



EUROPEAN CENTRAL BANK

EUROSYSTEM

Disinflation in the euro area

Hutchins Center on Fiscal
& Monetary Policy at the
Brookings Institution

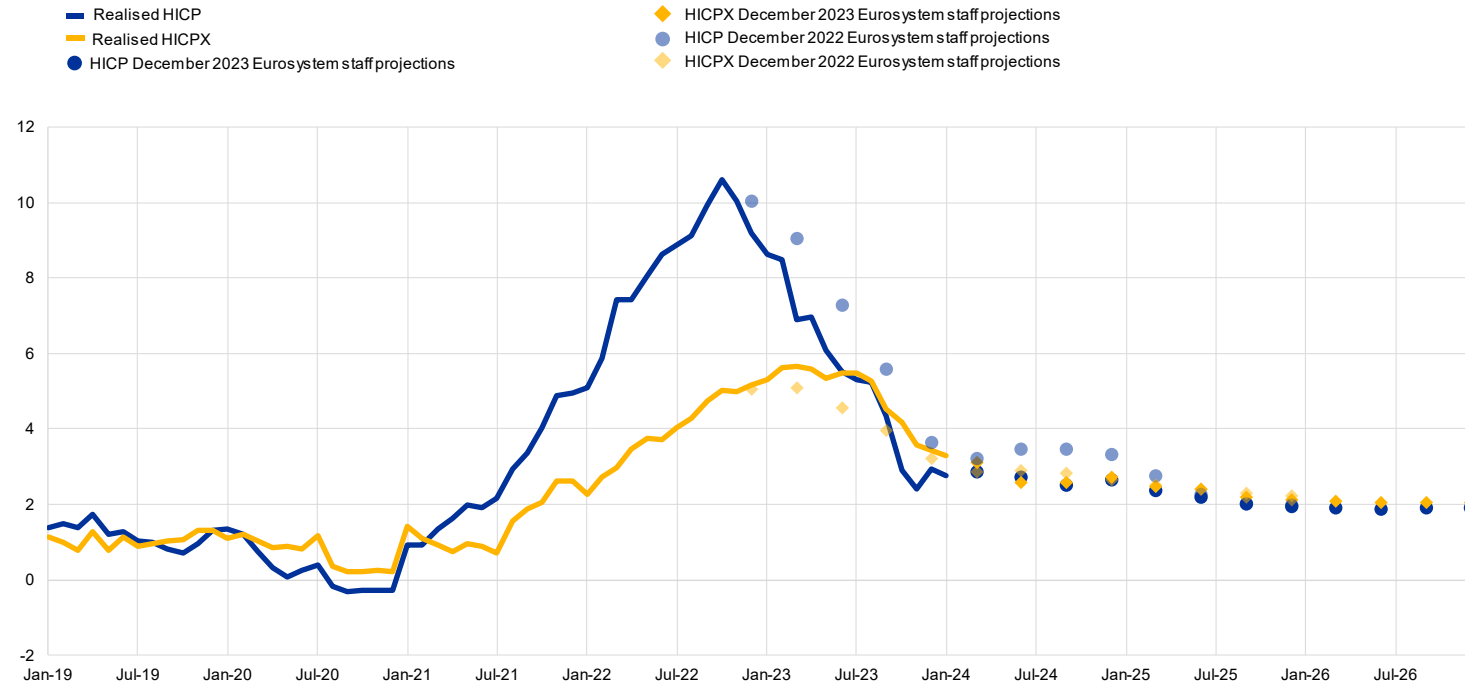
8 February 2024



Philip R. Lane
Member of the Executive Board

Headline inflation, core inflation and Eurosystem staff projections

(annual percentage changes)

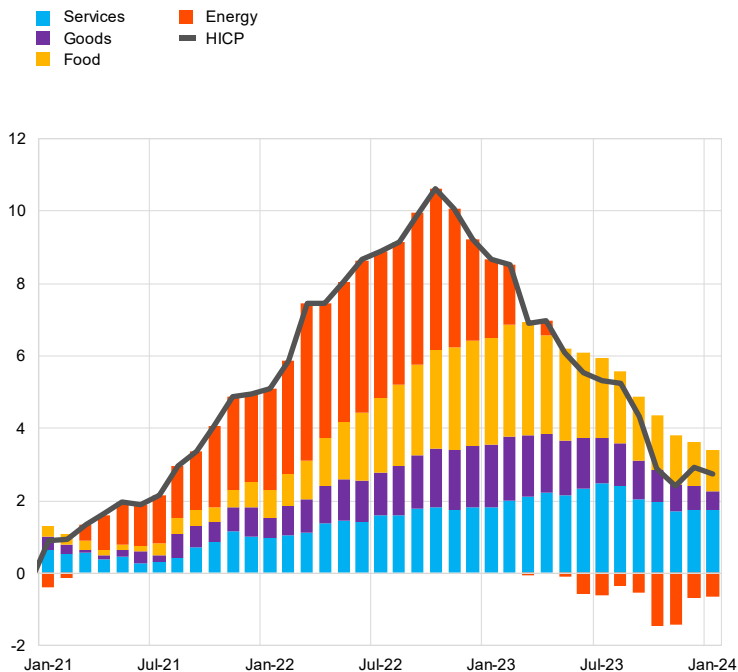


Sources: Eurostat and Eurosystem staff projections.

Notes: HICP refers to headline inflation and HICPX to HICP excluding food and energy. Realised HICP and HICPX are at a monthly frequency, and HICP and HICPX projections are at a quarterly frequency. Latest observations: January 2024 (flash) for realised HICP and HICPX.

Inflation developments

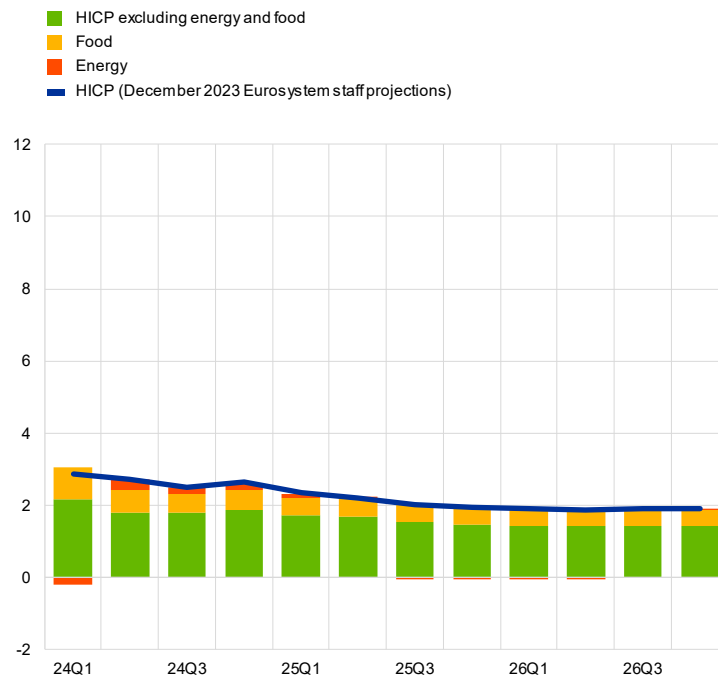
(annual percentage changes, percentage point contributions)



Sources: Eurostat and ECB staff calculations.
Latest observations: January 2024 (flash)

December 2023 Eurosystem staff projections

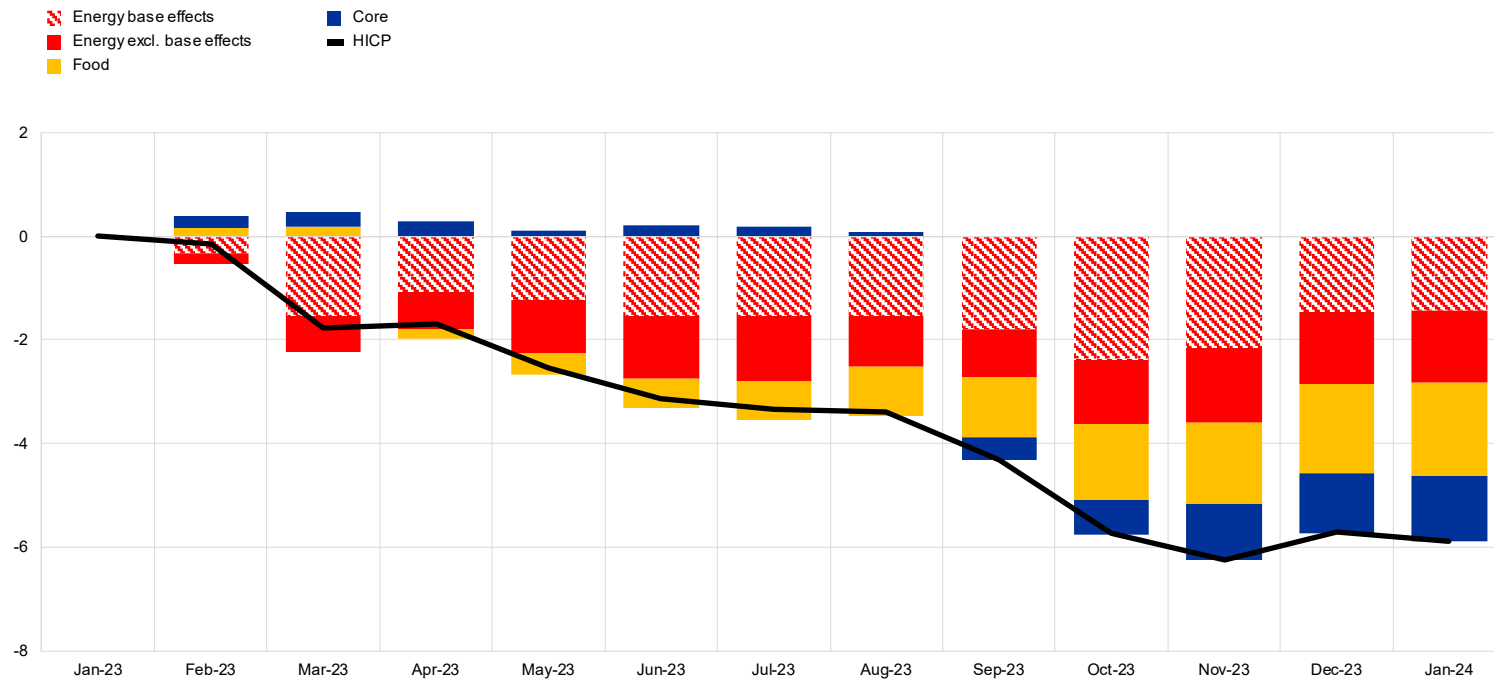
(annual percentage changes, percentage point contributions)



Sources: December 2023 Eurosystem staff projections and ECB staff calculations.

Headline inflation vis-à-vis January 2023

(percentage points)



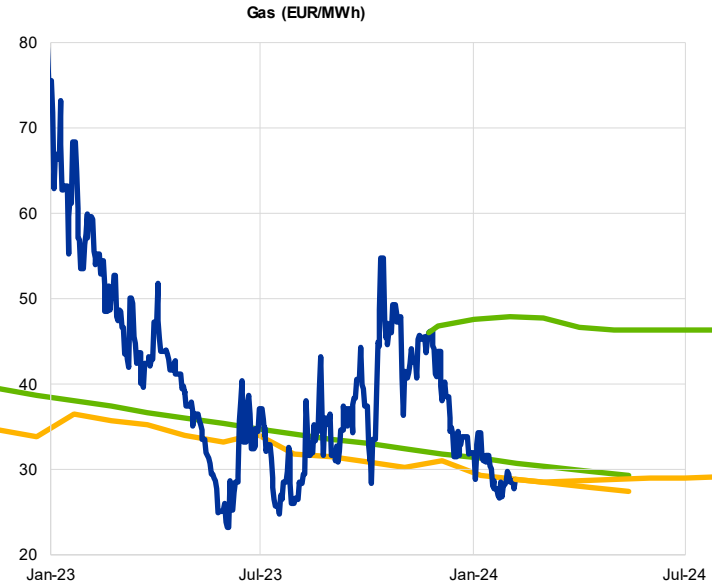
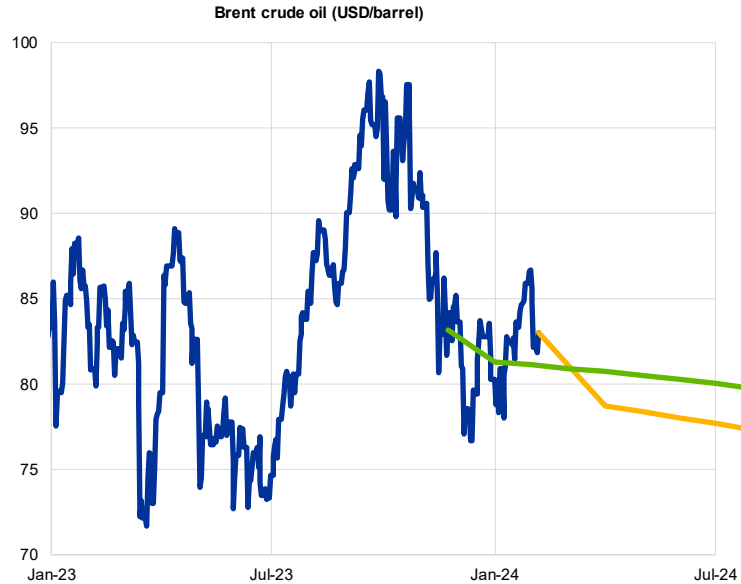
Sources: Eurostat and ECB staff calculations.

Notes: The notion of base effects is explained, inter alia, in the ECB Economic Bulletin box entitled "[Recent dynamics in energy inflation: the role of base effects and taxes](#)".

Latest observations: January 2024 (flash).

Oil and gas prices

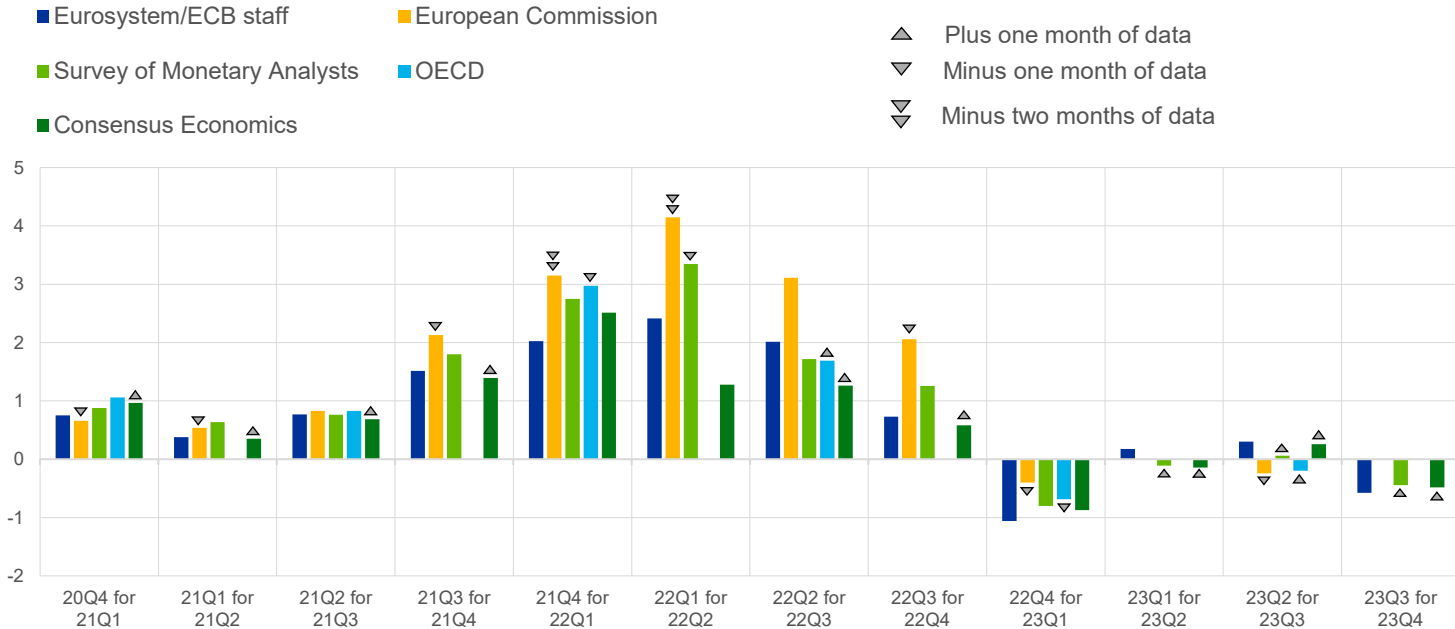
■ Spot
■ Futures (latest)
■ December 2023 Eurosystem staff projections



Sources: LSEG, ECB staff calculations and December 2023 Eurosystem staff projections.
Latest observations: 6 February 2024.

One-quarter ahead HICP forecast errors – comparison with other forecasters

(percentage points)



Sources: Eurosystem/ECB staff projections, Consensus Economics, Survey of Monetary Analysts (SMA), European Commission, OECD and Eurostat.

Notes: See also Chahad, M., Hofmann-Drahonsky, A.-C., Page, A. and Tirpák, M. (2023), "An updated assessment of short-term inflation projections by Eurosystem and ECB staff", Economic Bulletin, Issue 1/2023, ECB. For other forecasters, the errors are shown for publications where the corresponding cut-off date is closest to that of the Eurosystem/ECB staff projections. For the SMA, the median of survey respondents is shown. The arrows indicate differences in the months of available HICP data at the cut-off point for each publication relative to the Eurosystem/ECB staff projections. An upward arrow indicates one additional month of data, a downward arrow indicates one month less data, and two downward arrows indicate two months less data. Quarterly projections from the OECD are only available twice per year and therefore no error is shown in the first and third quarters. Notes on 2023Q3 for 2023Q4 errors: The European Commission did not publish quarterly forecasts in its Summer 2023 forecast, so there is no error depicted in the chart. The cut-off date for the Eurosystem/ECB staff projections was 30 August 2023. Although this was one day before the publication of the euro area HICP flash estimate for August 2023, flash releases for five euro area countries (covering 45% of the euro area HICP) were included implying no deviation from the Eurostat release for headline HICP.



Decomposition of recent one-quarter-ahead HICP inflation errors in the Eurosystem/ECB staff projections (percentage points)

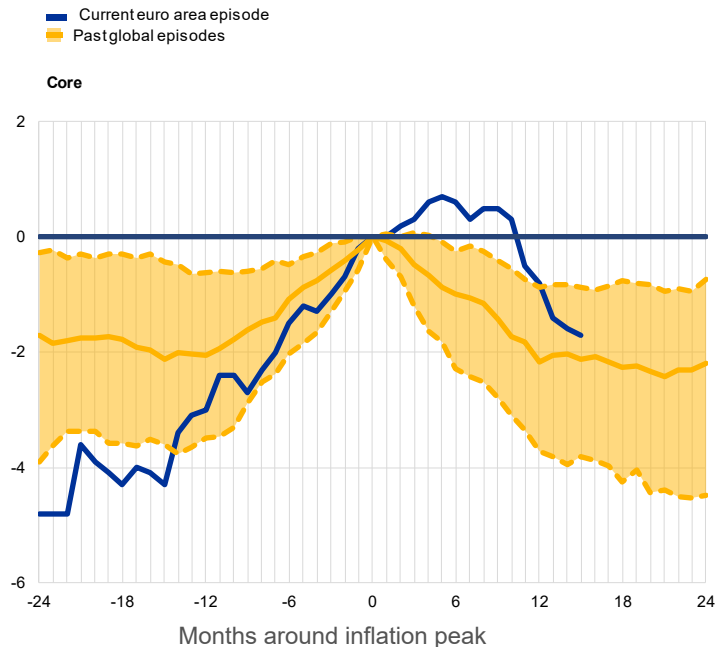
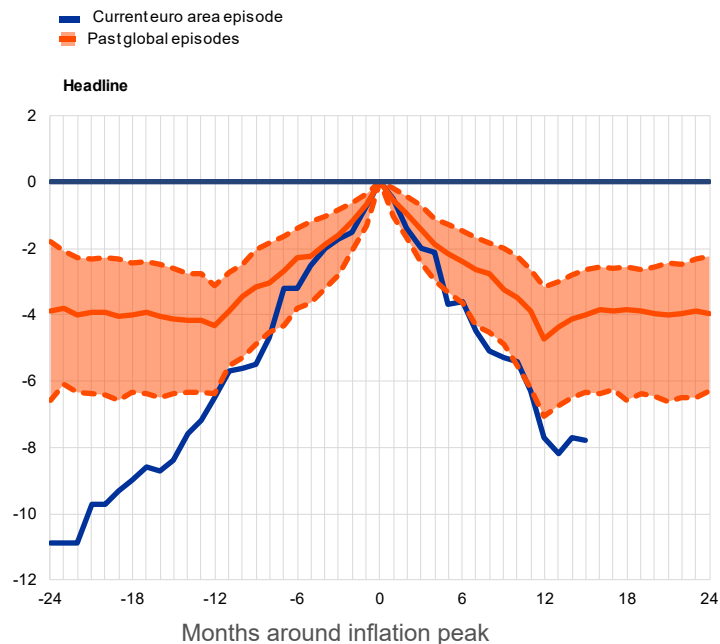


Source: ECB calculations.

Notes: See also Chahad, M., Hofmann-Drahonsky, A.-C., Page, A. and Tirpák, M. (2023), "An updated assessment of short-term inflation projections by Eurosystem and ECB staff", Economic Bulletin, Issue 1/2023, ECB. "Total error" is the outturn minus the projection. "Indirect impact of energy prices on non-energy inflation" is the sum of the indirect effects of oil, gas and electricity prices. (For oil, these are based on the elasticities derived from the Eurosystem staff macroeconomic models, and for gas and electricity these are computed assuming an elasticity proportional to the oil price shock.) "Impact of non-energy related assumptions" represents the assumptions for short and long-term interest rates, stock market prices, foreign demand, competitors' export prices, food prices and the exchange rate.

Headline inflation and the recent inflation episode in the euro area – headline and core inflation rates

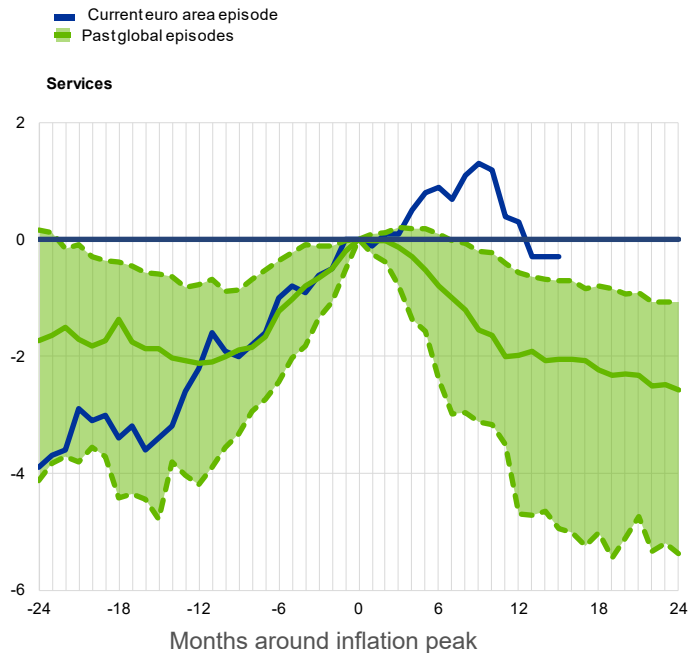
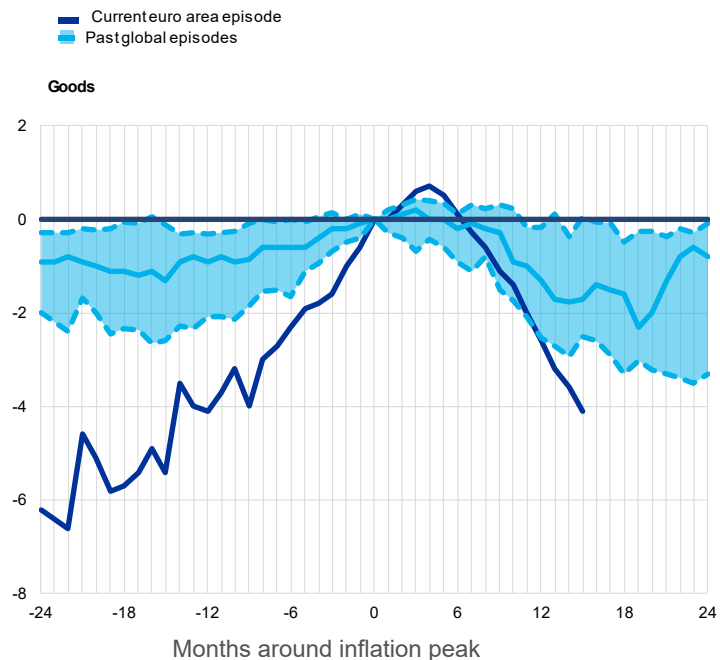
(percentage points)



Source: BIS, Eurostat, and ECB calculations.

Note: The shaded areas and the orange and yellow lines represent respectively the interquartile range and the median of national headline and core inflation series relative to their peaks during disinflation episodes before 2022 across a panel of 30 AEs and 28 EMEs. Month = 0 is when the headline inflation value is at the highest during that particular episode. The dark blue line represents the latest developments in headline and core inflation for the euro area, relative to the October 2022 peak. Latest observations: January 2024.

Headline inflation and the recent inflation episode in the euro area – goods and services inflation rates (percentage points)

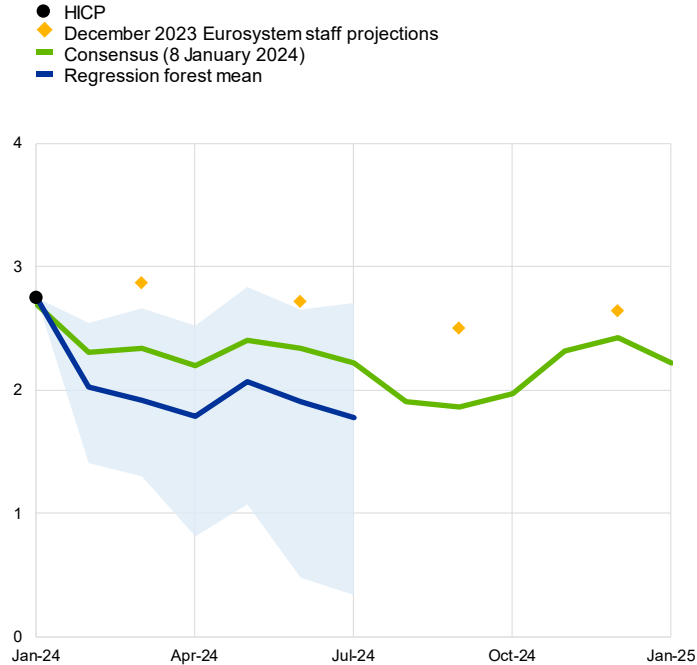


Source: BIS, Eurostat, and ECB calculations.

Note: The shaded areas and the blue and green lines represent respectively the interquartile range and the median of national non-energy industrial goods and services inflation series relative to their peaks during disinflation episodes before 2022. Non-energy industrial goods inflation refers to a panel of all euro area countries, while services inflation refers to a panel of 30 AEs and 28 EMEs. Month = 0 is when the headline inflation value is at the highest during that particular episode. The dark blue line represents the latest developments in Non-energy industrial goods and services inflation for the euro area, relative to the October 2022 peak. Latest observations: January 2024.

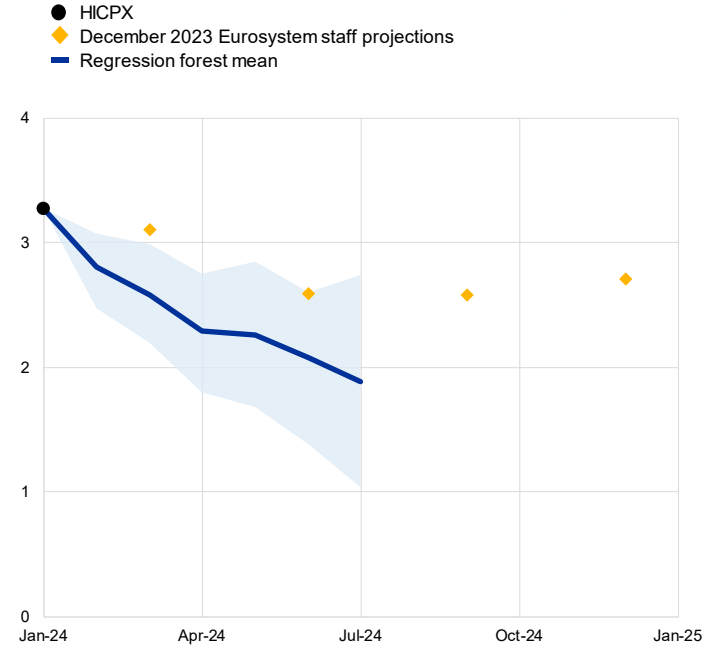
Short-term forecasts – headline inflation

(annual percentage changes)



Short-term forecasts – core inflation

(annual percentage changes)

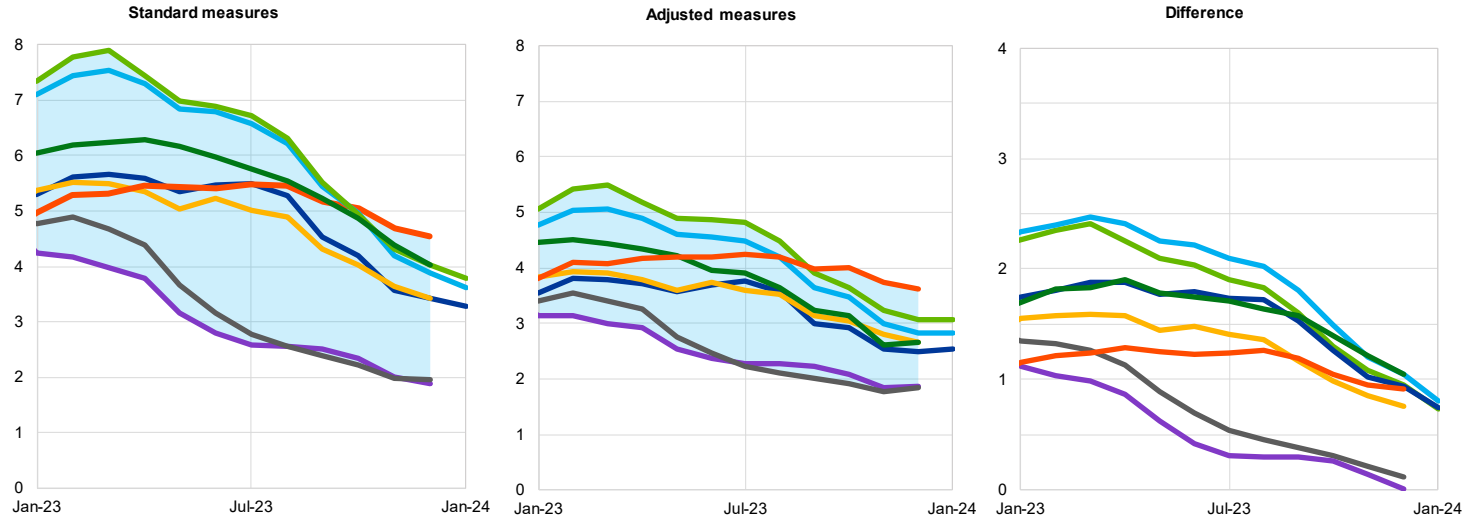


Sources: Eurostat, December 2023 Eurosystem staff projections, Consensus Economics and ECB staff calculations. Notes: Cut-off date for random forest is 1st February 2024. Consensus Economics data were collected on 8th January 2024. Random forest estimates are from [Lenza, Moutachaker and Paredes \(2023\)](#). Latest observation: January 2024 (flash).

Measures of underlying inflation

(annual percentage changes)

- HICPX
- HICPXX
- Domestic inflation
- HICP excluding unprocessed food and energy
- HICP excluding energy
- Supercore
- PCCI
- PCCI excl. energy

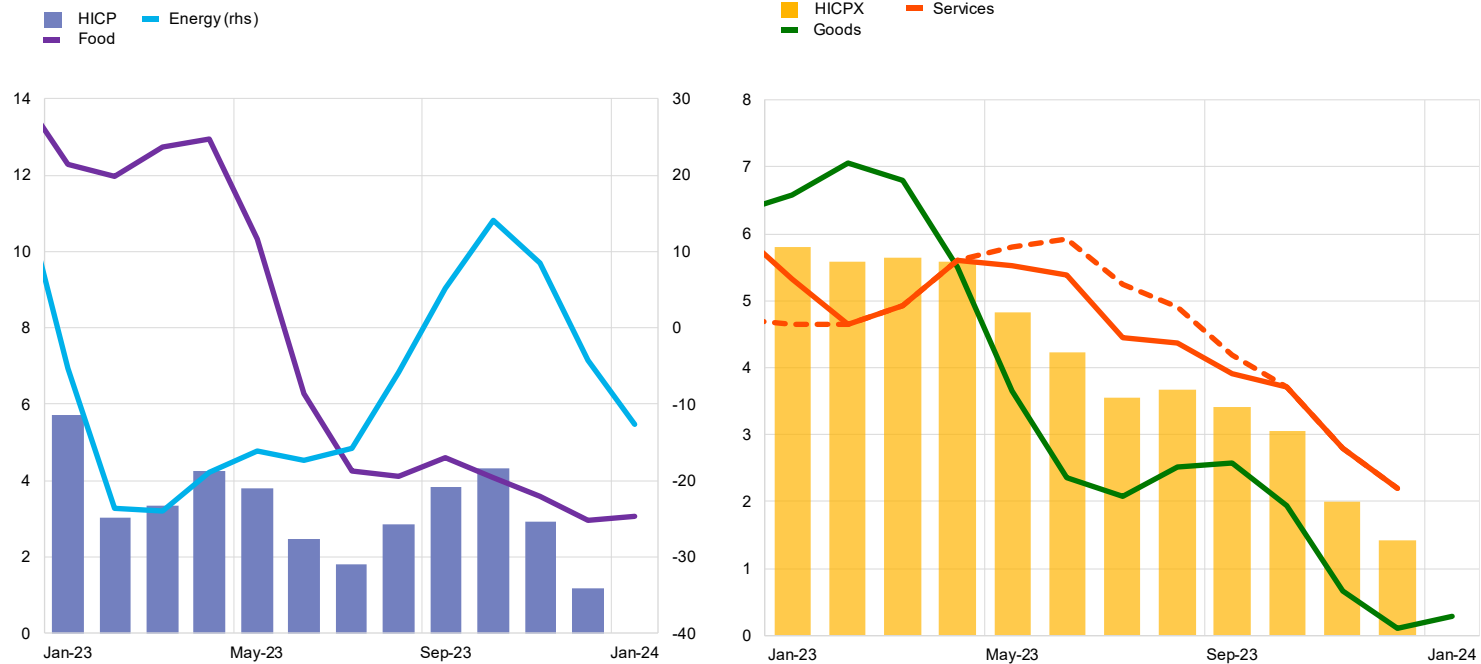


Sources: Eurostat and ECB staff calculations.

Notes: "PCCI" stands for "persistent and common component of inflation". The 'adjusted' measures abstract from energy and supply-bottleneck shocks using a large SVAR, see Bańbura, Bobeica and Martínez-Hernández, (2023), "[What drives core inflation? The role of supply shocks](#)", ECB Working Paper, No 2875, deducted mechanically from each measure. Latest observations: January 2024 (flash) for HICP excluding energy, HICP excluding energy and food and HICP excluding energy and unprocessed food, December 2023 for the rest.

Momentum of inflation and its components

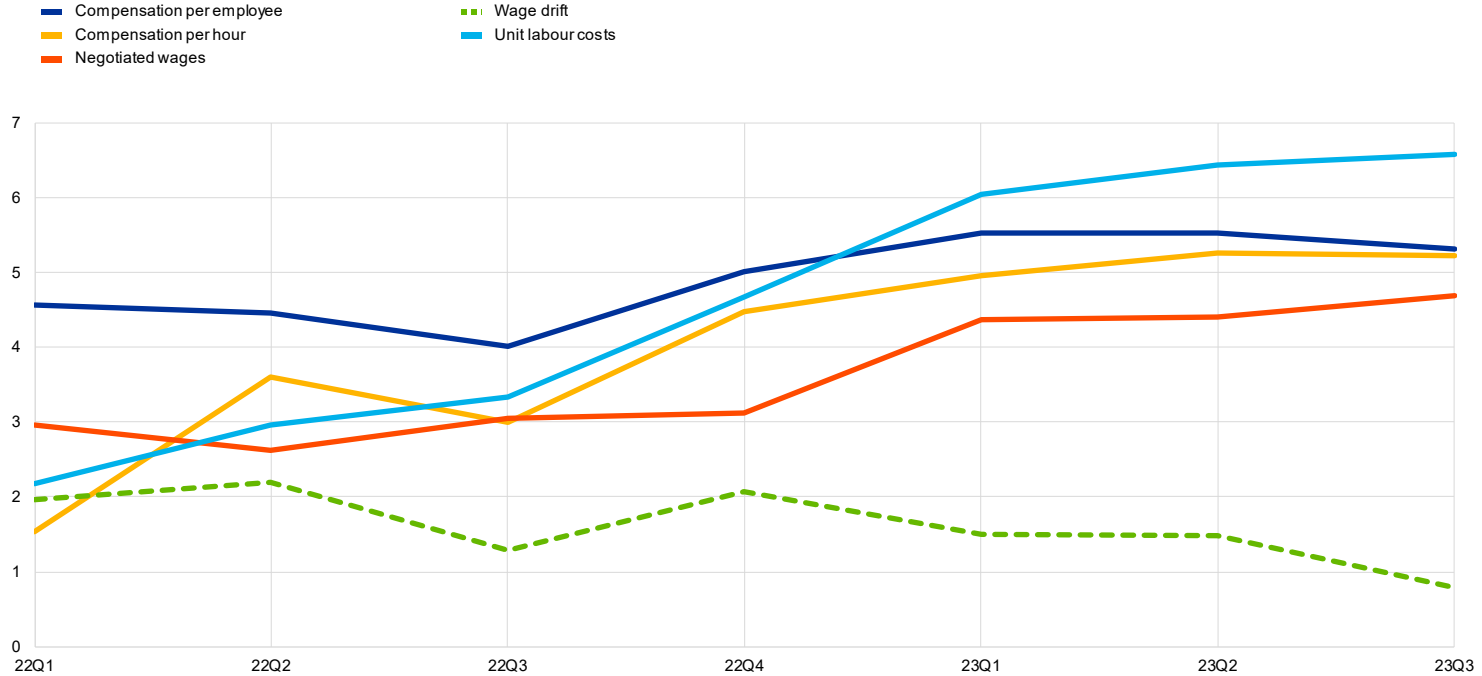
(annualised 3 months-on-3 months percentage changes)



Sources: Eurostat and ECB calculations

Notes: Calculated using seasonally adjusted data. The dashed red line corresponds to services adjusted for the effects of the 9- and 49-euro tickets introduced in Germany respectively in June 2022 and May 2023. Latest observations: January 2024 (flash) for food, energy and goods, December 2023 for the rest. Missing data points for January become available with the HICP release on 22 February 2024.

Indicators of euro area wage growth (annual percentage growth and percentage point contributions)



Sources: Eurostat, ECB and ECB staff calculations.

Notes: Wage drift measures deviations between developments in actual wages as measured by wages and salaries and developments in negotiated wages.

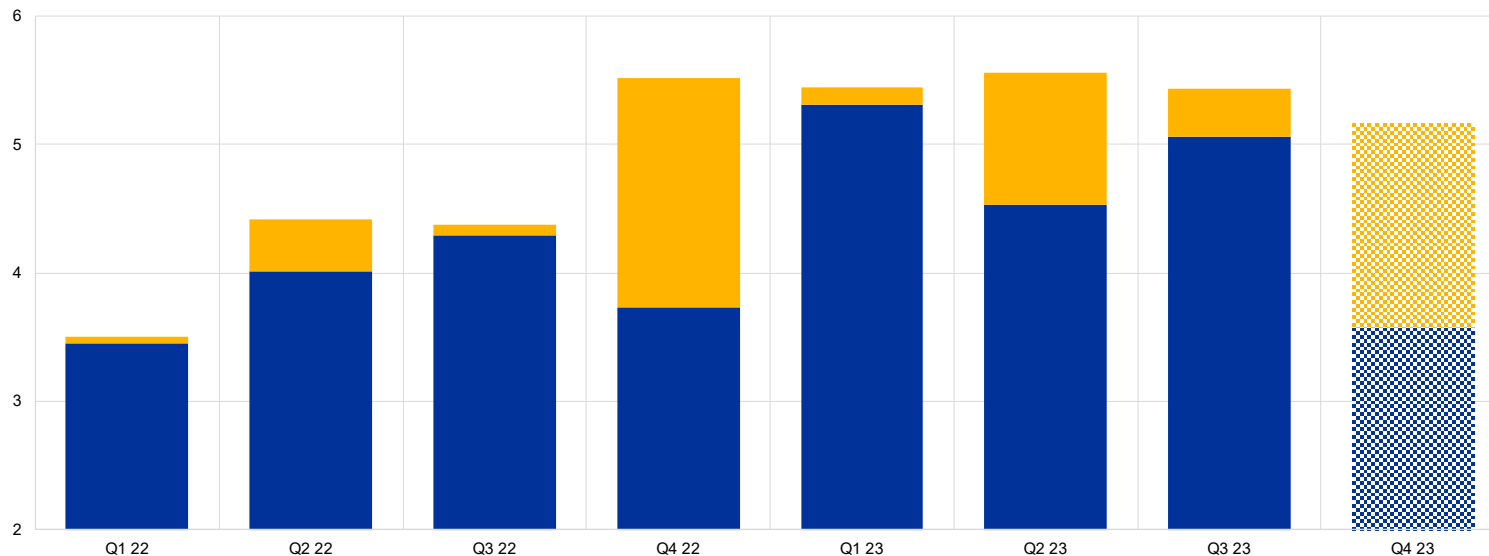
Latest observations: 2023 Q3.

Euro area wage tracker

(percentage point contributions)

■ Structural ■ One-offs

Wage growth in latest agreements

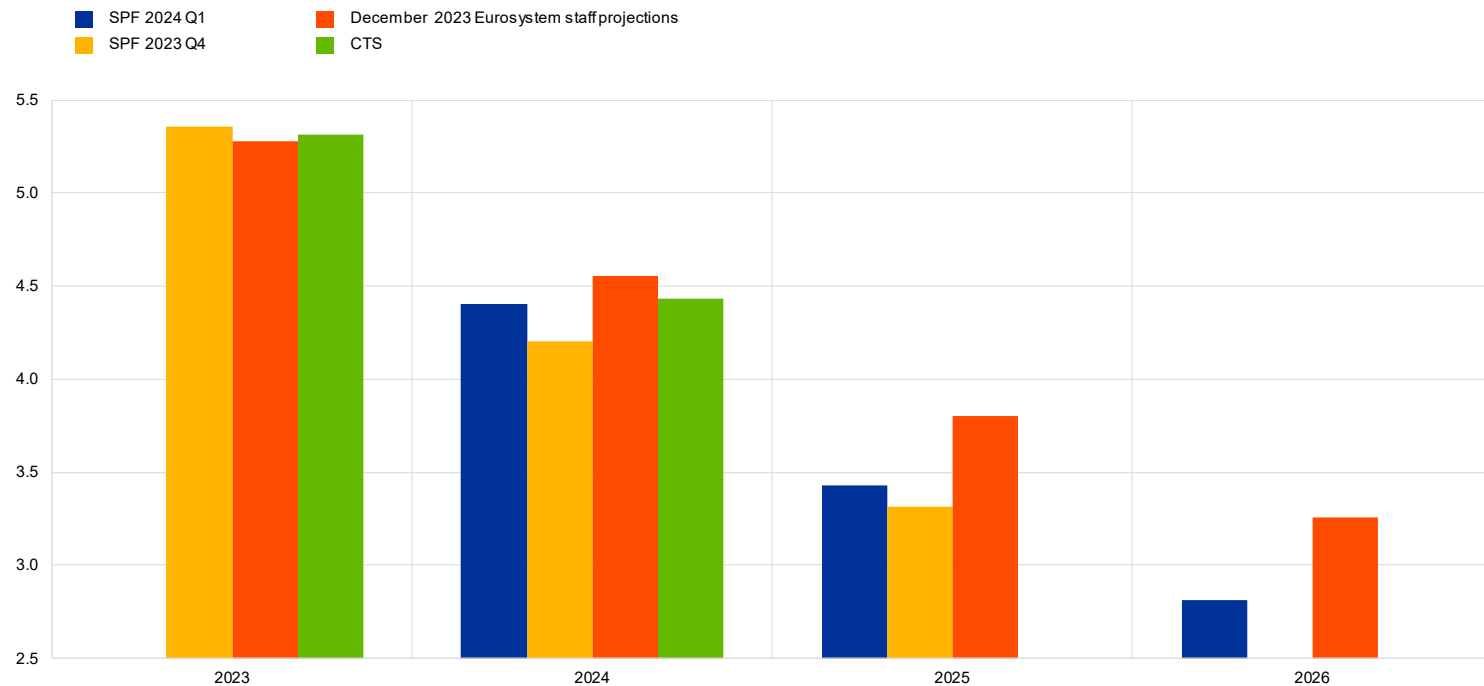


Source: Calculated based on micro data on wage agreements provided by Deutsche Bundesbank, Banco de España, the Dutch employer association (AWVN), Oesterreichische Nationalbank, Bank of Greece, Banca d'Italia and Banque de France.

Notes: Euro area aggregate based on DE, FR, IT, ES, NL, AT, GR, as of December 2023. The indicator of latest agreements reflects wage growth in the agreements reached in a certain quarter for the 12 months after an agreement. One-offs payments are spread over 12 months from the agreed disbursement date - smoothing the impact of one-off payments on wage growth. 2023Q4 for wage growth in latest agreements is preliminary as not all collective agreements reached in 2023Q4 are available yet. For the methodology, see also Górnicka, L. and G. Koester (eds.) 2024: "A forward-looking tracker of negotiated wages in the euro area". Eurosystem wage tracker experts. ECB Occasional Paper No. 338. European Central Bank (forthcoming).

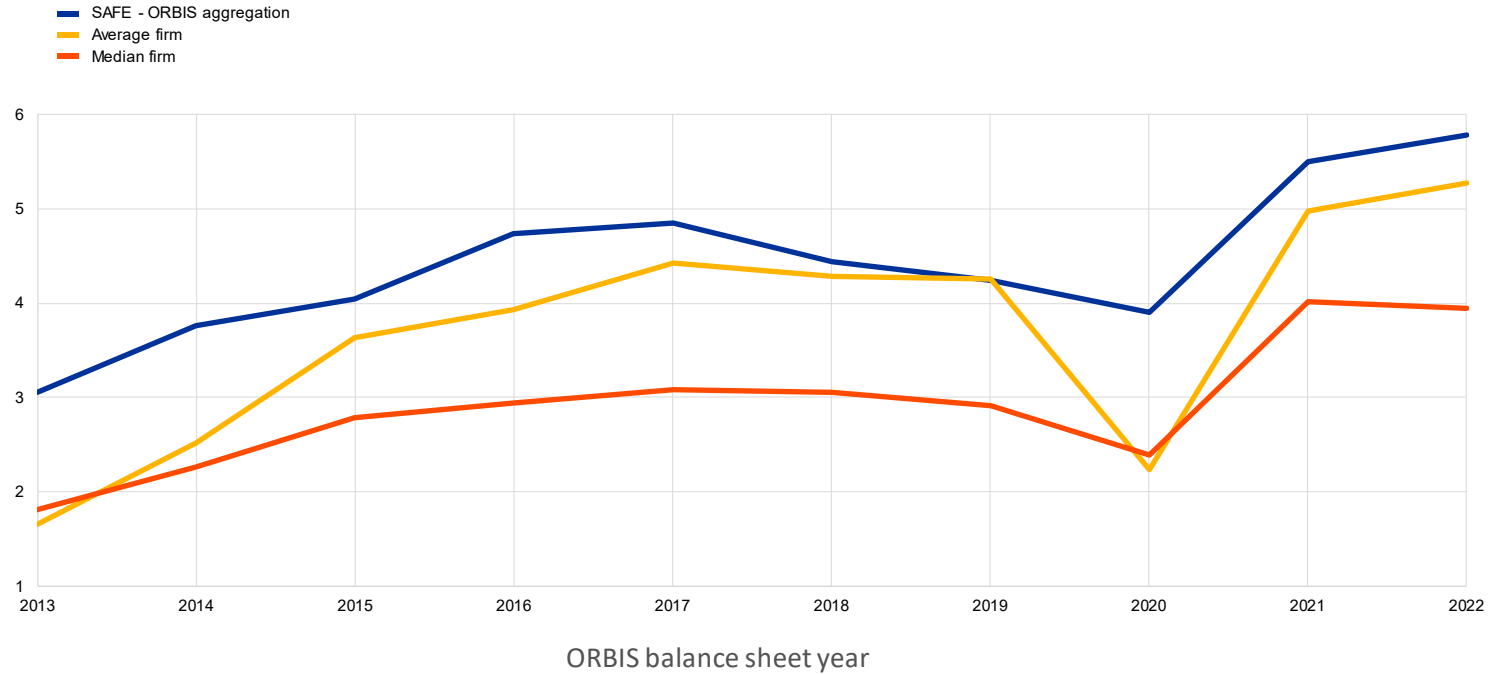
Latest observations: 2023 Q4.

Survey-based wage expectations and the December 2023 Eurosystem staff projections (annual percentage changes)



Source: January 2024 Corporate Telephone Survey (CTS), Survey of Professional Forecasters (SPF) and December 2023 Eurosystem staff projections.

SAFE – ORBIS profit margins (percentages)

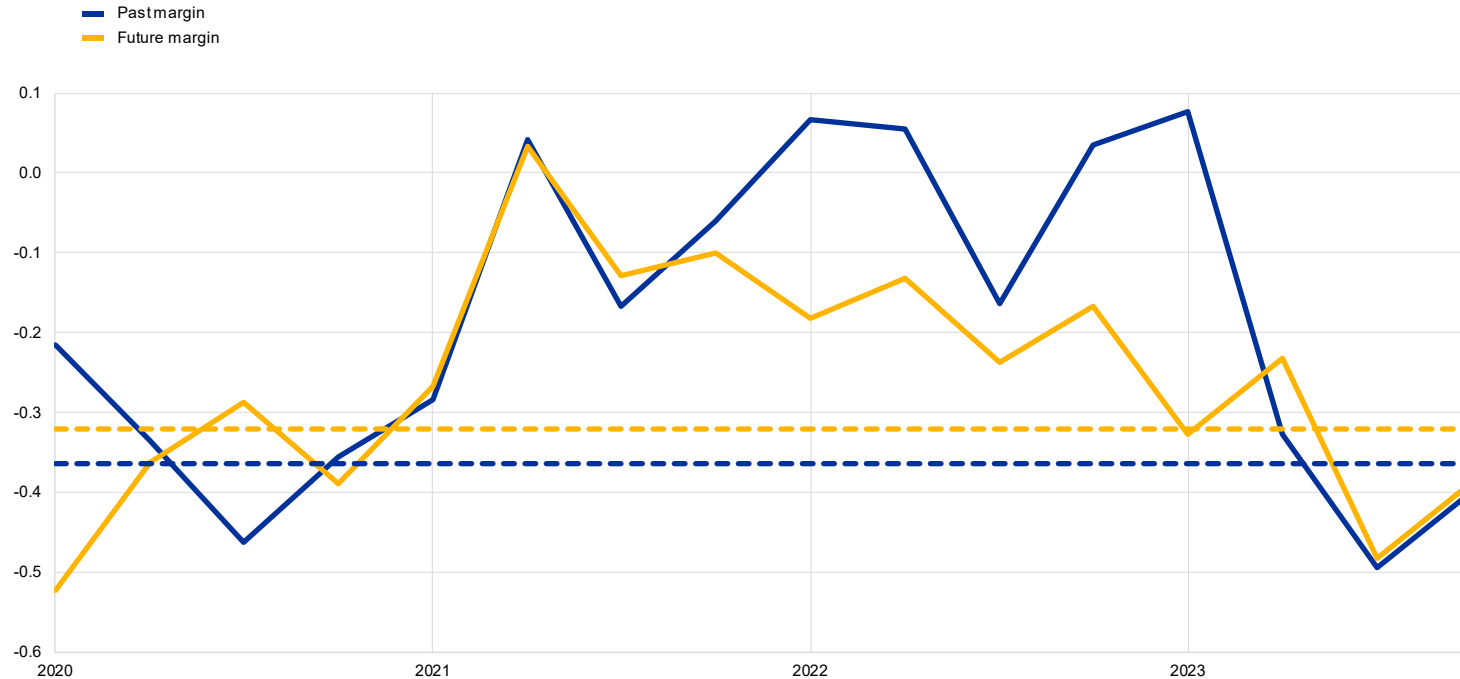


Source: ECB, European Commission survey on the access to finance of enterprises (SAFE), Moody's ORBIS.

Notes: The SAFE-ORBIS aggregate profit margin is calculated by summing the profits before taxes and revenues of firms in each ORBIS balance sheet year before calculating the profit margin ratio.

Corporate Telephone Survey – implied profit margin

(average of Corporate Telephone Survey scores)

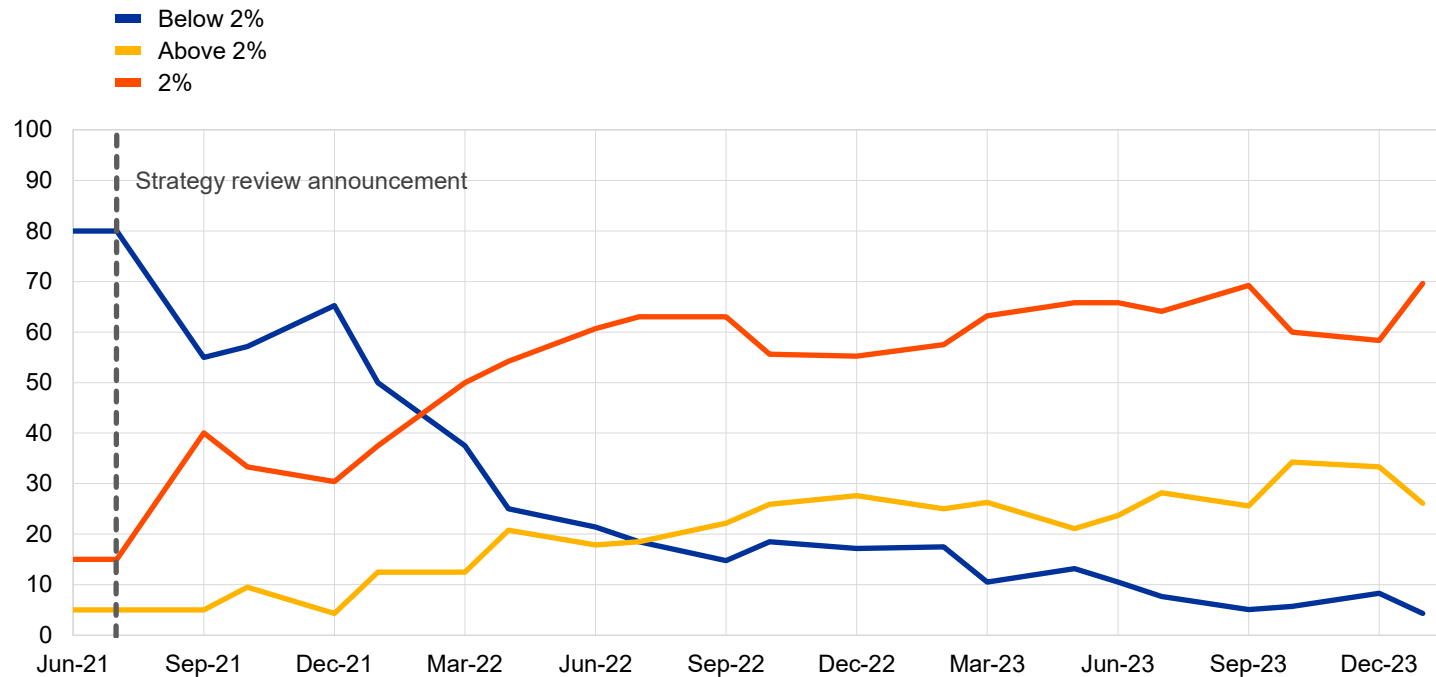


Source: Corporate Telephone Survey (CTS).

Notes: The score is calculated as the "selling price score - 0.5 x input cost score - 0.5 x wage score. Past and future selling and input price scores refer to developments in the previous and next quarters. The dashed lines represent the 2009-2019 average for "past" and "future". Latest observations are from the 2024 January CTS.

Evolution of long-run inflation expectations over survey rounds

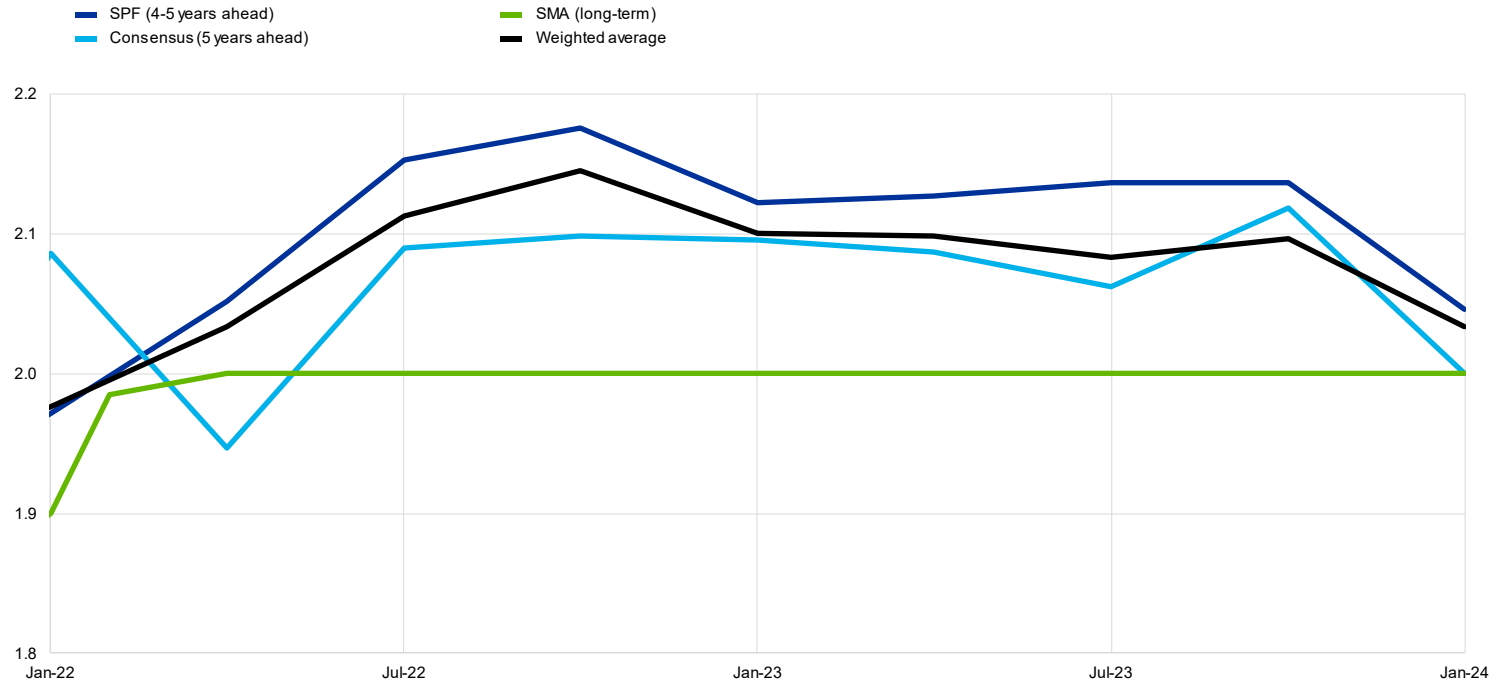
(percentage of respondents)



Source: Survey of Monetary Analysts (SMA).

Notes: The three groups are based on the HICP long run forecasts provided by respondents on the macroeconomic projections question of the SMA.

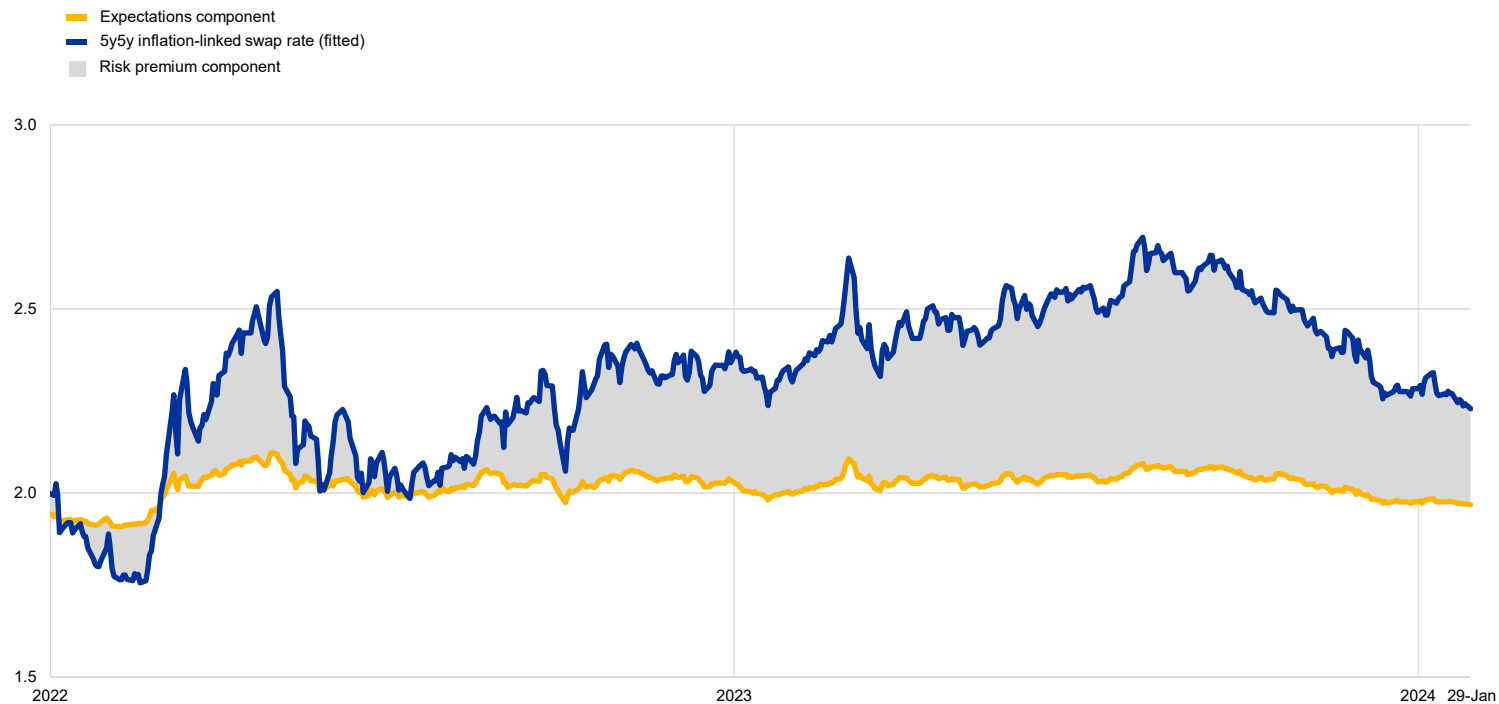
Professional forecasters' inflation expectations (annual percentage changes)



Sources: Consensus Economics, Survey of Professional Forecasters (SPF), ECB's Survey of Monetary Analysts (SMA).

Notes: The weighted average of surveys is computed using the number of respondents in each survey as a weight. The latest observations are for January 2024 for Consensus Economics and SMA, 2024 Q1 for SPF.

Decomposition of 5-year-in-5-years inflation-linked swap rate (annual percentage changes)



Sources: Bloomberg and ECB staff calculations

Notes: The 5y5y ILS rates (monthly data) refer to the average inflation rate over a five year period starting in five years' time, as implied by ILS rates. The expectations component is based on average estimates from two affine term structure models following Joslin, Singleton and Zhu (2011) applied to ILS rates (adjusted for the indexation lag); see Burban et al. (2021), ECB Economic Bulletin Issue 8, 2021, Box 4. Latest observations: 29 January 2024.