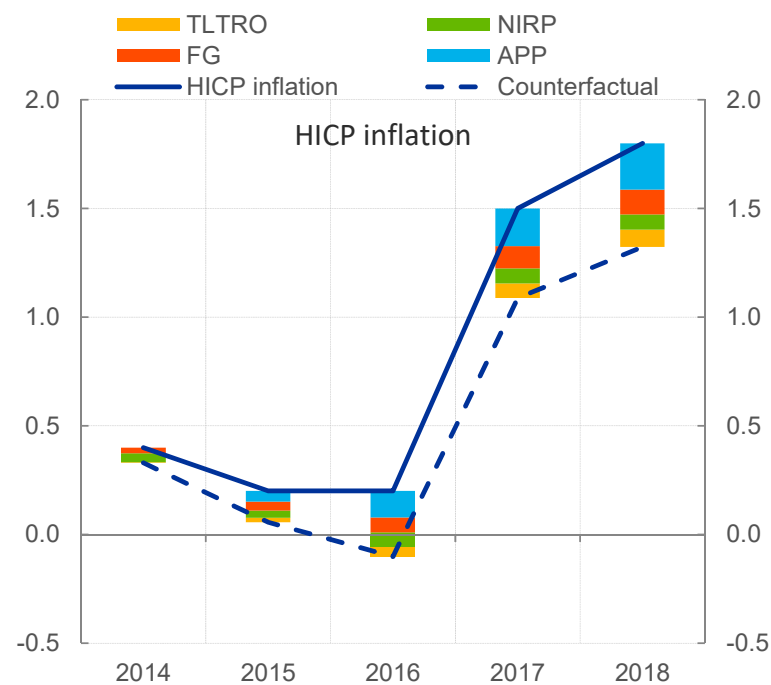
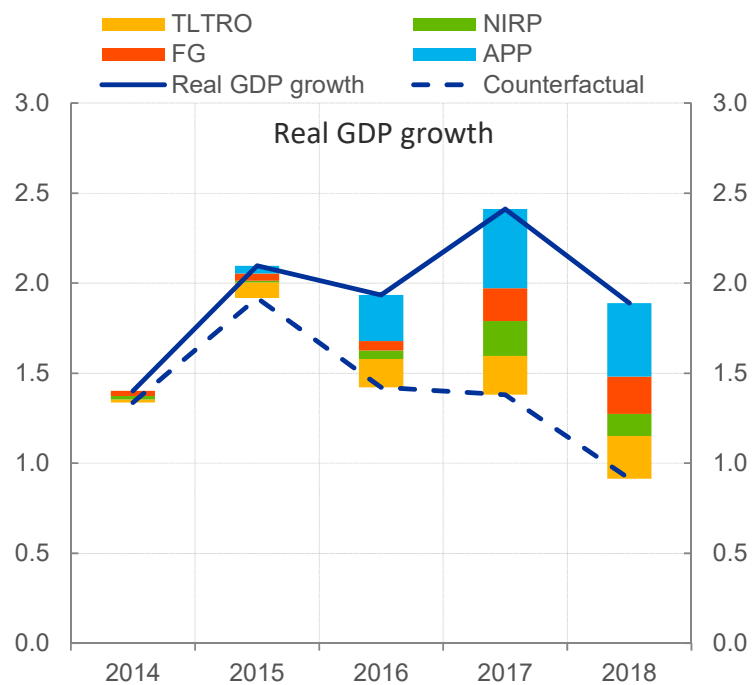
Impact of ECB policy measures on interest rates of different maturities  
(percentage points per annum)



Notes: The chart shows the impact of ECB non-standard measures on the GDP-weighted aggregate of euro area sovereign bond yields.

# Economic growth would have been weaker and inflation would have been lower ... without ECB's measures

Contribution of ECB's policy measures 2014-2018



Notes: Annual percentage change. Based on a macroeconomic model with financial variables conditioning on the yield curve impact shown on the previous slide.

# The ECB's new monetary policy strategy

## The ECB's monetary policy strategy statement

1. Changes since 2003
2. The Treaty basis
3. The appropriate price measure
4. The importance of an inflation buffer
5. The quantitative inflation target
6. Taking into account the effective lower bound
7. The medium-term orientation
8. Monetary policy instruments
9. The integrated analytical framework
10. Climate change
11. Communication
12. A regular review cycle

## Price stability framework

Price stability is best maintained by aiming for 2% symmetric inflation target over the medium term

- Persistent decline in equilibrium real interest rate over last decades
- Safety margin above zero while minimising costs of inflation
- Removes any possible ambiguity regarding symmetry of the ECB target

Taking into account the implications of the effective lower bound on nominal interest rate

- When the economy is operating close to the lower bound on nominal interest rates, it requires especially forceful or persistent monetary policy action to avoid negative deviations from the inflation target becoming entrenched
- This may also imply a transitory period in which inflation is moderately above target

## Monetary policy instruments

Ensuring that inflation stabilises at its 2% target in the medium term

- Primary monetary policy instrument is policy rates
- In recognition of the effective lower bound on policy rates, ECB will also employ in particular forward guidance, asset purchases and longer-term refinancing operations, as appropriate



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