

Monetary policy in times of pandemic and war

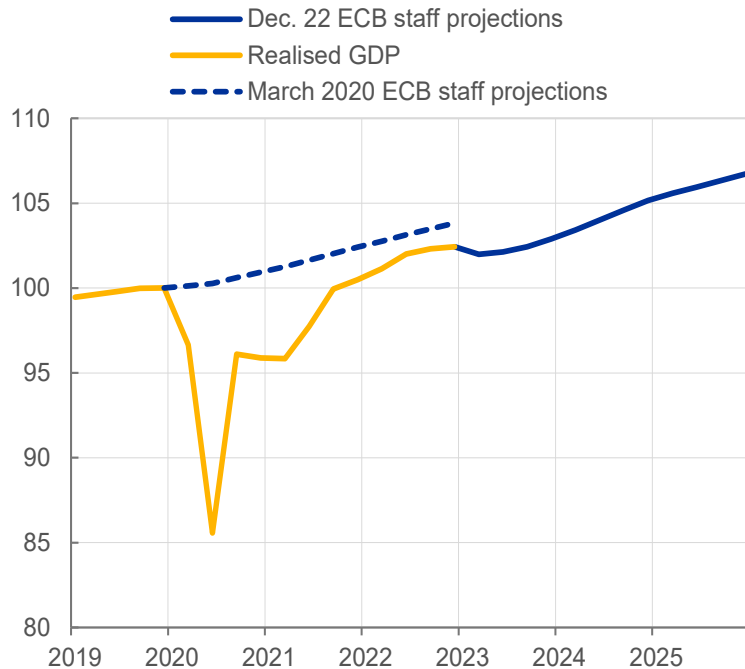
Isabel Schnabel, Member of the ECB's Executive Board

Web Seminar Finanzwende, 7 February 2023

Economic growth and inflation in the euro area since the start of the pandemic

Real GDP growth

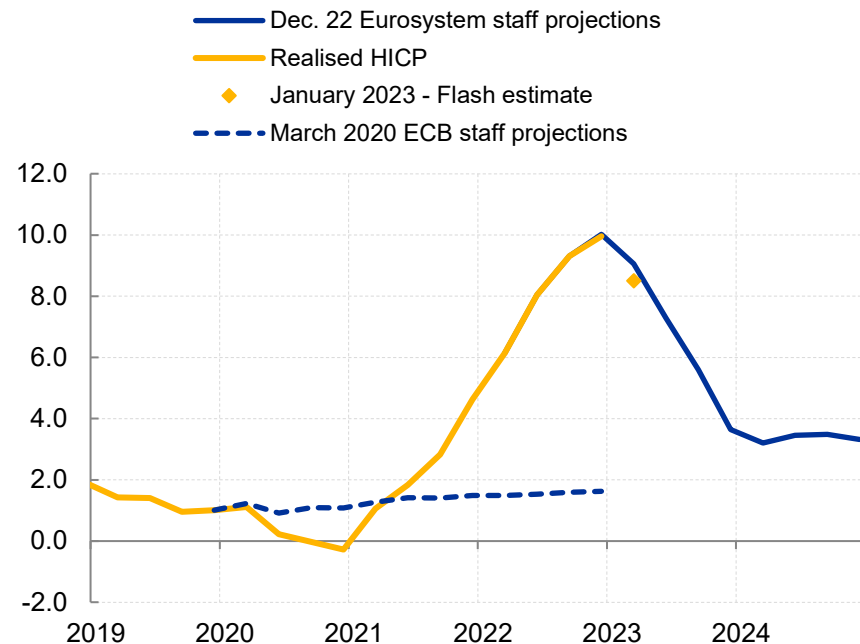
(index: Q4 2019 = 100)



Sources: Eurostat, ECB and Eurosystem.
Latest observation: Q4 2022.

Inflation

(annual percentage changes, quarterly data)

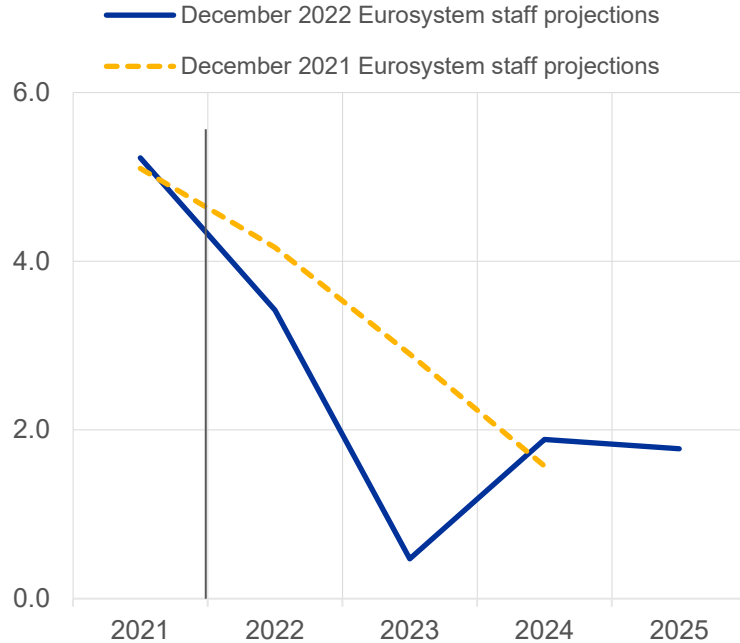


Sources: Eurostat, ECB and Eurosystem.
Latest observation: Q4 2022.

War had a negative impact on growth but no deep recession expected

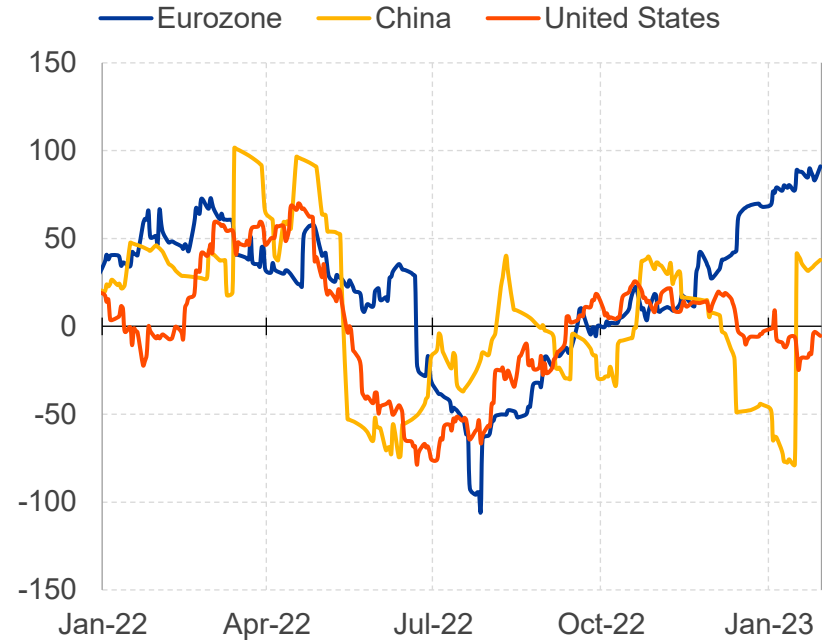
Real GDP growth projections

(annual percentage changes)



Sources: ECB and Eurosystem.

Citi economic surprise indices

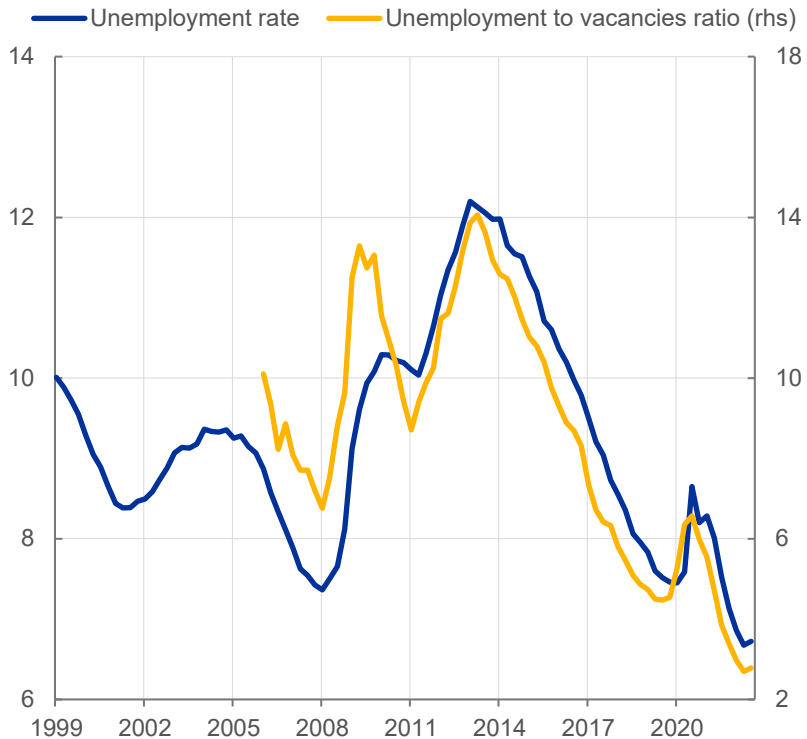


Sources: Bloomberg, Citi.
Latest observation: 3 February 2023.

Euro area unemployment rate at record low level amid labour shortages

Unemployment and vacancies

(left-hand scale: percentages; right-hand scale: ratio)



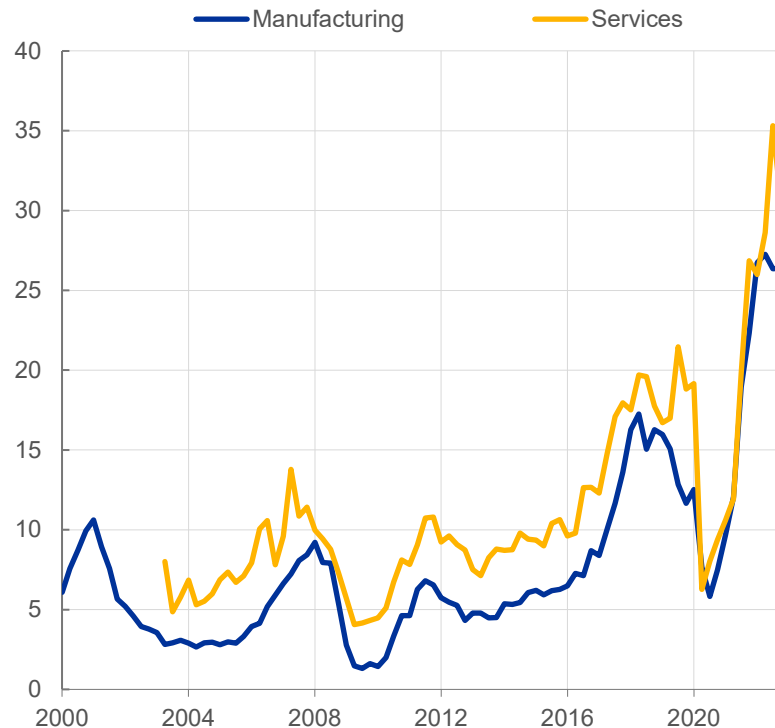
Sources: Eurostat, Haver Analytics and ECB staff calculations.

Notes: Eurostat vacancies are reported only in firms with 10 or more employees in France.

Latest observations: unemployment rate: 2022 Q3; UV ratio: 2022 Q3 without Portugal.

Limits to production – shortage of labour

(percentage balances)



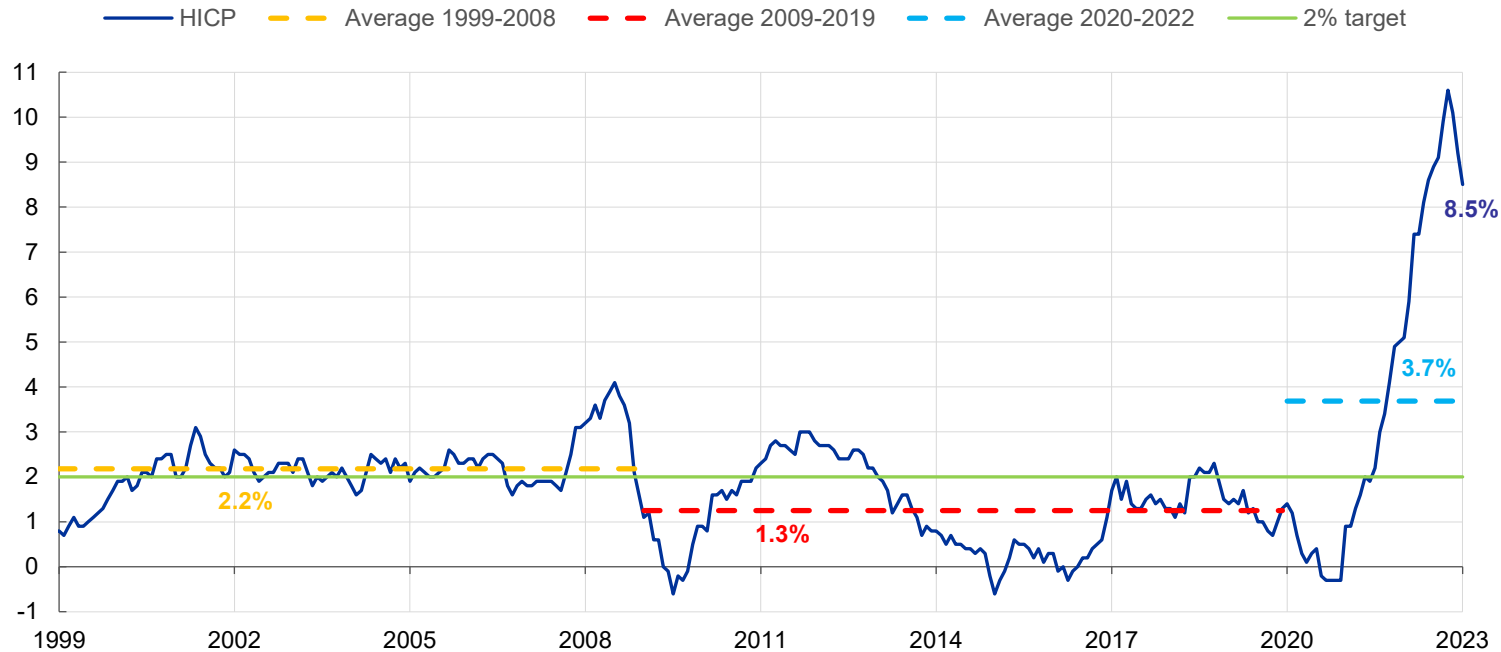
Source: European Commission.

Notes: Survey in industry and the services sector: percentage of firms who indicate labour shortages as limits on production and business.

Latest observation: 2022 Q4 (December 2022).

Inflation has started to edge down after sharp increase to historically high levels

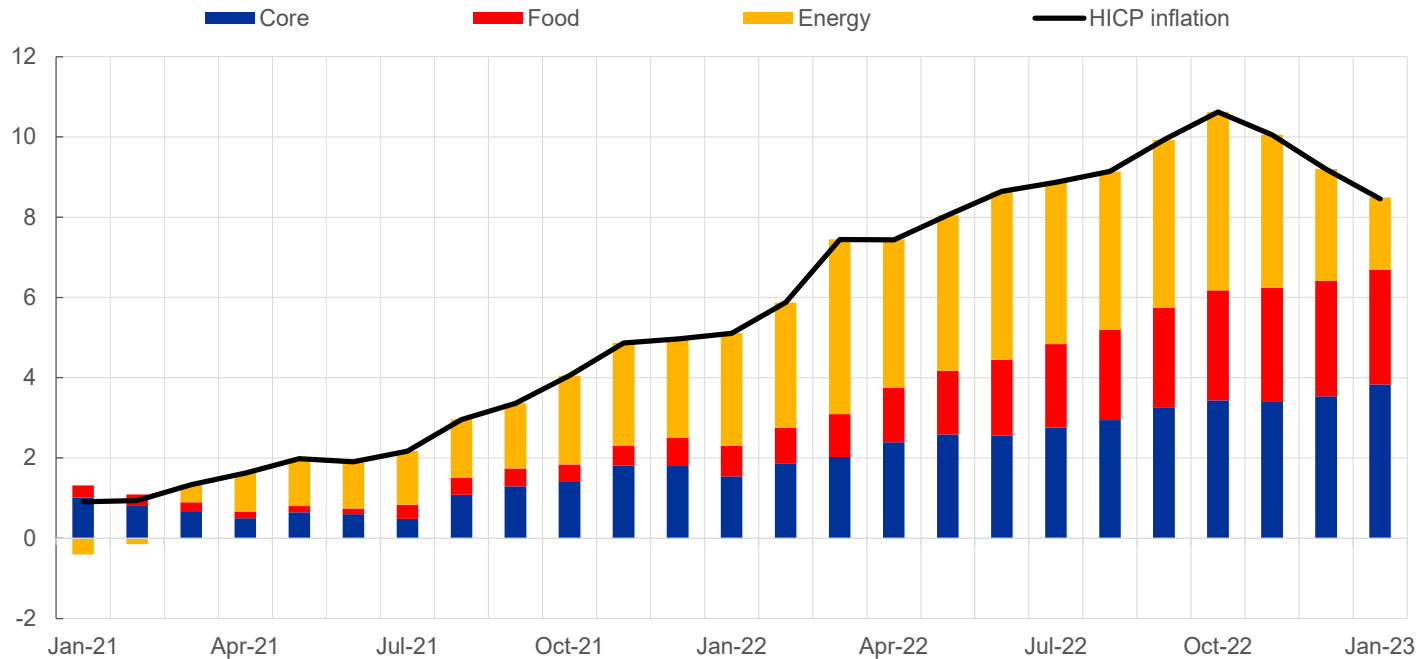
Euro area HICP inflation (annual percentage changes)



Sources: Eurostat and ECB calculations.
Latest observation: January 2023 (flash).

Decline in inflation driven by energy contribution, while other components still rise

Contributions to euro area inflation (annual percentage changes and percentage point contribution)

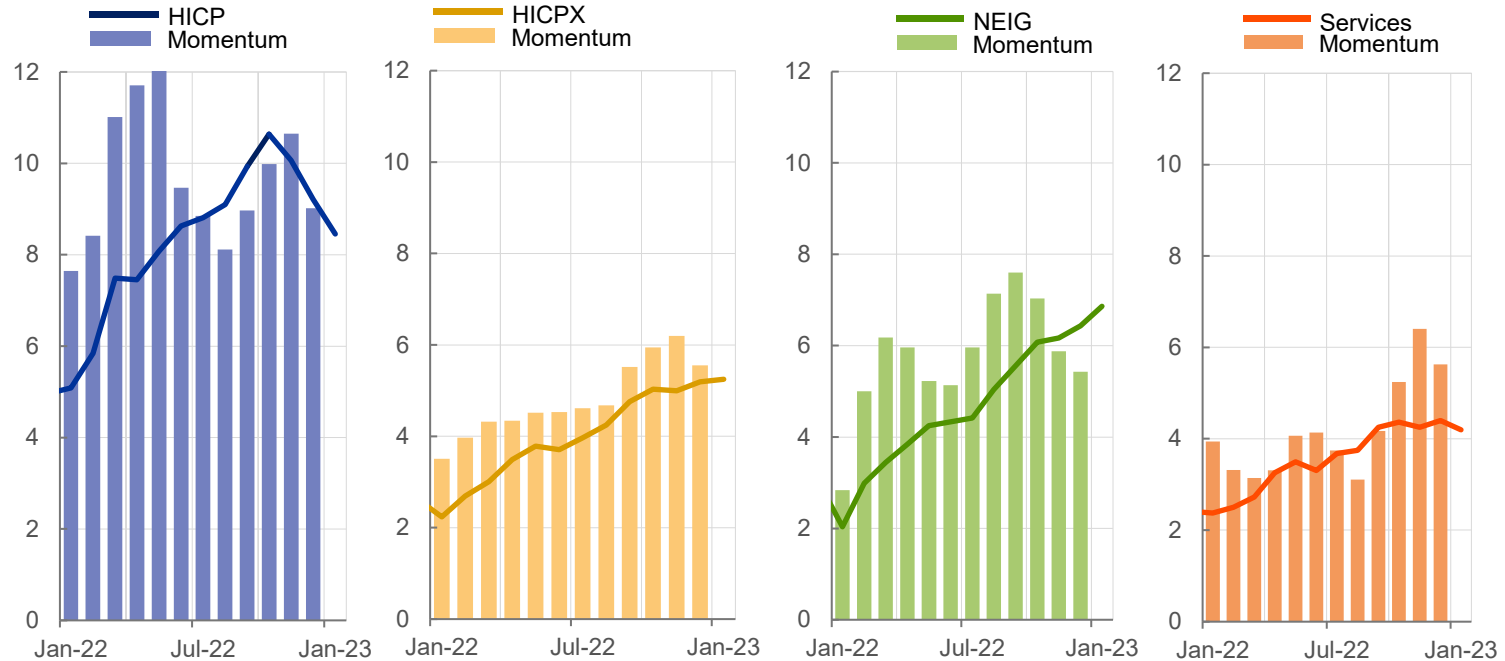


Sources: Eurostat and ECB calculations.
Notes: January contributions are preliminary.
Latest observation: January 2023 (flash).

Inflation momentum remains high, especially for services

Inflation momentum for HICP and its sub-components

(annual percentage change; annualised 3m-o-3m percentage change)



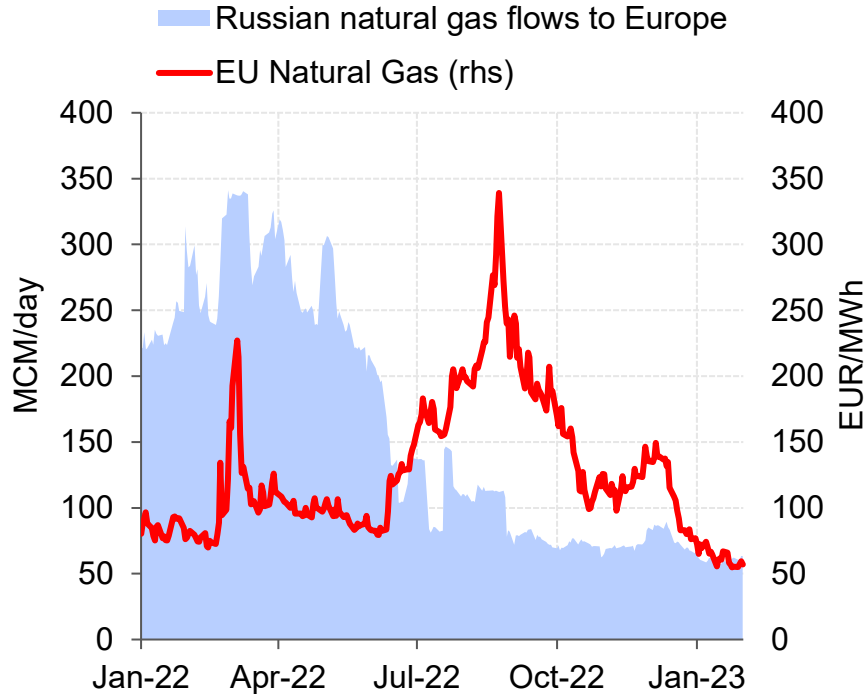
Sources: Eurostat and ECB calculations.

Note: Seasonally-adjusted data.

Latest observation: January 2023 (flash) for inflation rates and December 2022 for inflation momentum.

Gas prices have dropped to pre-war levels and supply bottlenecks are easing

EU natural gas prices and pipeline flows from Russia to Europe



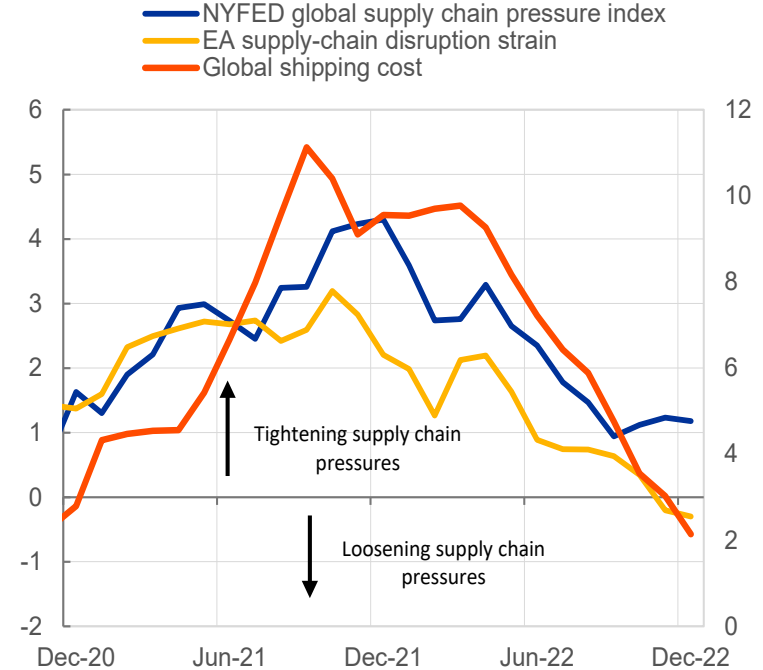
Sources: Bloomberg and ECB calculations.

Notes: The chart shows natural gas prices in Europe (Dutch TTF futures) in addition to natural gas pipeline flows from Russia to Europe (via Nord Stream to Germany, Yamal to Poland, Ukraine and Bulgaria).

Latest observation: 2 February 2023.

Supply bottlenecks

(lhs: standard deviations; rhs: USD per TEU)



Sources: Haver Analytics, Refinitiv and ECB calculations.

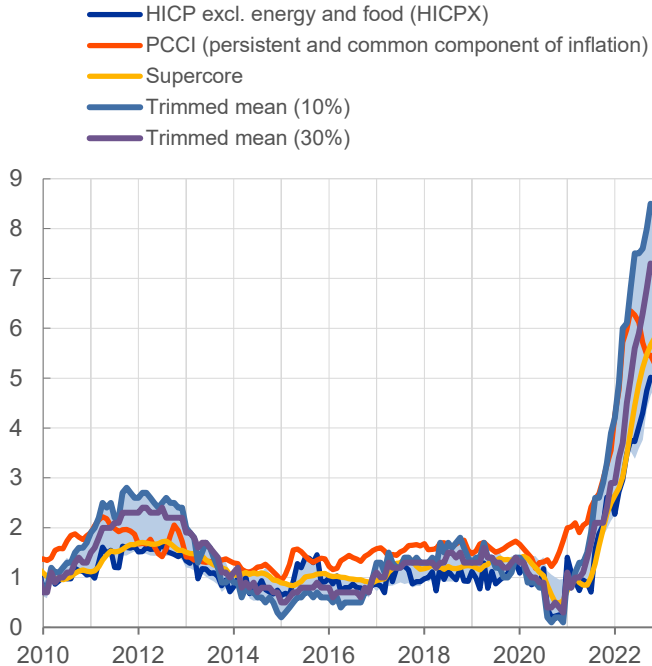
Notes: Global shipping cost is Freightos Baltic aggregate across major trade routes. TEU stands for twenty-foot equivalent unit shipping container.

Latest observation: December 2022.

Underlying inflation pressures remain high with most HICP components at elevated levels

Measures of underlying inflation

(annual percentage changes)



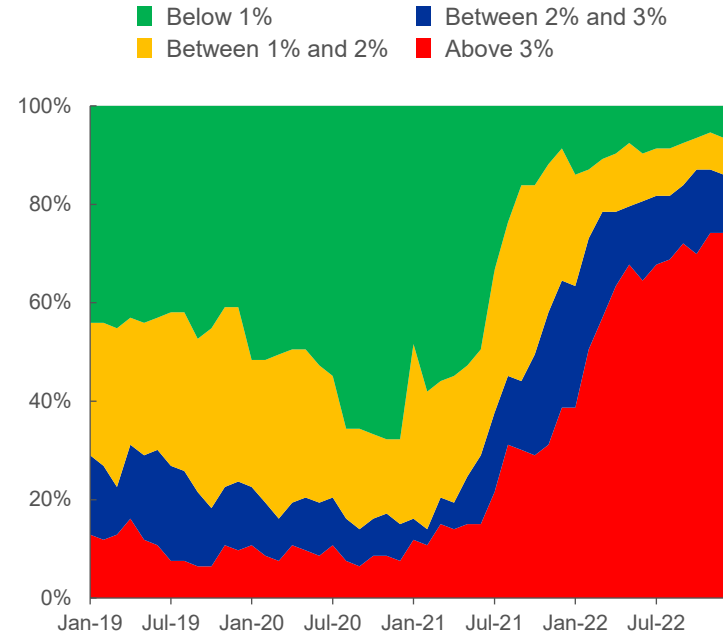
Sources: ECB and ECB calculations.

Notes: HICPX, Supercore and Trimmed means are non-seasonally adjusted, while PCCI is based on seasonally adjusted price series.

Latest observation: January 2023 (flash) for HICPX and December 2022 for the rest.

Share of HICP components according to pace of change

(percent)



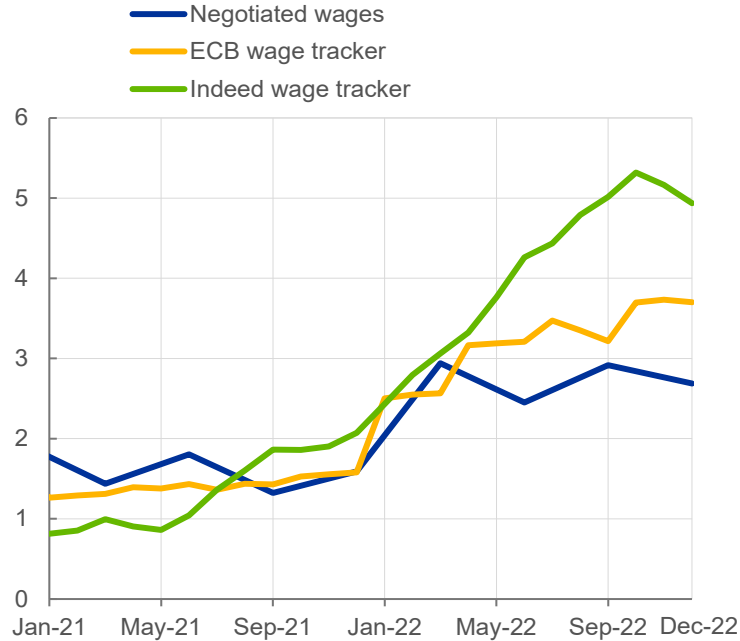
Sources: ECB and ECB calculations.

Latest observation: December 2022.

Nominal wage growth has picked up significantly, while real wages are falling sharply

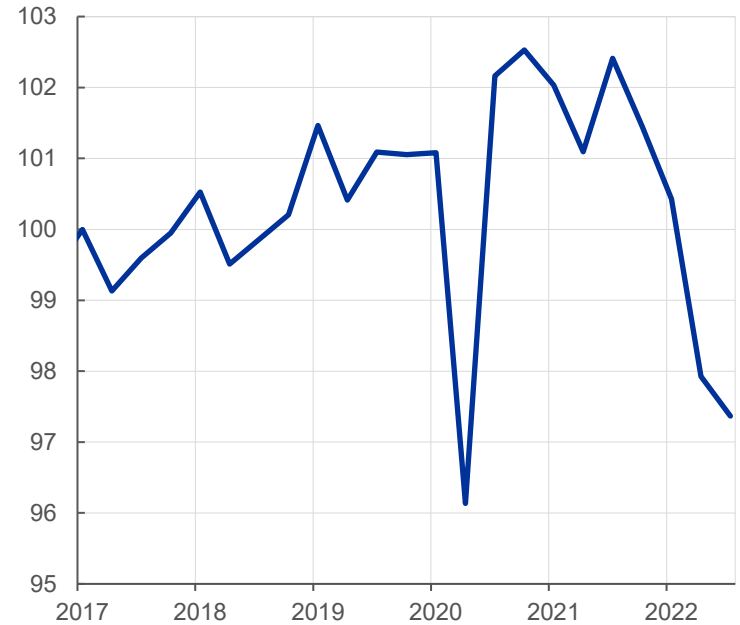
Negotiated wage growth, ECB and Indeed wage trackers

(annual percentage changes)



Real compensation per employee

(index: 2017 Q1 = 100)



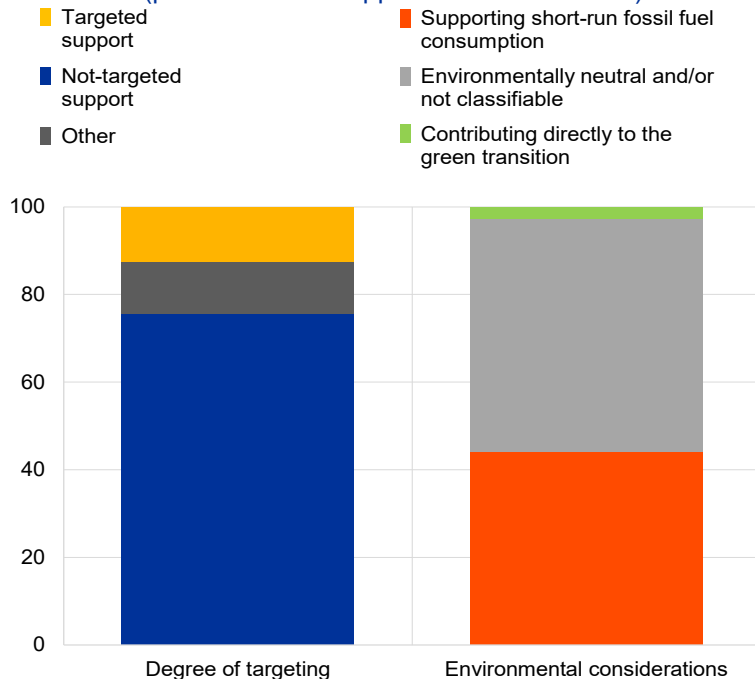
Sources: Adrjan, Pawel & Reamonn Lydon (2022), [Wage Growth in Europe: Evidence From Job Ads](#) – Central Bank of Ireland - Economic letter - Vol 2022, No. 7 (November), ECB and Eurostat. Notes: the ECB wage tracker is calculated based on micro data on wage agreements provided by Bundesbank, Banco de España, the Dutch employer association (AWVN), Oesterreichische Nationalbank, Bank of Greece, Banca d'Italia and Banque de France. For FR see also: Gautier, E. (2023): [Negotiated wage increases: what is the picture for 2022?](#). EA aggregate based on ES, IT, GR, AT, DE, NL and FR. Latest observations: 2022 Q4 (based on Oct and Nov data) for negotiated wages and December 2022 for ECB wage tracker and Indeed data.

Sources: Eurostat and ECB calculations.
Notes: Compensation per employee is deflated using the HICP.
Latest observation: 2022Q3.

Fiscal support mainly untargeted and inflationary over the medium term

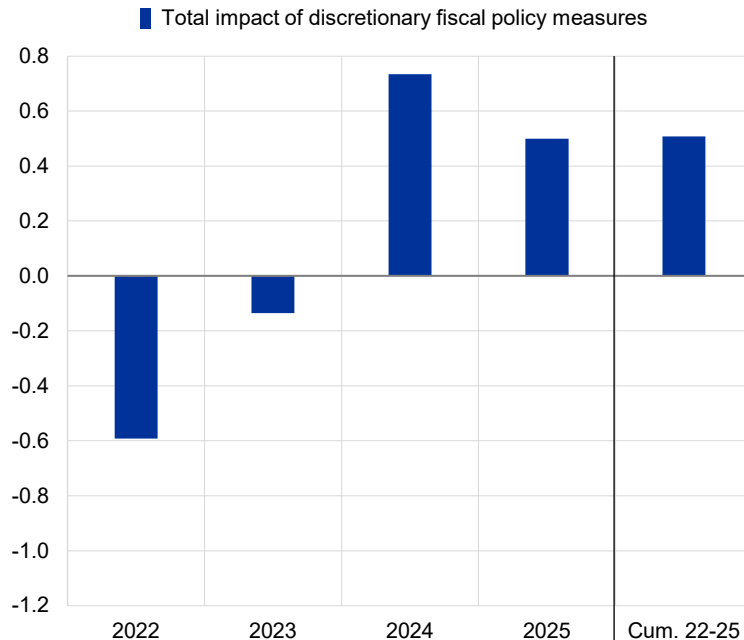
Euro area energy measures: targeted vs. untargeted and environmental considerations

(percent of total support in 2022 and 2023)



Impact of discretionary fiscal measures on inflation outlook

(percentage points)



Sources: Working Group of Public Finances, December 2022 BMPE and ECB calculations.

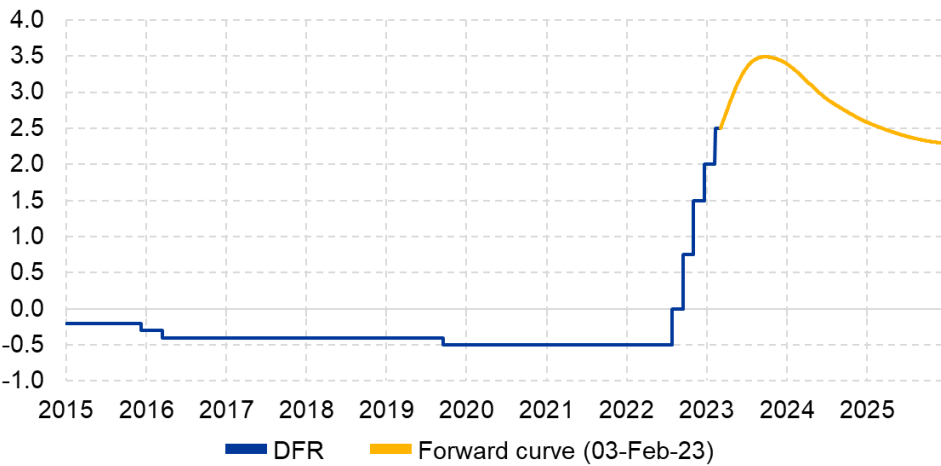
Notes: The classification of budgetary policy measures to mitigate the impact of high energy prices on households and firms is in line with the European Commission methodology and also reflects the Eurosystem staff assessment. The shares are calculated based on the total policy measures in 2022 and 2023. The category "Other" includes measures such as government purchases to fill gas storage. The degree of targeting refers to support targeted at vulnerable households and firms. For households, a measure is considered targeted if there is some form of means testing. For firms, a measure is considered targeted if it applies to specific energy-intensive activities as defined by the European Commission.

Source: ECB calculations based on structured questionnaire of Working Group of Forecasting

Notes: The bars show the impact of all discretionary fiscal measures included in the December 2022 BMPE baseline.

Sharp adjustment of ECB policy rates in 2022 with expectations of further rate increases

DFR and EUR forward OIS curve (percentage per annum)



Sources: Bloomberg and ECB.
Latest observation: 3 February 2023.

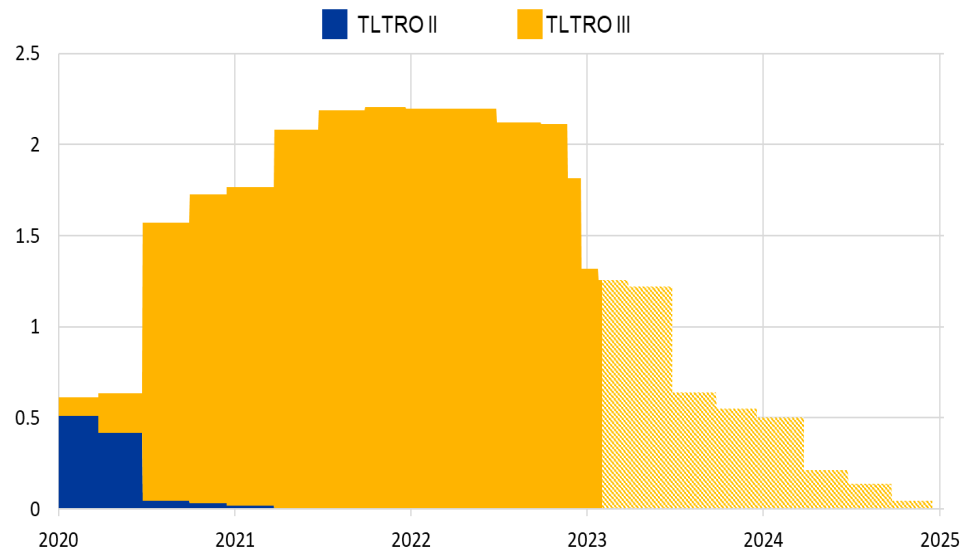
Market pricing of terminal rate (percentage per annum)



Sources: Bloomberg, ECB and ECB calculations.
Notes: The terminal rate for the euro area is derived from the euro overnight index swap (OIS) forward curve by capturing the first local peak within a five-year horizon for each observation.
Latest observation: 3 February 2023.

Eurosystem balance sheet is expected to decline markedly

Targeted longer-term refinancing operations (TLTROs) (EUR trillion)

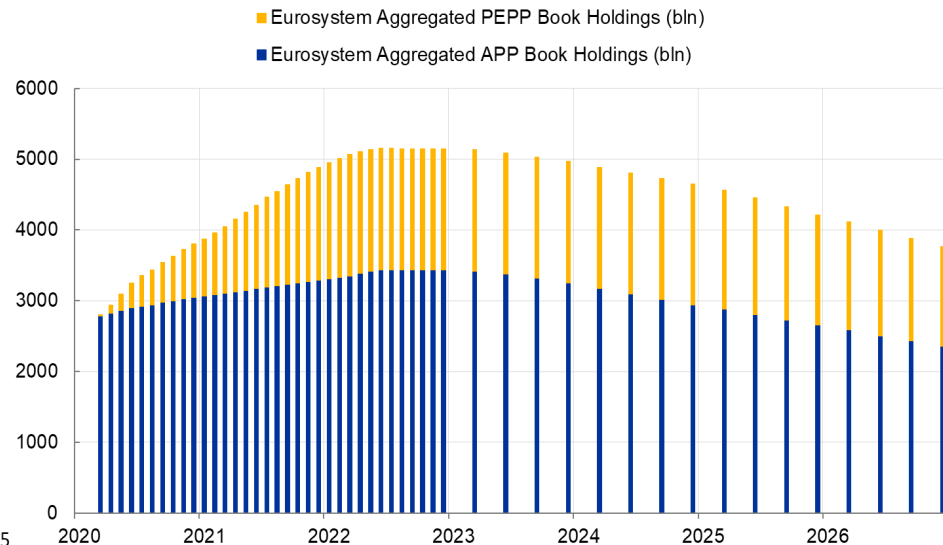


Source: ECB.

Notes: Blue and yellow areas show outstanding amounts under the targeted longer-term refinancing operations (TLTROs) in book amortised values. The solid yellow and blue areas depict all operations up to 25 January 2023. The shaded yellow area depicts the projected evolution of the TLTRO outstanding amount if all funds were held until maturity.

Latest observation: 6 February 2023.

APP and PEPP portfolio holdings (EUR billion)



Source: ECB, Survey of Monetary Analysts (SMA).

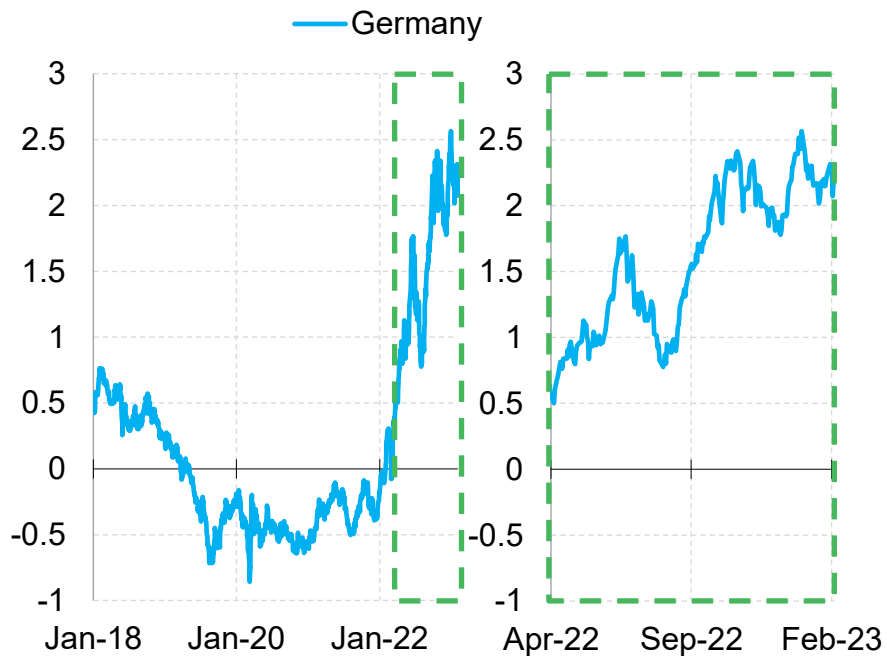
Notes: Blue and yellow bars show holdings under the asset purchase programme (APP) and pandemic emergency purchase programme (PEPP) in book amortised values. SMA responses for the projections.

Latest observation: February 2023.

Substantial increase in euro area long-term sovereign yields with stable bond spreads

10-year Bund yield

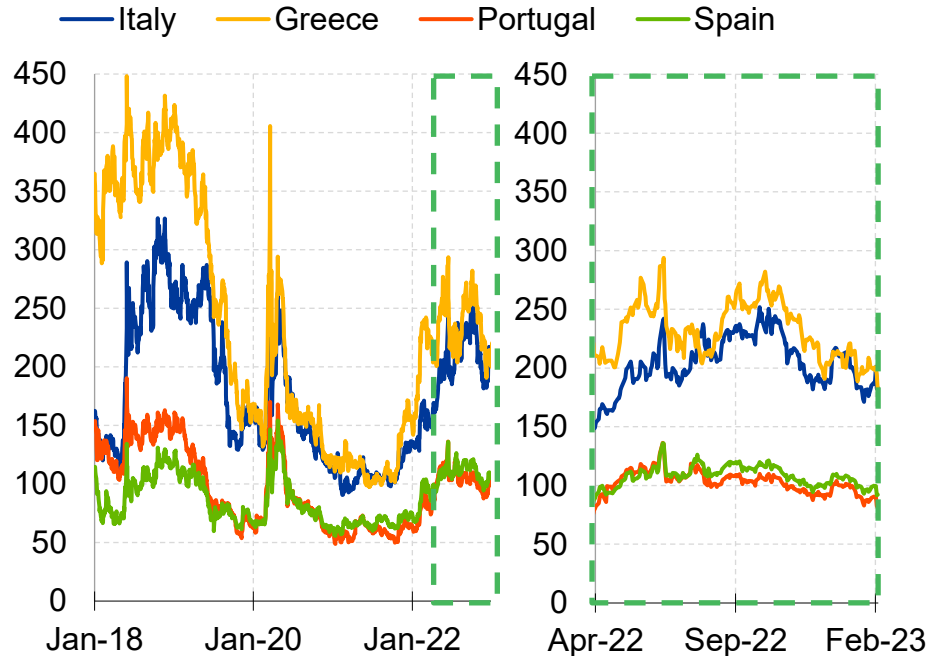
(percentage per annum)



Sources: Bloomberg.
Latest observation: 3 February 2023.

Sovereign 10-year bond spreads over Bund

(basis points)

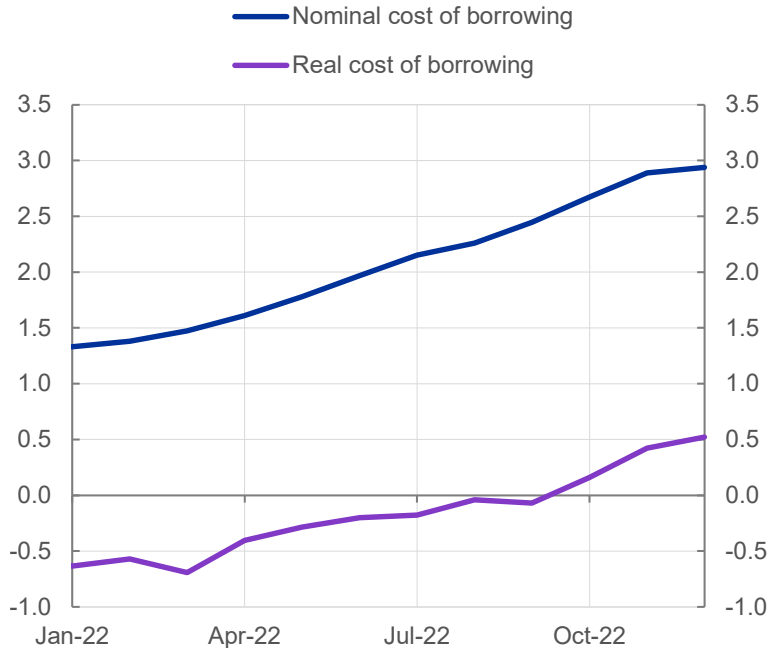


Sources: Bloomberg.
Latest observation: 3 February 2023.

Rising mortgage rates herald end of housing boom

Cost of borrowing of households for house purchase

(% per annum)



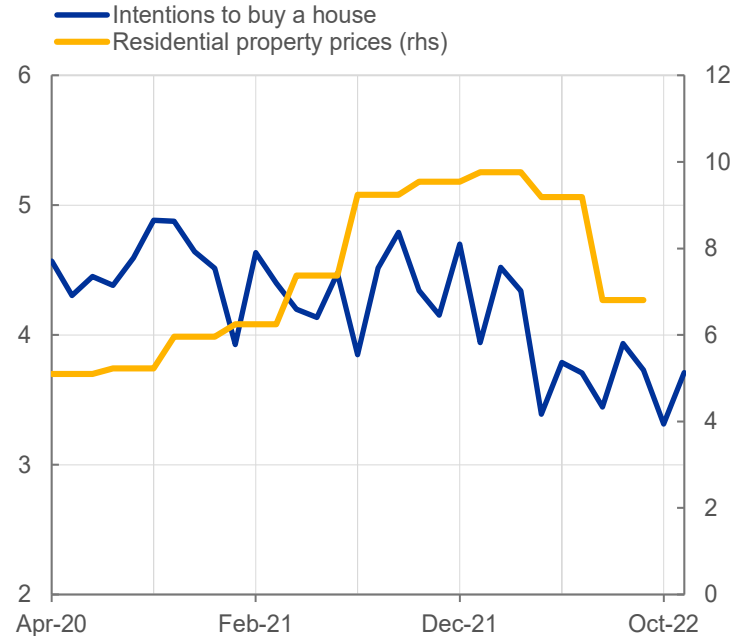
Sources: ECB (MIR), Bloomberg, Consensus Economics and ECB calculations.

Notes: The cost of borrowing indicator for households for house purchase is calculated by aggregating short- and long-term rates on new loans for house purchase using a 24-month moving average of new business volumes.

Latest observations: December 2022.

Households' intention to buy a house in next 12 months, increase in residential property prices

(lhs: percentages; rhs: annual percentage changes)



Sources: CES and ECB.

Notes: Share of respondents who intend to buy a house.

Latest observation: December 2022 for Intentions to buy a house and 2022Q3 for Residential property prices.

Thank you very much for your attention!