

# The euro area outlook and monetary policy\*

*di Philip R. Lane*

## Introduction

The Governing Council last week decided to lower the deposit facility rate – the rate through which we steer the monetary policy stance – from 3.25 per cent to 3.0 per cent. This decision was justified by our updated assessment of the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission. In my remarks, I would like to discuss these three elements of our reaction function.<sup>[1][2]</sup>

## The inflation outlook

The December Eurosystem staff projections expect headline inflation to average 2.4 per cent in 2024, 2.1 per cent in 2025 and 1.9 per cent in 2026. It is then projected to increase to 2.1 per cent in 2027 as a result of the expanded EU Emissions Trading System. The projections continue to foresee a rapid decline in core inflation, from 2.9 per cent this year to 2.3 per cent in 2025 and 1.9 per cent in 2026 and 2027. Compared to the September 2024 macroeconomic projections exercise (MPE), the projections have been revised down by 0.1 percentage points in 2024 and 2025 for headline inflation, and in 2026 for core inflation.

The latest Survey of Monetary Analysts is broadly in line with the December projections for headline inflation. Market-based indicators of inflation compensation are also consistent with a timely return of inflation to target, while also showing a marked compression in inflation risk premia. This may suggest that markets have revised downwards the risk of future adverse supply shocks and revised upwards the risk of future adverse demand shocks.

The economic outlook plays a central role in determining the inflation outlook. The incoming information suggests a slowdown in the near term. Looking ahead, conditions are in place for growth to strengthen over the forecast horizon. According to the staff assessment, while structural factors have weighed on the euro area economy, especially the manufacturing sector, the weak productivity growth since 2022 has also included a significant cyclical component, largely driven by the past tightening of monetary policy and weak external demand. Domestic demand should

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\* Intervento del Membro del Comitato esecutivo della Bce al Mni Webcast, Francoforte, 18 dicembre 2024

therefore benefit from rising real wages, the gradual fading of the effects of restrictive monetary policy and the ongoing recovery in the global economy. Although fiscal policies are set to remain on a consolidation path overall, funds from the Next Generation EU programme will still support investment in the next two years.

On the external side, euro area export growth is expected to benefit from strengthening foreign demand. At the same time, trade uncertainty has increased materially and the effects of a potential increase in tariffs on the euro area economy will depend on the extent, timing and magnitude of tariff and non-tariff measures, as well as on the responses of the EU and other countries.

The labour market remains resilient. Employment grew by 0.2 per cent in the third quarter, again surprising to the upside, and the unemployment rate remained at its historical low of 6.3 per cent in October. However, labour demand continues to soften. The job vacancy rate declined to 2.5 per cent in the third quarter, 0.8 percentage points below its peak, and surveys also point to fewer jobs being created in the current quarter.

According to the December Eurosystem staff projections, real GDP growth is expected to average 0.7 per cent in 2024, 1.1 per cent in 2025, 1.4 per cent in 2026 and 1.3 per cent in 2027. Compared to the September projections, real GDP growth has been revised down by 0.1 percentage points in 2024 and 2025. The latest Survey of Monetary Analysts indicates a lower growth profile than the staff projections for 2025, 2026 and 2027.

The inflation outlook also encompasses the assessment of the risks surrounding the baseline path. The risks to economic growth remain tilted to the downside. The risk of greater friction in global trade could weigh on euro area growth by dampening exports and weakening the global economy. Lower confidence could prevent consumption and investment from recovering as fast as expected. This could be amplified by geopolitical risks, such as Russia's unjustified war against Ukraine and the tragic conflict in the Middle East, which could disrupt energy supplies and global trade. Growth could also be lower if the lagged effects of monetary policy tightening last longer than expected. It could be higher if easier financing conditions and falling inflation allow domestic consumption and investment to rebound faster, which would also make the euro area more resilient to global shocks.

Inflation could turn out higher if wages or profits increase by more than expected. Upside risks to inflation also stem from the heightened geopolitical tensions, which could push energy prices and freight costs higher in the near term and disrupt global

trade. Moreover, extreme weather events, and the unfolding climate crisis more broadly could drive up food prices by more than expected. By contrast, inflation may surprise on the downside if low confidence and concerns about geopolitical events prevent consumption and investment from recovering as fast as expected, if monetary policy dampens demand more than expected, or if the economic environment in the rest of the world worsens unexpectedly. Greater friction in global trade would make the euro area inflation outlook more uncertain.

### **Underlying inflation**

The indicators of underlying inflation with the highest predictive power are developing in line with a sustained return of inflation to target; in particular, the Persistent and Common Component of Inflation (PCCI) measure remains at around 2.0 per cent. Domestic inflation, which closely tracks services inflation, again eased somewhat in October. But at 4.2 per cent, it remained high, reflecting strong wage pressures and the fact that some services prices have still been adjusting to the past inflation surge.

At the same time, the incoming information points to a moderation in services inflation dynamics, which should support an easing of domestic inflation. The three-month-on-three-month seasonally adjusted services inflation rate fell to 2.6 per cent in November from 3.4 per cent in October, indicating a further softening in momentum. Meanwhile, the sizeable gap between services inflation and its medium-term underlying trend – captured by the PCCI for services, which stands at 2.5 per cent – suggests there should be further downward adjustment in services inflation in the coming months.

The incoming wage data broadly confirm our previous assessment of elevated but easing wage pressures. The growth rate of compensation per employee moderated to 4.4 per cent in the third quarter from 4.7 per cent in the second quarter, 0.1 percentage points below the December projection. The growth rate of unit labour costs eased to 4.3 per cent from 5.2 per cent. Profit margins continue to buffer the impact of elevated labour costs on inflation: annual growth in unit profits remained negative in the third quarter. Forward-looking wage trackers continue to point to a material easing of wage growth in 2025.

### **The strength of monetary policy transmission**

Market interest rates in the euro area have declined further since our October meeting, reflecting the perceived worsening of the economic outlook and the consequent repricing of policy rate expectations. Our past interest rate cuts – together with the anticipation of future cuts – are gradually making it less expensive for firms and households to borrow. The average interest rate on new loans to firms was 4.7 per cent in October, more than half a percentage point below its peak a year earlier. The cost of issuing market-based debt has fallen by more than a percentage point since its peak. The average rate on new mortgages has also come down, to 3.6 per cent in October, around half a percentage point below its peak in 2023.

But financing conditions remain restrictive. The cost of new credit for firms is elevated in historical comparison, particularly in real terms, and the cumulative tightening of credit standards since the beginning of the hiking cycle remains elevated. The average rate on the outstanding stock of mortgages is set to rise as loans granted at fixed rates reprice at higher levels. Bank lending to firms has only gradually picked up, from subdued levels, with the annual rate of increase rising to 1.2 per cent in October. The annual growth rate of debt securities issued by firms stood at 3.1 per cent in October, remaining within the narrow range observed over recent months. Mortgage lending continued to drift up gradually, to an annual growth rate of 0.8 per cent in October.

## **Conclusion**

In summary, the incoming information and the latest staff projections indicate that the disinflation process remains well on track. While domestic inflation is still high, it should come down as services inflation dynamics moderate and labour cost pressures ease. Recent policy rate cuts are also gradually transmitting to funding costs, but financing conditions along the entire transmission chain, starting with the level of our policy rate and including the market interest rates that financial intermediaries charge on credit to households and firms, remain restrictive.

This assessment explains the decision to lower the deposit facility rate by 25 basis points. Looking to the future, in the current environment of elevated uncertainty, it is prudent to maintain agility on a meeting-by-meeting basis and not pre-commit to any particular rate path. In terms of risk management, monetary easing can proceed more slowly compared to the interest rate path embedded in the December projections in the event of upside shocks to the inflation outlook and/or to economic momentum. Equally, in the event of downside shocks to the inflation outlook and/or to economic momentum, monetary easing can proceed more quickly. All else equal,

the rate path will also be influenced by our ongoing assessment of underlying inflation dynamics and the strength of monetary policy transmission.

We are determined to ensure that inflation stabilises sustainably at our two per cent medium-term target. We will follow a data-dependent and meeting-by-meeting approach to determining the appropriate monetary policy stance. In particular, our interest rate decisions will be based on our assessment of the inflation outlook in light of the incoming economic and financial data, the dynamics of underlying inflation and the strength of monetary policy transmission. We are not pre-committing to a particular rate path.

1. A slide deck to accompany these remarks follows.
2. For further discussion of last week's monetary policy decision, see Lagarde, C. (2024), "*Monetary policy in the euro area*", speech at the Bank of Lithuania's Annual Economics Conference on "Pillars of Resilience Amid Global Geopolitical Shifts", on the occasion of the 10<sup>th</sup> anniversary of euro introduction, Vilnius, Lithuania, 16 December.

# The euro area outlook and monetary policy

Philip R. Lane

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18 December 2024



## December 2024 staff projections: key macroeconomic variables

	December 2024 (annual percentage change)				vs September 2024 (percentage points)		
	2024	2025	2026	2027	2024	2025	2026
	HICP	2.4	2.1	1.9	2.1	-0.1	-0.1
HICP excl. energy and food	2.9	2.3	1.9	1.9	0.0	0.0	-0.1
Compensation per employee	4.6	3.3	2.9	2.8	0.1	-0.3	-0.3
Unit labour costs	4.7	2.6	2.0	2.0	0.2	0.0	-0.1
Real GDP	0.7	1.1	1.4	1.3	-0.1	-0.2	-0.1
Private consumption	0.9	1.3	1.3	1.2	0.1	-0.1	-0.2
Government consumption	2.3	1.2	1.2	1.0	1.1	0.1	0.1
Total investment	-1.7	1.2	2.2	1.6	-1.2	0.0	0.1
Unemployment rate (% of labour force)	6.4	6.5	6.3	6.1	-0.1	0.0	-0.2
	December 2024 (Q4-on-Q4 percentage change)				vs September 2024 (percentage points)		
	Q4 2024	Q4 2025	Q4 2026	Q4 2027	Q4 2024	Q4 2025	Q4 2026
	HICP	2.3	2.0	1.9	2.1	-0.3	0.0
HICP excluding energy and food	2.8	2.1	1.9	1.9	-0.1	0.0	0.0
Compensation per employee	4.2	2.9	2.9	2.7	-0.1	-0.4	-0.1
Unit labour costs	3.7	2.0	1.9	1.9	0.0	-0.2	0.0
Real GDP	1.1	1.2	1.5	1.2	0.0	-0.3	0.1
Private consumption	1.2	1.2	1.3	1.1	0.3	-0.3	-0.1
Government consumption	2.1	0.6	1.6	0.6	1.7	-0.9	0.7
Total investment	-1.5	0.3	2.5	1.2	-0.8	-1.0	0.2
Unemployment rate (% of labour force)	6.4	6.4	6.2	6.0	-0.1	-0.1	-0.2

Note: Revisions calculated based on rounded figures.

## Evolution of GDP growth projections (Q4-on-Q4)

(annual % changes)

GDP	12/23	03/24	06/24	09/24	12/24
Q4 2024	1.3	1.1	1.5	1.1	1.1
Q4 2025	1.5	1.7	1.4	1.5	1.2
Q4 2026	1.5	1.5	1.6	1.4	1.5
Q4 2027	-	-	-	-	1.2

Sources: ECB and Eurosystem staff projections.

## Evolution of HICP inflation projections (Q4-on-Q4)

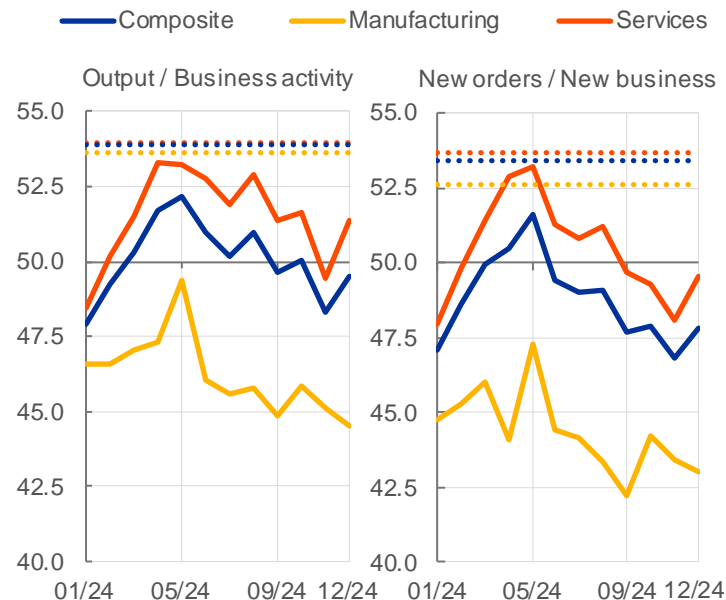
(annual % changes)

HICP	12/23	03/24	06/24	09/24	12/24
Q4 2024	2.6	2.2	2.5	2.6	2.3
Q4 2025	2.0	1.9	2.0	2.0	2.0
Q4 2026	1.9	1.9	1.8	1.9	1.9
Q4 2027	-	-	-	-	2.1

Sources: ECB and Eurosystem staff projections.

## Composite, manufacturing and services PMIs

(diffusion index)

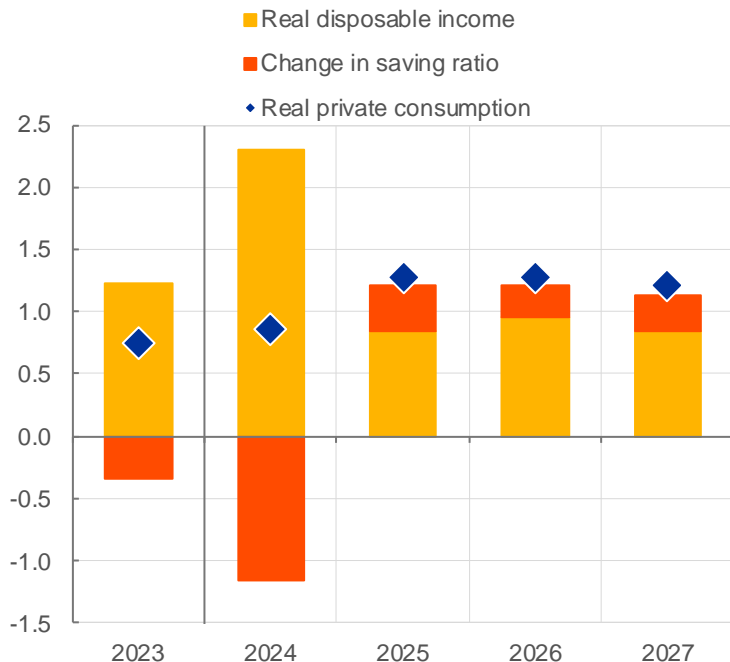


Source: S&P Global.

Notes: Dotted lines refer to 2015-2019 means. 'Output' and 'new orders' correspond to manufacturing and composite and 'business activity' and 'new business' to services. The latest observations are for December 2024.

## Real private consumption growth decomposition

(annual percentage changes, pp contributions)

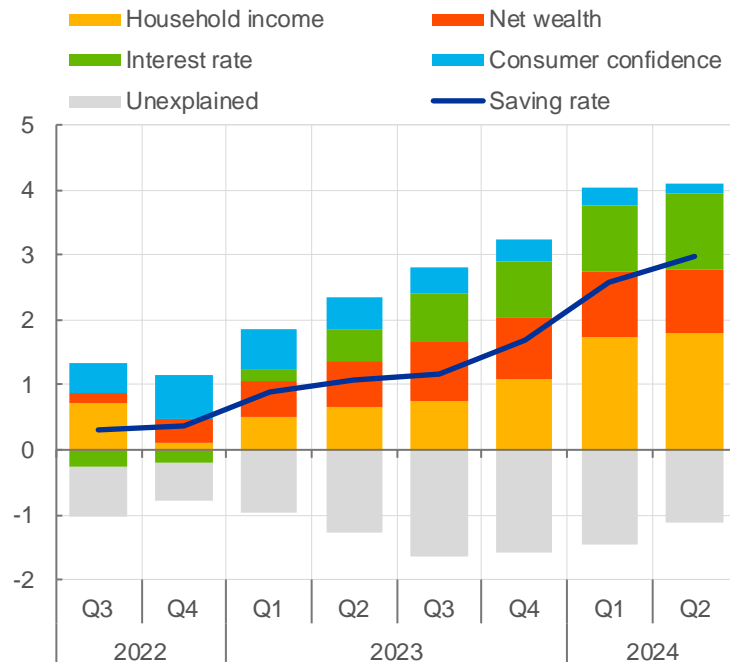


Sources: December 2024 Eurosystem staff projections and ECB calculations.

Note: An increase in the saving rate implies a negative contribution of savings to consumption growth.

## Change in the household saving rate

(percentage point changes since the second quarter of 2022 and percentage point contributions)

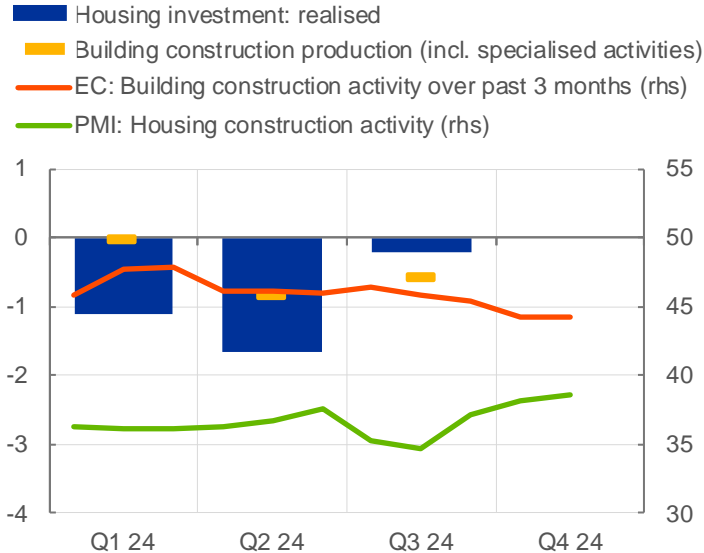


Sources: Eurostat, ECB, ECB and Eurostat (QSA) and ECB calculations.

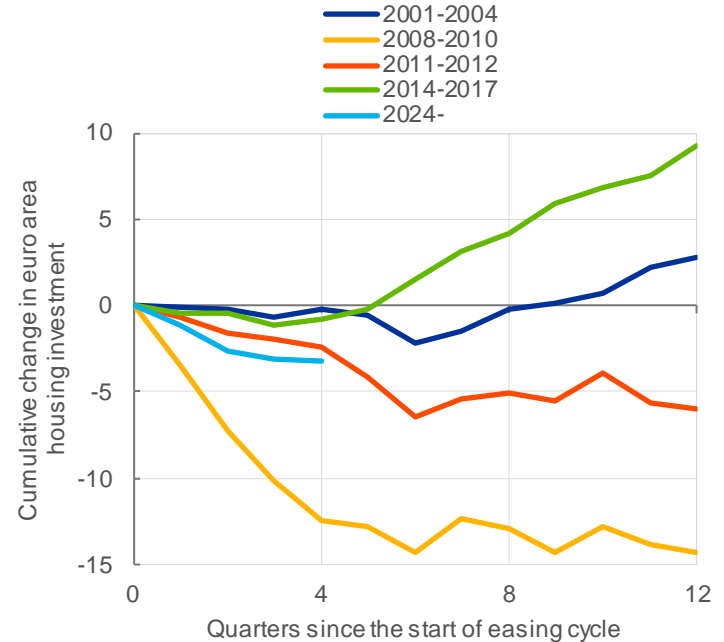
Notes: The chart shows the contributions of real household income, real net wealth, real interest rates and consumer confidence to the cumulative changes in the household saving rate since the second quarter of 2022, based on an estimated error correction model for private consumption growth and taking the growth in real household income as given.

## Housing investment and short-term indicators

(left-hand-side: quarter-on-quarter percentage changes; right-hand-side: diffusion indices, monthly)



## Housing investment turning points (cumulative changes)



Sources: Eurostat, DG-ECFIN, S&P Global, ECB and ECB calculations.

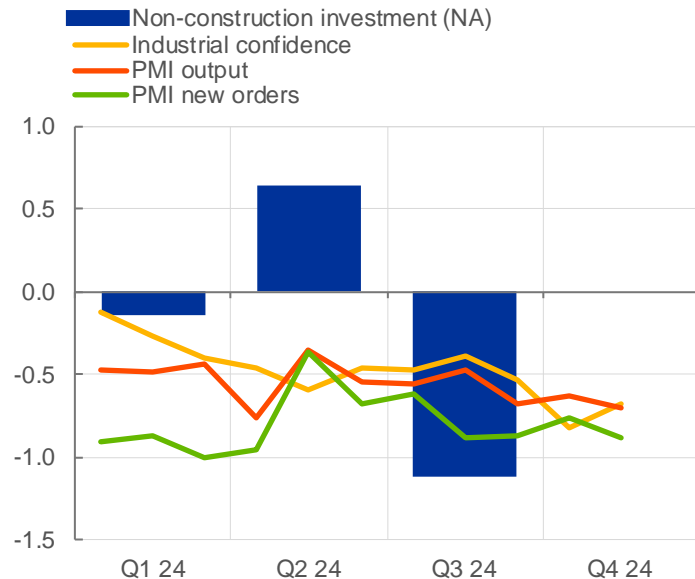
Notes: The EC indicator includes specialised activities (i.e. the construction of parts of buildings or preparation thereof, e.g. concrete work, brick laying etc.) and is transformed to have the same mean and standard deviation as the PMI. The latest observations are for the third quarter of 2024 for housing investment, September 2024 for building construction production and November 2024 for EC and PMI.

Sources: Eurostat, ECB and ECB calculations.

Note: The modified Bry-Boschan algorithm is used to date the turning points in the monetary policy rate (measured as the 3-month EURIBOR).

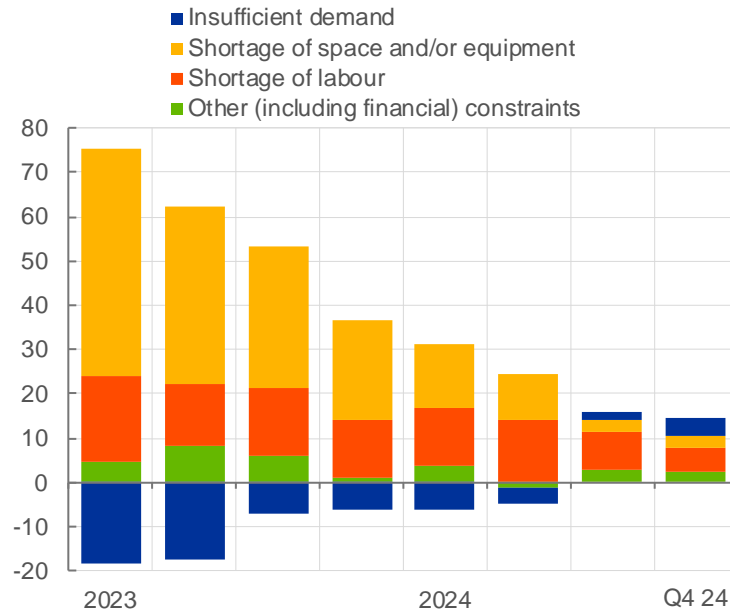
## Business investment and capital goods indicators

(quarter-on-quarter percentage changes, standardised surveys)



## Limits to production in the capital goods sector

(percentage balances)



Sources: Eurostat, S&P Global, DG-ECFIN and ECB calculations.

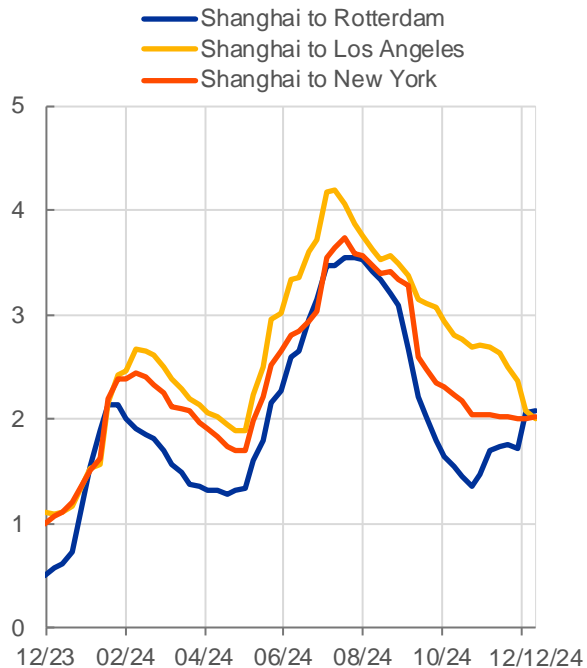
Notes: Non-construction investment exclude Irish IPP. PMIs in deviation from 50, divided by 10. Confidence is standardised. The latest observations are for the third quarter of 2024 for investment and November 2024 for the other variables.

Source: DG-ECFIN.

Notes: The series are adjusted to the 2008-2019 average. The latest observations are for the fourth quarter of 2024.

## Shipping prices

(indices, 02/01/2020 = 1)

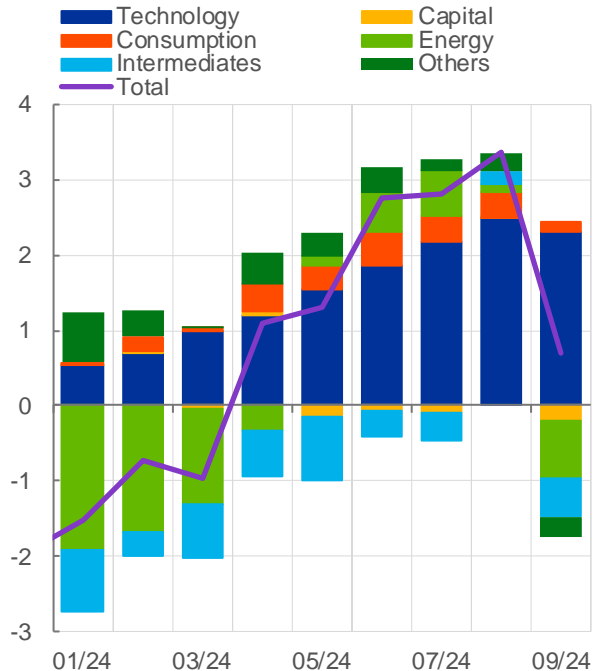


Sources: Drewry shipping consultants via Haver Analytics and ECB staff calculations.

Note: The latest observations are for 12/12/2024.

## World (excluding EA) imports of goods

(annual percentage changes, percentage point contributions, 3month moving average)

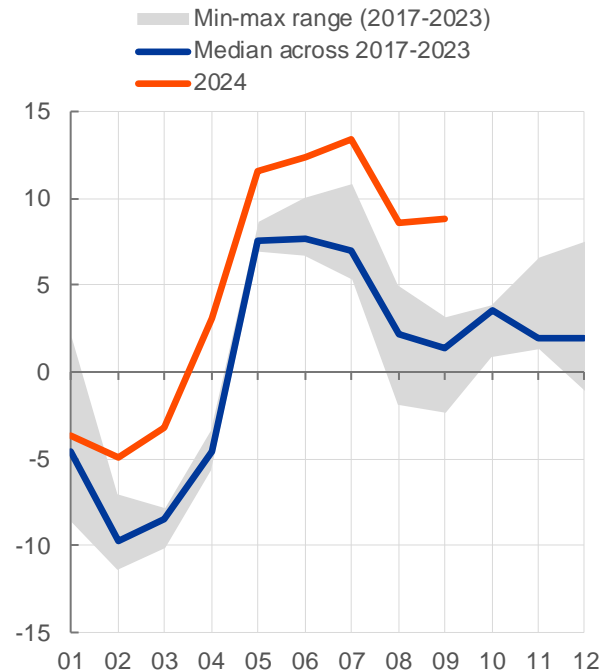


Sources: Trade Data Monitor (TDM) and ECB staff calculations.

Notes: Adjusted Broad Economic Categories (BEC) definitions to account for technological and energy goods. Technological goods include products from two-digit categories such as 84, 85, 87 and 88. In particular, semiconductor product definitions at four-digits (8541, 8542, 8486) are also considered. The latest observations are for September 2024.

## US – chips and AI related imports

(3month-on-3month percentage changes)

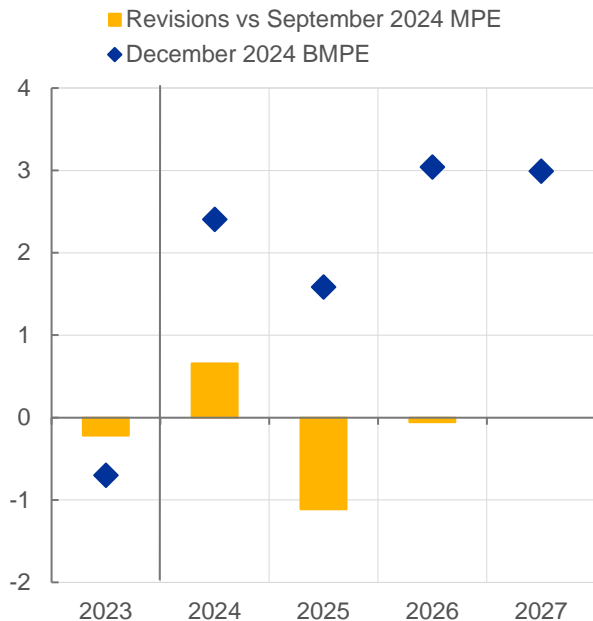


Sources: Trade Data Monitor (TDM), Global Trade Alert (GTA) and ECB staff calculations.

Notes: The list of chips and AI-related products was retrieved from Global Trade Alert announcements of policies targeted to AI, chips and quantum-related technologies. There were 259 such six-digit harmonised commodity system (HS) products identified. The latest observations are for September 2024.

## Forecasted extra euro area export volumes

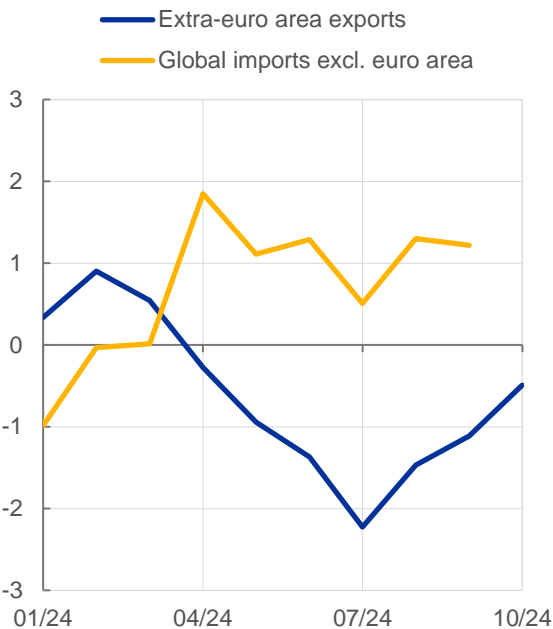
(annual percentage change)



Sources: December 2024 Eurosystem staff projections and September ECB staff projections.

## Euro area goods exports volumes

(3 months-on-3 months percentage change)

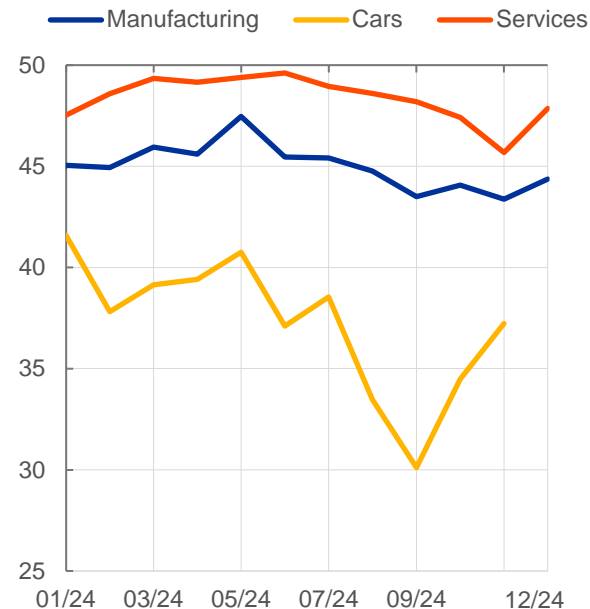


Sources: Eurostat and CPB.

Notes: Global imports are in volumes; goods exports are in volume index. The underlying data are seasonally adjusted. As export volume data for October is not available, the latest data point is approximated by deflating October values with industrial export prices. The latest observations are for September 2024 for global imports and October 2024 for extra-euro area exports.

## PMI new export orders

(diffusion index)

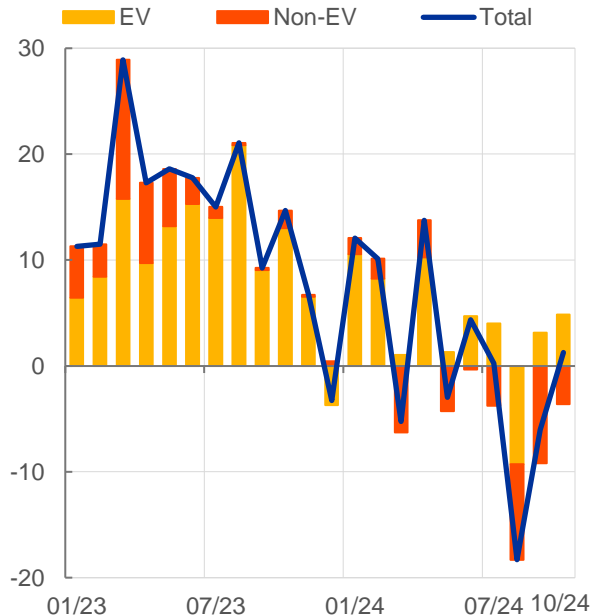


Sources: S&P Global and ECB staff calculations.

Notes: The car sector is included in the manufacturing PMI. A diffusion index is obtained by adding together the percentage of respondents reporting "higher" and half of the percentage of respondents reporting "the same". A number bigger than 50 indicates an expansion, an index smaller than 50 indicates a contraction. The latest observations are for December 2024 (except November for cars PMI).

## New vehicle registrations in the EU

(year-on-year growth)

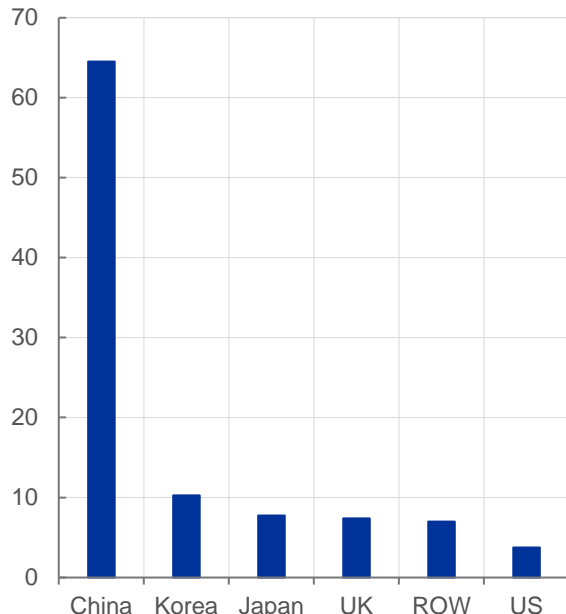


Sources: Acea, Haver Analytics.

Notes: Category "EV" includes battery electric vehicles (BEV) and "Other EV", as hybrid and plug-in hybrid vehicles. "Non-EV" includes petrol- and diesel-powered vehicles. The latest observations are for October 2024.

## Extra-EU BEV imports, by country of origin

(share of total)

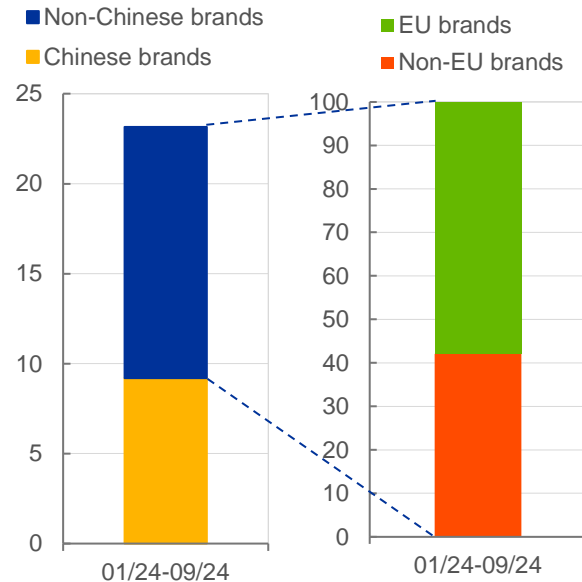


Source: TDM.

Note: Observations are an average from January 2024 to August 2024.

## China-produced battery electric vehicles exported into the EU

(left-hand side: share of total BEV sales in the EU; right-hand side: share of total sales by non-Chinese brands only)



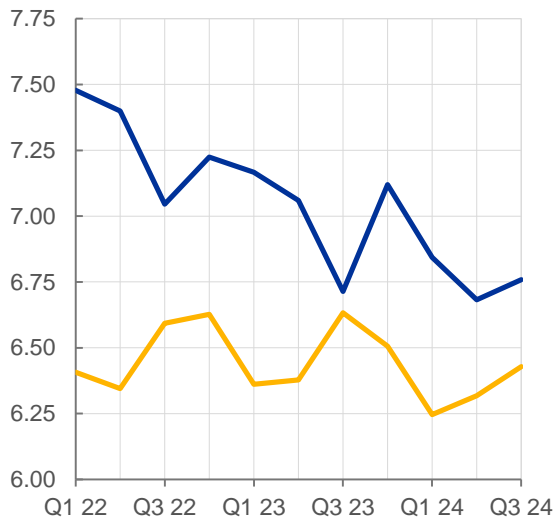
Sources: JATO Dynamics, Bloomberg.

Notes: BEV stands for battery electric vehicles. The chart shows sales data for battery electric vehicle models sold in a sample of EU countries. The brand data includes only those models which are exclusively produced in China. Information on whether a model is produced in China is based on 2023 annual reports and available plant-level production data from Bloomberg.

## Transitions into and out of employment

(millions)

— Into employment — Out of employment

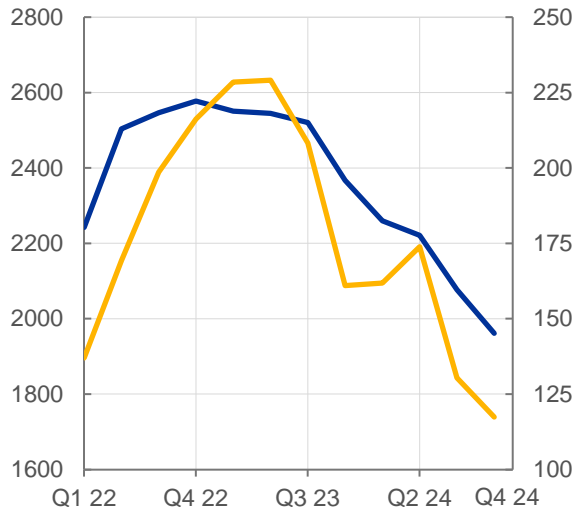


Sources: Eurostat and ECB staff calculations.  
Note: The latest observations are for the third quarter of 2024.

## Indeed job postings

(thousands)

— Indeed job postings (total)  
— New job postings (right-hand side)

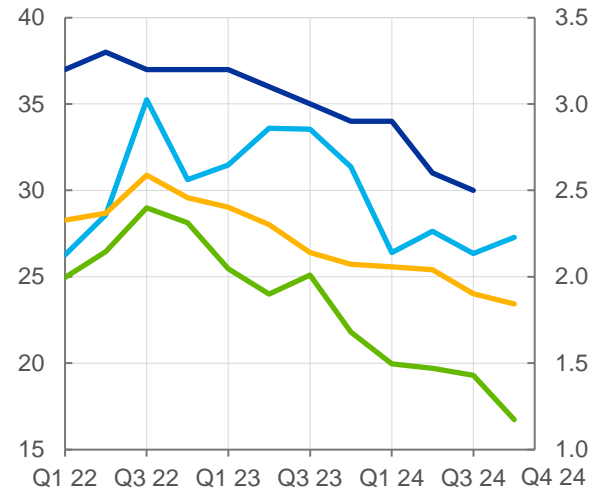


Source: Eurostat.  
Notes: New job postings represent a two-quarter moving average and refer specifically to job postings that include wage information. For reference, see: Adrjan, Pawel and Lydon, Reamonn (2023) "What do wages in online job postings tell us about wage growth?", available at SSRN. The latest observations are for November 2024.

## Labour shortages

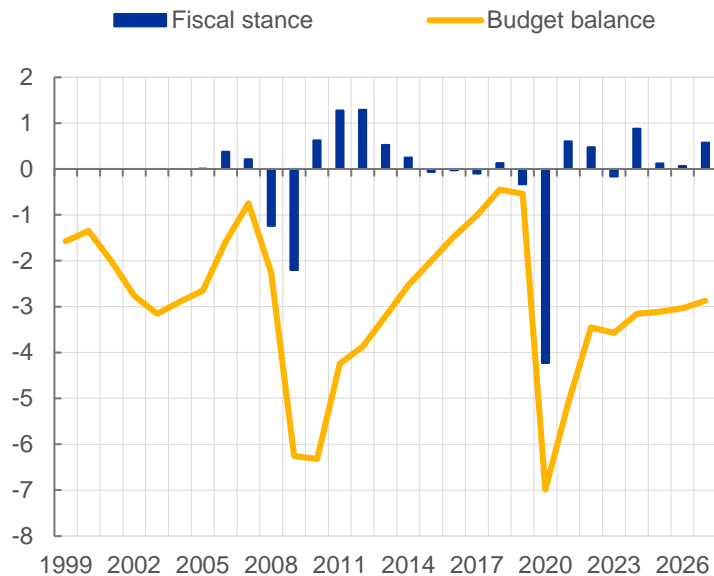
(left-hand side: percentage of firms; right-hand side: percentage of job posts)

— Labour shortages - Manufacturing  
— Labour shortages - Services  
— Labour shortages - Construction  
— Job vacancy rate (right-hand side)



Sources: Eurostat, DG-ECFIN and ECB calculations.  
Note: The latest observations are for Q3 2024 for the job vacancy rate and Q4 2024 for labour shortages.

## Budget balance and fiscal stance (percent of GDP, percentage points of potential GDP)



Source: December 2024 BMPE.

Notes: The fiscal stance is calculated as the change in the cyclically adjusted primary balance net of the assistance to the financial sector and the NGEU grants on the revenue side (in percentage points of potential GDP). Calculations for the fiscal stance harmonised in the current definition available only as of 2004 for the euro area aggregate comprising all 20 current Member States.

## Overview of fiscal projections (percentage of GDP and percentage points)

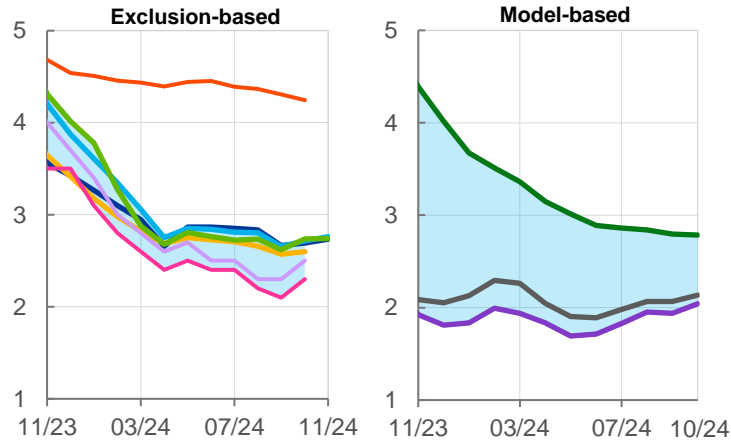
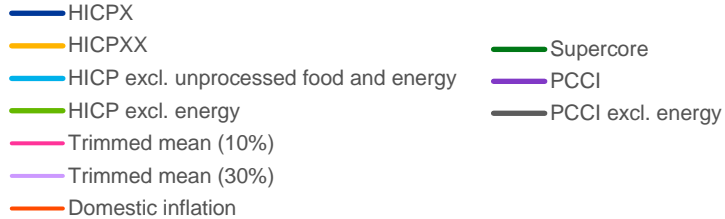
	December 2024 (percentage of GDP)						Revisions since September 2024 (percentage points)			
	2019	2023	2024	2025	2026	2027	2023	2024	2025	2026
<b>Budget balance</b>	<b>-0.5</b>	<b>-3.6</b>	<b>-3.2</b>	<b>-3.1</b>	<b>-3.0</b>	<b>-2.9</b>	<b>0.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.0</b>
Total revenues	46.5	45.9	46.5	46.7	46.6	46.3	-0.5	-0.1	0.1	0.0
Total expenditures	47.0	49.5	49.6	49.8	49.7	49.1	-0.4	-0.2	0.0	0.0
Interest expenditure	1.6	1.7	1.9	2.0	2.1	2.2	0.0	0.0	0.1	0.1
Primary balance	1.1	-1.8	-1.3	-1.1	-0.9	-0.7	0.0	0.2	0.2	0.1
<b>Gross debt</b>	<b>83.7</b>	<b>87.4</b>	<b>87.8</b>	<b>88.3</b>	<b>88.7</b>	<b>88.6</b>	<b>-0.8</b>	<b>-0.7</b>	<b>-1.0</b>	<b>-1.1</b>
Interest rate-growth differential	-1.1	-3.6	-1.2	-1.0	-1.0	-0.8	0.1	0.4	0.2	0.0
Deficit-debt adjustment	0.3	-0.4	0.2	0.4	0.4	0.0	0.0	-0.1	-0.3	-0.1
<b>Fiscal stance (adj. for NGEU)</b>	<b>-0.3</b>	<b>-0.2</b>	<b>0.9</b>	<b>0.1</b>	<b>0.1</b>	<b>0.6</b>	<b>-0.2</b>	<b>0.3</b>	<b>0.0</b>	<b>-0.2</b>

Source: December 2024 BMPE.

# Underlying inflation and inflation momentum

## Measures of underlying inflation

(annual percentage changes)

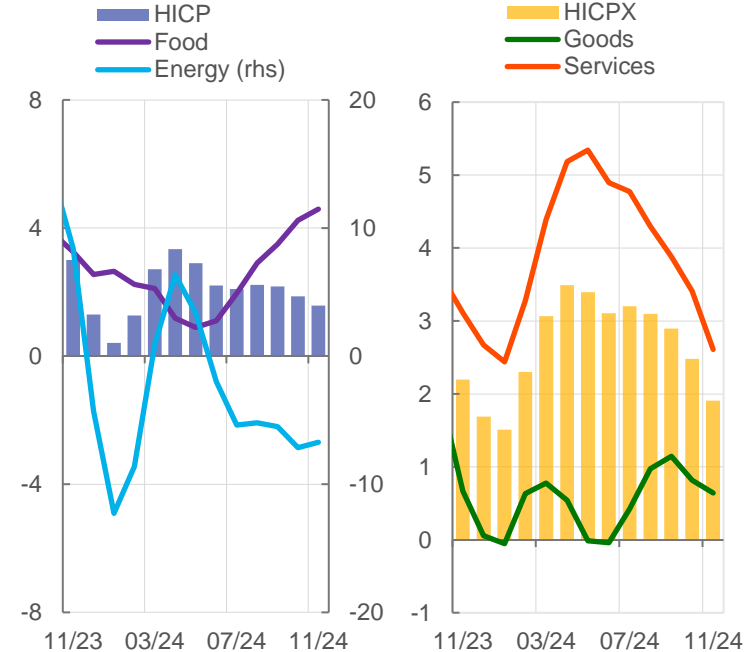


Sources: Eurostat and ECB calculations.

Note: The latest observations are for November 2024 (flash estimate) for HICPX, HICP excluding energy and HICP excluding unprocessed food and energy and October 2024 for the rest.

## Momentum of inflation and its subcomponents

(annualised three month-on-three month percentage changes)



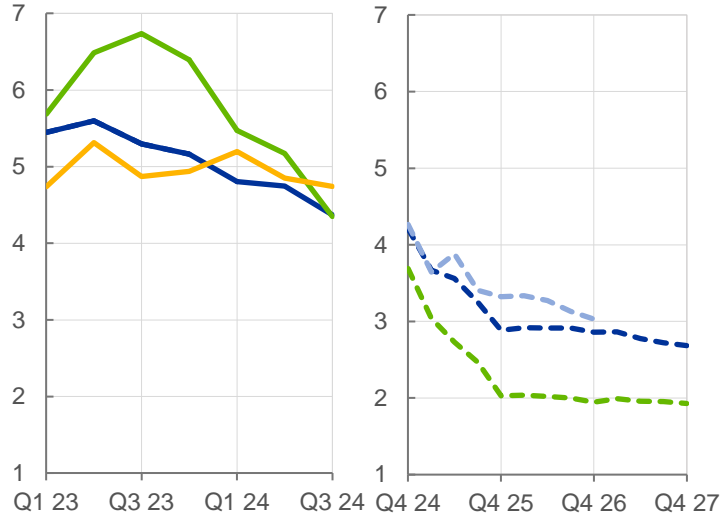
Sources: Eurostat and ECB calculations.

Notes: Calculated using seasonally adjusted data. The latest observations are for November 2024 (flash estimate).

## Labour cost indicators in the euro area and their forecasts

(annual percentage changes)

- Compensation per employee (September 2024 MPE)
- Compensation per employee (and December 2024 BMPE)
- Unit labour costs (and December 2024 BMPE)
- Compensation per hour



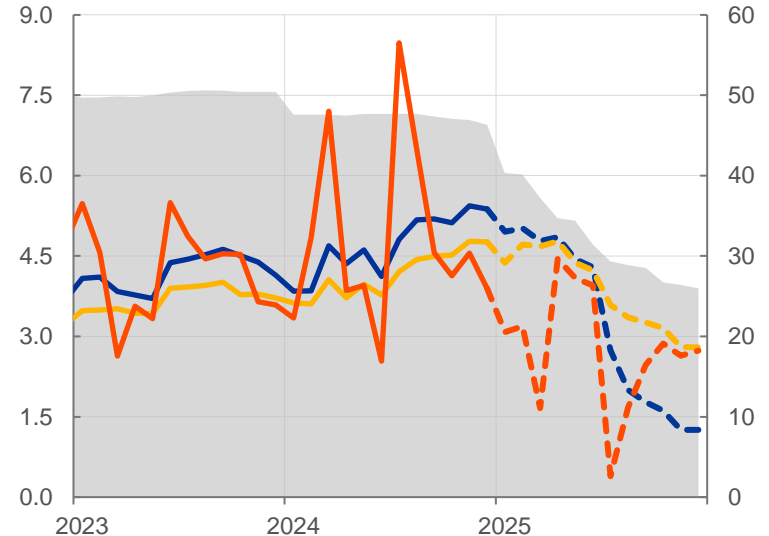
Sources: Eurostat, ECB, September and December 2024 Eurosystem staff projections and ECB calculations.

Note: The latest observations are for Q3 2024.

## ECB wage tracker

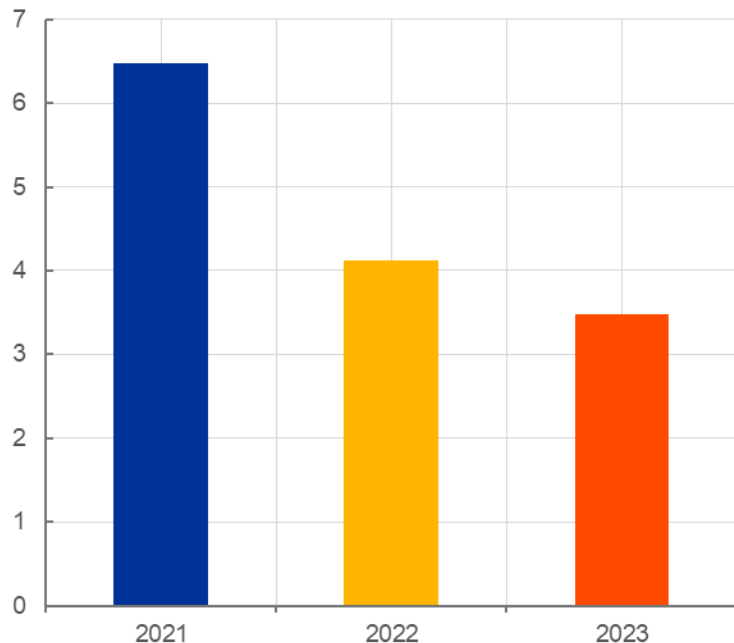
(annual percentage changes)

- Share of employees covered (right-hand side)
- ECB wage tracker
- ECB wage tracker excluding one-off payments
- ECB wage tracker including unsmoothed one-off payments

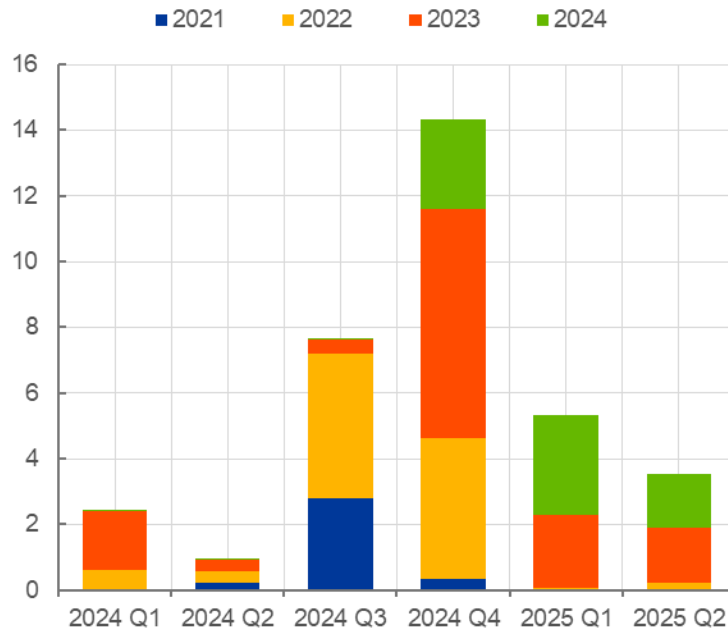


Sources: Wage tracker calculated based on micro data on wage agreements provided by Deutsche Bundesbank, Banco de España, the Dutch employer association (AWVN), Österreichische Nationalbank, Bank of Greece, Banca d'Italia, and Banque de France. Notes: The euro area aggregate for the wage tracker is based on data for Germany, France, Italy, Spain, the Netherlands, Austria, and Greece. The latest observations are for December 2025.

## 12-months-ahead growth for contracts signed in 2024 by preceding signing year (annual percentage changes)



## Workers covered in expiring agreements by signing year (millions of workers)

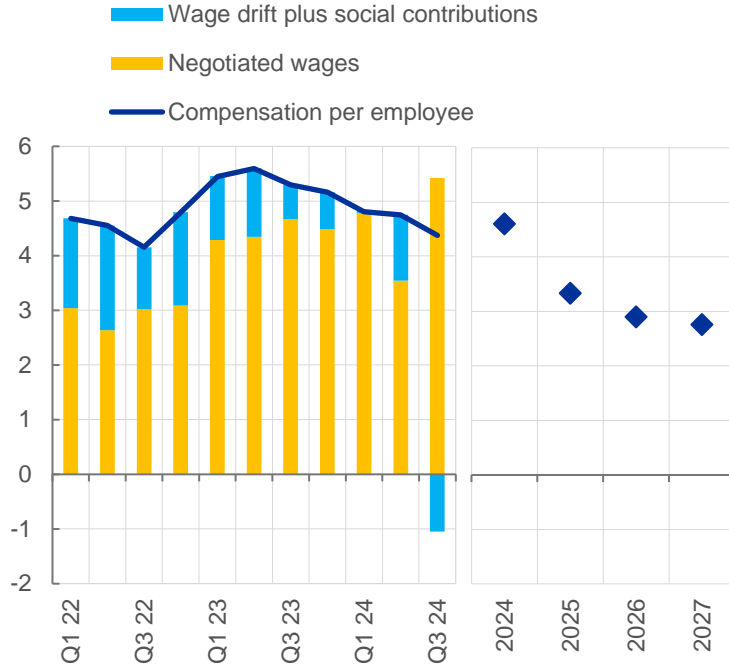


Sources: Wage tracker calculated based on micro data on wage agreements provided by Deutsche Bundesbank, Banco de España, the Dutch employer association (AWVN), Österreichische Nationalbank, Bank of Greece, Banca d'Italia, and Banque de France.  
Note: 12-month-ahead wage growth excluding one-off payments for agreements signed in 2024.

Sources: Wage tracker calculated based on micro data on wage agreements provided by Deutsche Bundesbank, Banco de España, the Dutch employer association (AWVN), Österreichische Nationalbank, Bank of Greece, Banca d'Italia, and Banque de France.  
Note: The x-axis represents the quarter when contracts are due to expire, colours refer to when these agreements were signed.

## Decomposition of compensation per employee growth

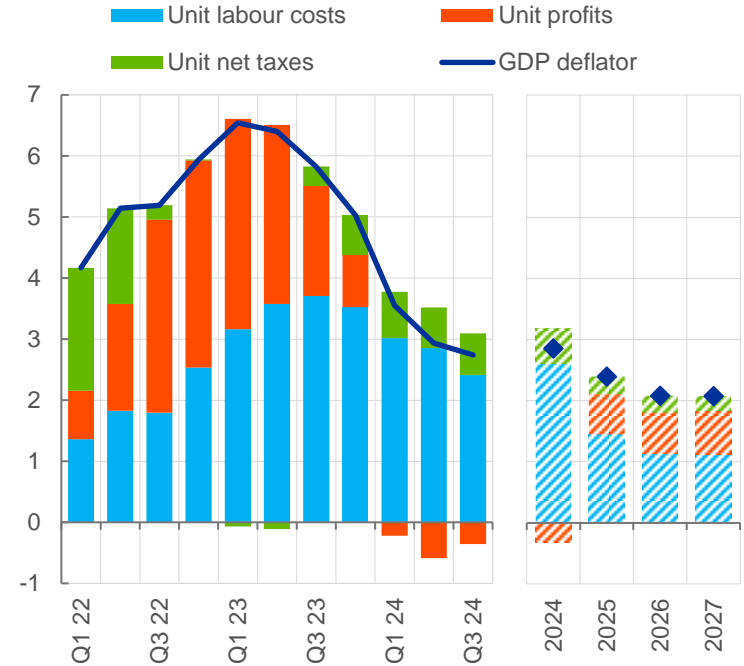
(annual percentage changes and percentage point contributions)



Sources: Eurostat, December Eurosystem staff projections and ECB calculations.  
Notes: The diamonds are projections based on the December 2024 BMPE. The latest observations are for Q3 2024.

## GDP deflator

(annual percentage changes and percentage point contributions)

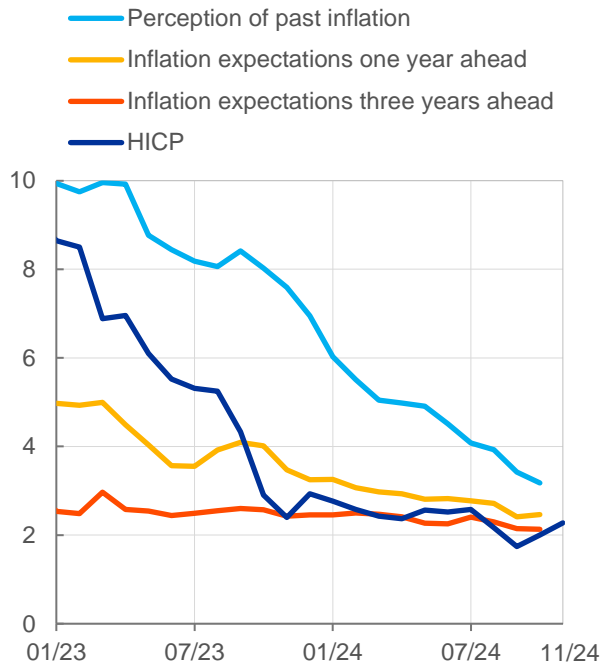


Sources: Eurostat, December Eurosystem staff projections and ECB calculations.  
Notes: Unit net taxes reflect taxes minus subsidies. When the contribution of subsidies on products is larger than the contribution of indirect taxes, the unit net tax contribution turns negative. The latest observations are for Q3 2024.

# Inflation expectations

## ECB consumer expectations survey

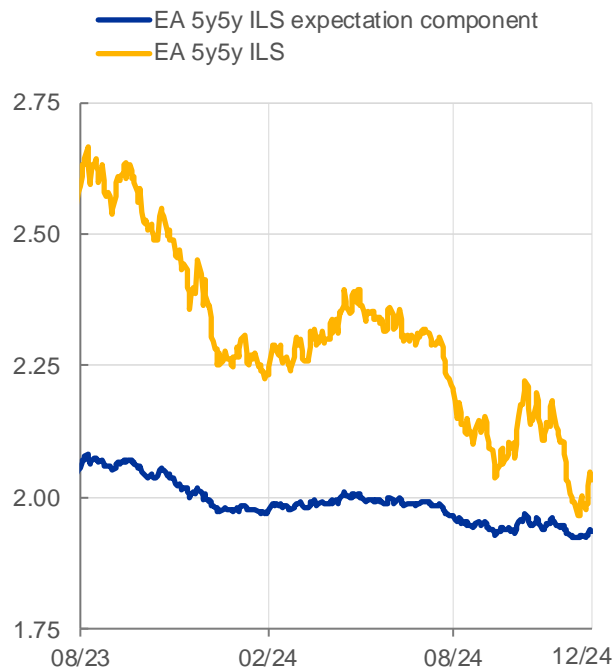
(annual percentage changes)



Sources: Eurostat and ECB Consumer Expectations Survey (CES).  
Notes: The series refer to the median value for CES. The latest observations are for November 2024 (flash estimate) for HICP and October 2024 for the rest.

## Euro area inflation-linked swap rates

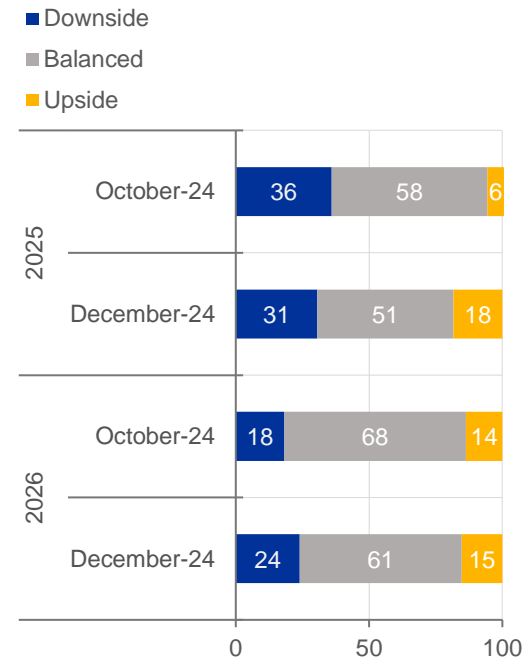
(percentages per annum)



Sources: LSEG, Bloomberg and ECB calculations.  
Notes: Premia-adjusted forward ILS rates are an average of estimates from two affine term structure models as in Joslin, Singleton and Zhu (2011) applied to ILS rates non-adjusted for the indexation lag; see Burban et al. (2022). The latest observations are for 16 December 2024.

## Balance of risks for inflation from Survey of Monetary Analysts

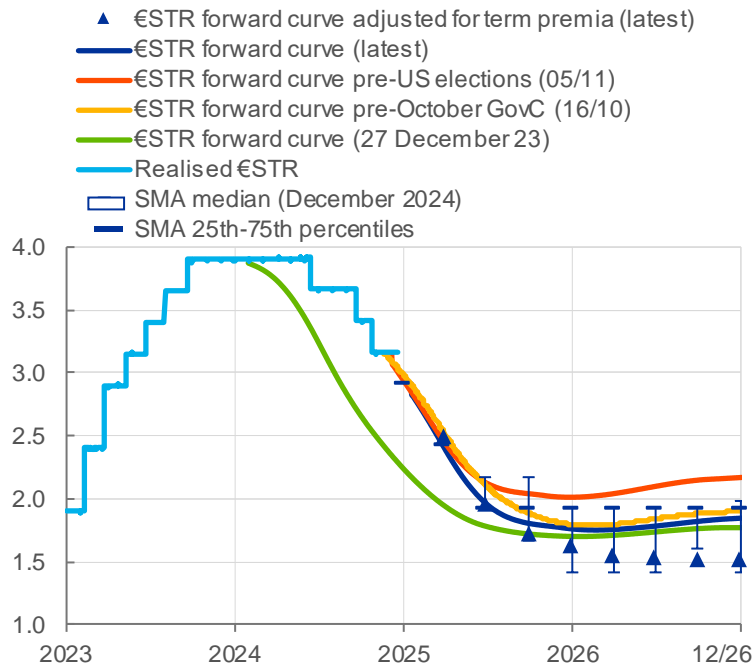
(percentage per annum)



Source: ECB Survey of Monetary Analysts (SMA).  
Notes: Percentages may not add up to 100 due to rounding. The latest observations are for December 2024.

# Near-term rate expectations and the real yield curve

## €STR forward curve and survey expectations of the deposit facility rate (percentages per annum)

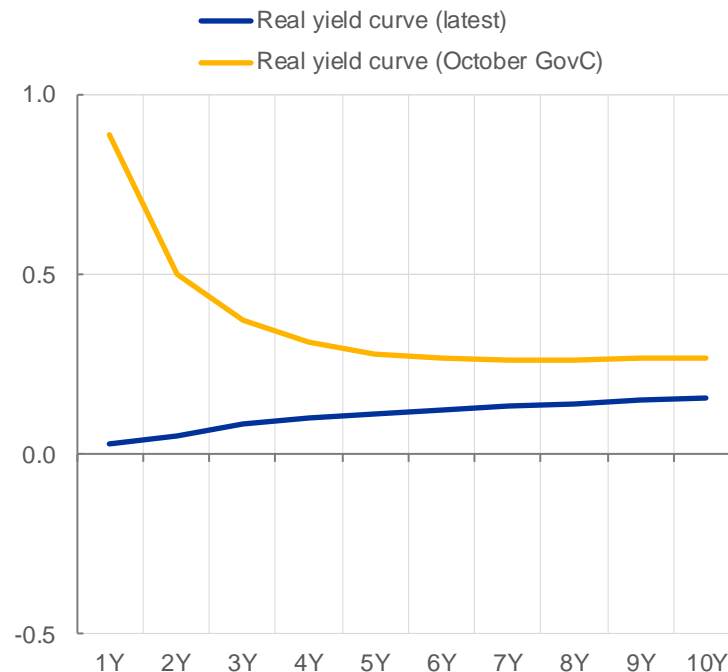


Sources: LSEG, Bloomberg, SMA, and ECB calculations.

Notes: The DFR expectations from SMA are adjusted for the current €STR vs. DFR spread. Estimates are based on two affine term structure models, with and without survey information on rate expectations (both variations of Joslin, Singleton and Zhu (2011)), and a lower bound term structure model following Geiger and Schupp (2018) incorporating survey information on rate expectations. The latest observations are for 16 December 2024.

## Real yield curves

(percentages per annum)



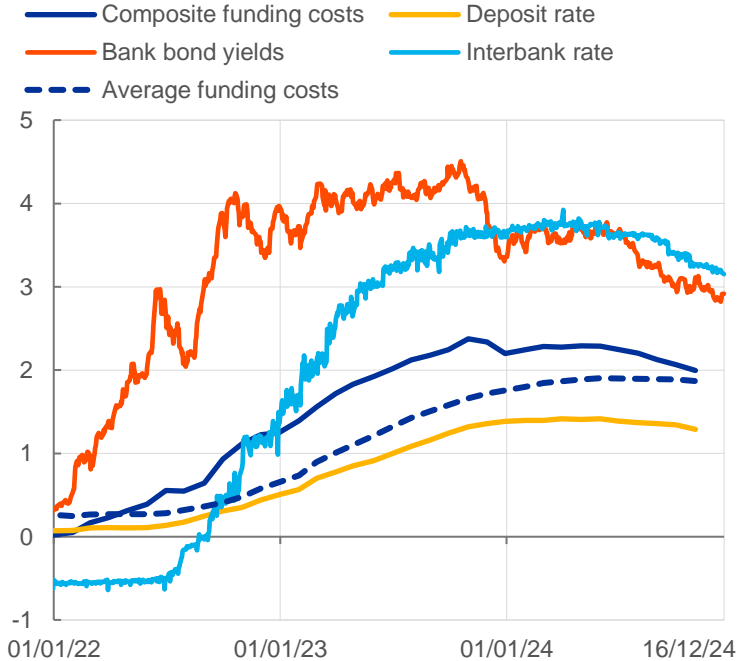
Sources: Bloomberg, LSEG and ECB calculations.

Notes: The real rate is calculated by subtracting the inflation-linked swap rate from the nominal OIS rate. The latest observations are for 16 December 2024.

# Bank funding costs and credit standards

## Bank funding costs

(percentages per annum)

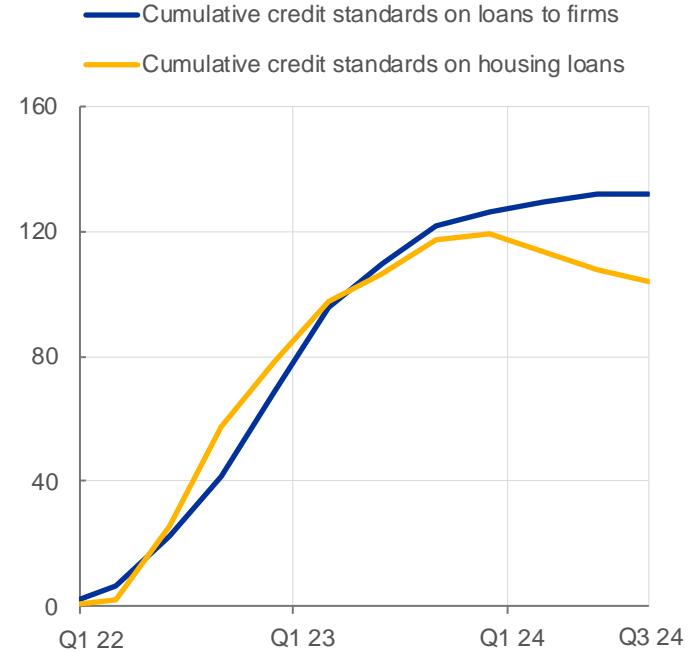


Sources: ECB (BSI, MIR, CSDB, MMSR), IHS Markit iBoxx and ECB calculations.

Notes: Marginal funding costs are weighted average of new business costs for overnight deposits, deposits redeemable at notice, time deposits, bonds, and interbank borrowing, weighted by outstanding amounts. Average funding costs use the same weights but are based on rate on outstanding deposits and interbank funding and yield to maturity at issuance for bonds. The latest observations are for October 2024 for monthly data and 16 December 2024 for daily data.

## Cumulated change in credit standards for firms and households

(net percentages)



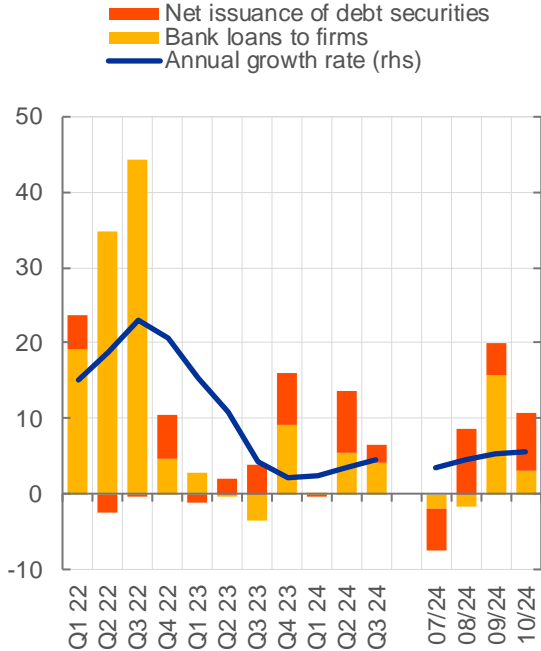
Sources: ECB (BLS) and ECB calculations.

Notes: Net percentages for credit standards are defined as the difference between the sum of the percentages of banks responding “tightened considerably” and “tightened somewhat” and the sum of the percentages of banks responding “eased somewhat” and “eased considerably”. Cumulation starts in the first quarter of 2022. The latest observations are for Q3 2024.

# Credit to firms, lending rates and use of loans by innovative firms

## Firm debt financing

(average monthly flows in EUR bn)

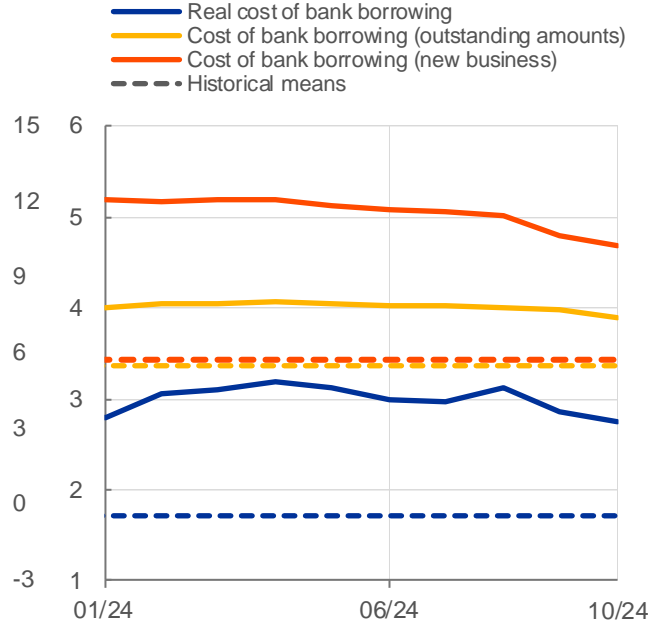


Sources: ECB (BSI, CSEC) and ECB calculations.

Notes: The seasonal adjustment for the net issuance of debt securities is not official. Bank loans are adjusted for sales, securitisation and cash pooling. The latest observations are for October 2024.

## Firm cost of borrowing

(percentages per annum)

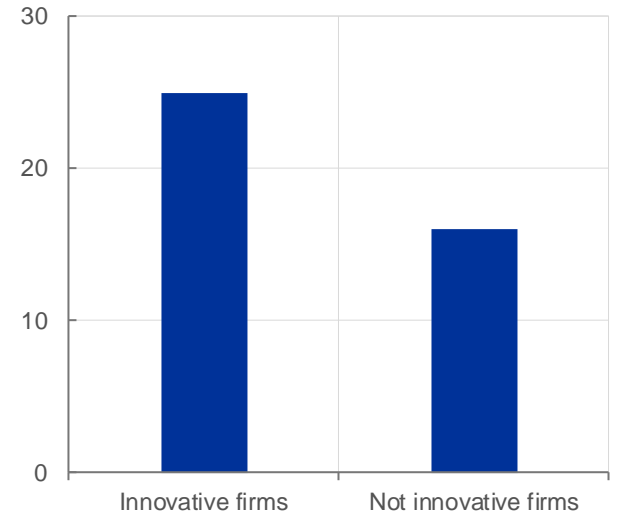


Sources: ECB (MIR), ECB projections database, Consensus Economics and ECB calculations.

Notes: Real lending rates are constructed using the Consensus 1 year ahead inflation expectations. Dashed lines are historical means. The latest observations are for October 2024.

## Share of firms borrowing from banks

(percentages)

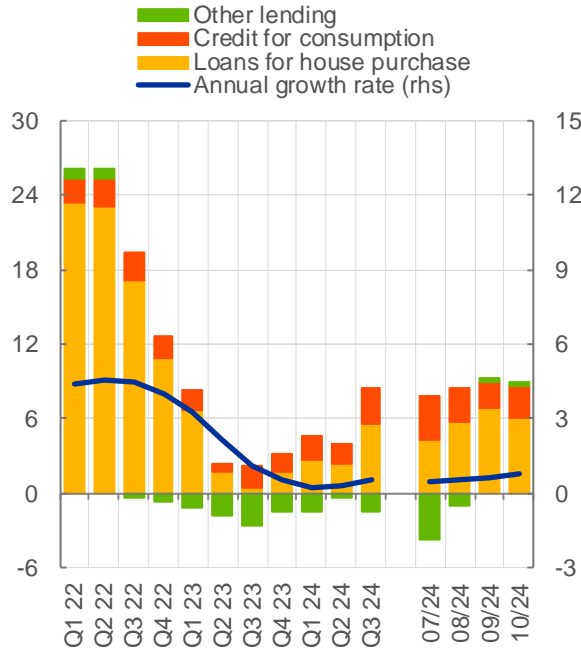


Sources: ECB (SAFE) and ECB calculations.

Notes: Innovative firms are firms who respond to SAFE that they introduced a new product or service in the market in the last 12 months (annual question). The chart shows the percentage of firms who reported they have used bank loans over the last 6 months. The latest observations are for Q3 2024.

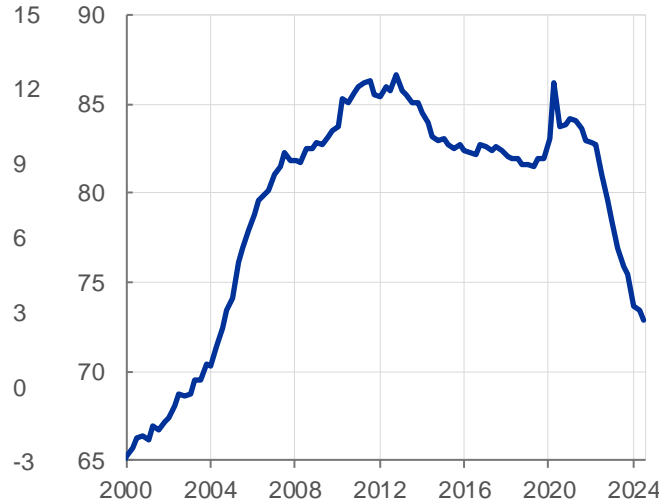
# Credit to households, outlook, and mortgage affordability

## Bank loans to households (average monthly flows in EUR bn)



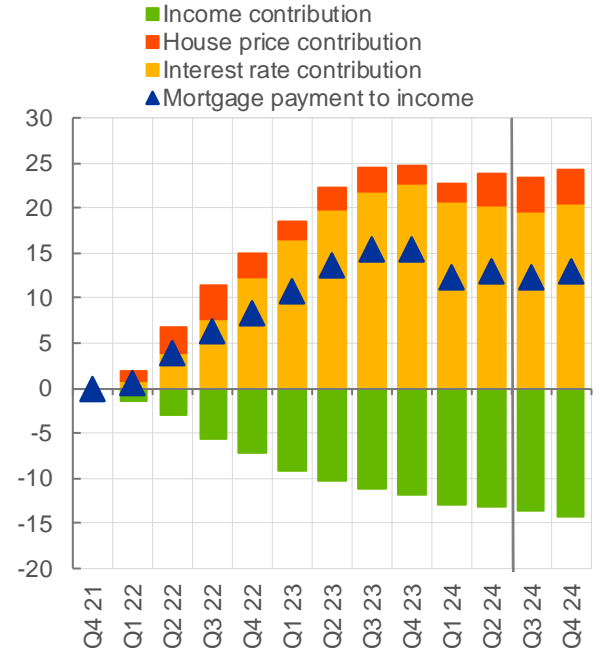
Sources: ECB (BSI) and ECB calculations.  
Notes: Bank loans are adjusted for sales, securitisation and cash pooling. The latest observations are for October 2024.

## Bank lending to households over gross disposable income (percentage of gross personal disposable income)



Source: ECB (BSI, ECB projections, QSA).  
Notes: Loans to households are adjusted for sales and securitisation. The latest observations are for Q2 2024. Q3 is a nowcast.

## Change in debt service ratio for typical newly-granted mortgages (percentage points)



Sources: ECB (MIR, QSA, RESR), ECB projections and ECB calculations.  
Note: The latest observations are for Q2 2024, and the projections go until Q4 2024.