EUROPEAN CENTRAL BANK

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Contents

Economic, financial and monetary developments

Overview

At its meeting on 5 June 2025, the Governing Council decided to lower the three key ECB interest rates by 25 basis points. In particular, the decision to lower the deposit facility rate – the rate through which the Governing Council steers the monetary policy stance – was based on its updated assessment of the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission.

Inflation is currently at around the Governing Council's 2% medium-term target. In the baseline of the June 2025 Eurosystem staff macroeconomic projections for the euro area, headline inflation is set to average 2.0% in 2025, 1.6% in 2026 and 2.0% in 2027. The downward revisions compared with the March 2025 ECB staff macroeconomic projections for the euro area, by 0.3 percentage points for both 2025 and 2026, mainly reflect lower assumptions for energy prices and a stronger euro. Staff expect inflation excluding energy and food to average 2.4% in 2025 and 1.9% in 2026 and 2027, broadly unchanged since March.

Staff see real GDP growth averaging 0.9% in 2025, 1.1% in 2026 and 1.3% in 2027. The unrevised growth projection for 2025 reflects a stronger than expected first quarter combined with weaker prospects for the remainder of the year. While the uncertainty surrounding trade policies is expected to weigh on business investment and exports, especially in the short term, rising government investment in defence and infrastructure will increasingly support growth over the medium term. Higher real incomes and a robust labour market will allow households to spend more. Together with more favourable financing conditions, this should make the economy more resilient to global shocks.

In the context of high uncertainty, staff also assessed some of the mechanisms by which different trade policies could affect growth and inflation under some alternative illustrative scenarios. These scenarios are published with the staff projections on the ECB's website. Under this scenario analysis, a further escalation of trade tensions over the coming months would result in growth and inflation being below the baseline projections. By contrast, if trade tensions were resolved with a benign outcome, growth and, to a lesser extent, inflation would be higher than in the baseline projections.

Most measures of underlying inflation suggest that inflation will settle at around the Governing Council's 2% medium-term target on a sustained basis. Wage growth is still elevated but continues to moderate visibly, and profits are partially buffering its impact on inflation. The concerns that increased uncertainty and a volatile market response to the trade tensions in April would have a tightening impact on financing conditions have eased.

The Governing Council is determined to ensure that inflation stabilises sustainably at its 2% medium-term target. Especially in current conditions of exceptional uncertainty, it will follow a data-dependent and meeting-by-meeting approach to determining the appropriate monetary policy stance. The Governing Council's interest rate decisions will be based on its 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. The Governing Council is not pre-committing to a particular rate path.

Economic activity

The economy grew by 0.3% in the first quarter of 2025, according to Eurostat's flash estimate. Unemployment, at 6.2% in April, is at its lowest level since the launch of the euro, and employment grew by 0.3% in the first quarter of the year, according to the flash estimate.

The outlook for euro area economic growth is clouded by trade tensions and elevated global uncertainty. For 2025 as a whole, these effects are seen to be partly compensated by stronger than expected economic activity in the first quarter, which likely reflects in part the frontloading of exports in anticipation of higher tariffs. In the medium term economic activity is seen to be supported by the recently announced new fiscal measures. The June 2025 baseline projections assume that US tariffs on EU goods, which have increased to 10%, will remain in place over the entire projection horizon. Together with the elevated trade policy uncertainty and the recent appreciation of the euro, the higher tariffs will weigh on euro area exports and investment, and, to a lesser extent, on consumption. By contrast, new government spending on infrastructure and defence, mainly in Germany, should bolster euro area domestic demand from 2026 onwards. Overall, the conditions remain in place for euro area GDP growth to strengthen over the projection horizon. In particular, rising real wages and employment, less restrictive financing conditions – mainly reflecting recent monetary policy decisions – and a rebound in foreign demand in the later part of the projection horizon should all support a gradual recovery. Compared with the March 2025 projections, the outlook for GDP growth is unrevised for 2025, reflecting better than expected incoming data which are seen to be largely offset by the effects of the trade tensions and the appreciation of the euro exchange rate. The trade tensions and the stronger exchange rate have resulted in a downward revision to growth for 2026, while growth is unrevised for 2027.

In line with the June 2025 projections, survey data point overall to some weaker prospects in the near term. While manufacturing has strengthened, partly because trade has been brought forward in anticipation of higher tariffs, the more domestically oriented services sector is slowing. Higher tariffs and a stronger euro are expected to make it harder for firms to export. High uncertainty is expected to weigh on investment.

At the same time, several factors are keeping the economy resilient and should support growth over the medium term. A strong labour market, rising real incomes,

robust private sector balance sheets and easier financing conditions, in part because of the Governing Council's past interest rate cuts, should all help consumers and firms withstand the fallout from a volatile global environment. Recently announced measures to step up defence and infrastructure investment should also bolster growth.

In the present geopolitical environment, it is even more urgent for fiscal and structural policies to make the euro area economy more productive, competitive and resilient. The European Commission's Competitiveness Compass provides a concrete roadmap for action, and its proposals, including on simplification, should be swiftly adopted. This includes completing the savings and investment union, following a clear and ambitious timetable. It is also important to rapidly establish the legislative framework to prepare the ground for the potential introduction of a digital euro. Governments should ensure sustainable public finances in line with the EU's economic governance framework, while prioritising essential growth-enhancing structural reforms and strategic investment.

Inflation

Annual inflation declined to 1.9% in May, from 2.2% in April, according to Eurostat's flash estimate. Energy price inflation remained at -3.6%. Food price inflation rose to 3.3%, from 3.0% the month before. Goods inflation was unchanged at 0.6%, while services inflation dropped to 3.2%, from 4.0% in April. Services inflation had jumped in April mainly because prices for travel services around the Easter holidays went up by more than expected.

Most indicators of underlying inflation suggest that inflation will stabilise sustainably at the Governing Council's 2% medium-term target. Labour costs are gradually moderating, as indicated by incoming data on negotiated wages and available country data on compensation per employee. The ECB's wage tracker points to a further easing of negotiated wage growth in 2025, while the June 2025 projections see wage growth falling to below 3% in 2026 and 2027. While lower energy prices and a stronger euro are putting downward pressure on inflation in the near term, inflation is expected to return to target in 2027.

Short-term consumer inflation expectations edged up in April 2025, likely reflecting news about trade tensions. But most measures of longer-term inflation expectations continue to stand at around 2%, which supports the stabilisation of inflation around the Governing Council's target.

While headline inflation, as measured by the Harmonised Index of Consumer Prices (HICP), is likely to stay below 2% in the near term, it is expected to return to target in the medium term. Eurosystem staff expect inflation to decline in the course of 2025 and to reach a trough of 1.4% in the first quarter of 2026, before returning to 2.0% in 2027. The decline in headline inflation over 2025 is seen to be driven in part by negative energy inflation following the recent decline in oil prices and wholesale natural gas prices. Energy inflation is expected to remain negative until 2027 when new climate change mitigation measures come into effect in the context of the new

Emissions Trading System (ETS2). Following a temporary increase in the second quarter of 2025, food inflation is expected to fall to rates slightly above 2% in 2027. HICP inflation excluding energy and food is expected to decline, driven by the services component, as the effects of delayed price adjustments for some items fade out, wage pressures recede, and lower energy prices feed through the pricing chain. Wage growth should continue to follow its downward path as pressures to recoup past real wage losses fade. Coupled with a recovery in productivity growth, this is expected to lead to significantly slower unit labour cost growth. External price pressures, as reflected in import prices, are expected to remain moderate assuming that EU tariff policies remain unchanged, with some downward pressure stemming from the stronger euro and the decline in energy commodity prices over recent months. Compared with the March 2025 projections, the outlook for headline HICP inflation is revised down by 0.3 percentage points for both 2025 and 2026 on account of lower energy commodity price assumptions and the appreciation of the euro, while it is unrevised for 2027.

Risk assessment

Risks to economic growth remain tilted to the downside. A further escalation in global trade tensions and associated uncertainties could lower euro area growth by dampening exports and dragging down investment and consumption. A deterioration in financial market sentiment could lead to tighter financing conditions and greater risk aversion, and make firms and households less willing to invest and consume. Geopolitical tensions, such as Russia's unjustified war against Ukraine and the tragic conflict in the Middle East, remain a major source of uncertainty. By contrast, if trade and geopolitical tensions were resolved swiftly, this could lift sentiment and spur activity. A further increase in defence and infrastructure spending, together with productivity-enhancing reforms, would also add to growth.

The outlook for euro area inflation is more uncertain than usual, as a result of the volatile global trade policy environment. Falling energy prices and a stronger euro could put further downward pressure on inflation. This could be reinforced if higher tariffs led to lower demand for euro area exports and to countries with overcapacity rerouting their exports to the euro area. Trade tensions could lead to greater volatility and risk aversion in financial markets, which would weigh on domestic demand and would thereby also lower inflation. By contrast, a fragmentation of global supply chains could raise inflation by pushing up import prices and adding to capacity constraints in the domestic economy. A boost in defence and infrastructure spending could also raise inflation over the medium term. Extreme weather events, and the unfolding climate crisis more broadly, could drive up food prices by more than expected.

Financial and monetary conditions

Risk-free interest rates have remained broadly unchanged since the Governing Council's monetary policy meeting on 17 April 2025. Equity prices have risen, and

corporate bond spreads have narrowed, in response to more positive news about global trade policies and the improvement in global risk sentiment.

The Governing Council's past interest rate cuts continue to make corporate borrowing less expensive. The average interest rate on new loans to firms declined to 3.8% in April, from 3.9% in March. The cost of issuing market-based debt was unchanged at 3.7%. Bank lending to firms continued to strengthen gradually, growing by an annual rate of 2.6% in April after 2.4% in March, while corporate bond issuance was subdued. The average interest rate on new mortgages stayed at 3.3% in April, while growth in mortgage lending increased to 1.9%.

In line with its monetary policy strategy, the Governing Council thoroughly assessed the links between monetary policy and financial stability. While euro area banks remain resilient, broader financial stability risks remain elevated, in particular owing to highly uncertain and volatile global trade policies. Macroprudential policy remains the first line of defence against the build-up of financial vulnerabilities, enhancing resilience and preserving macroprudential space.

Monetary policy decisions

The interest rates on the deposit facility, the main refinancing operations and the marginal lending facility were decreased to 2.00%, 2.15% and 2.40% respectively, with effect from 11 June 2025.

The asset purchase programme and the pandemic emergency purchase programme portfolios are declining at a measured and predictable pace, as the Eurosystem no longer reinvests the principal payments from maturing securities.

Conclusion

At its meeting on 5 June 2025, the Governing Council decided to lower the three key ECB interest rates by 25 basis points. In particular, the decision to lower the deposit facility rate – the rate through which the Governing Council steers the monetary policy stance – was based on its updated assessment of the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission. The Governing Council is determined to ensure that inflation stabilises sustainably at its 2% medium-term target. Especially in current conditions of exceptional uncertainty, it will follow a data-dependent and meeting-by-meeting approach to determining the appropriate monetary policy stance. The Governing Council's interest rate decisions will be based on its 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. The Governing Council is not pre-committing to a particular rate path.

In any case, the Governing Council stands ready to adjust all of its instruments within its mandate to ensure that inflation stabilises sustainably at its medium-term target and to preserve the smooth functioning of monetary policy transmission.

1 External environment

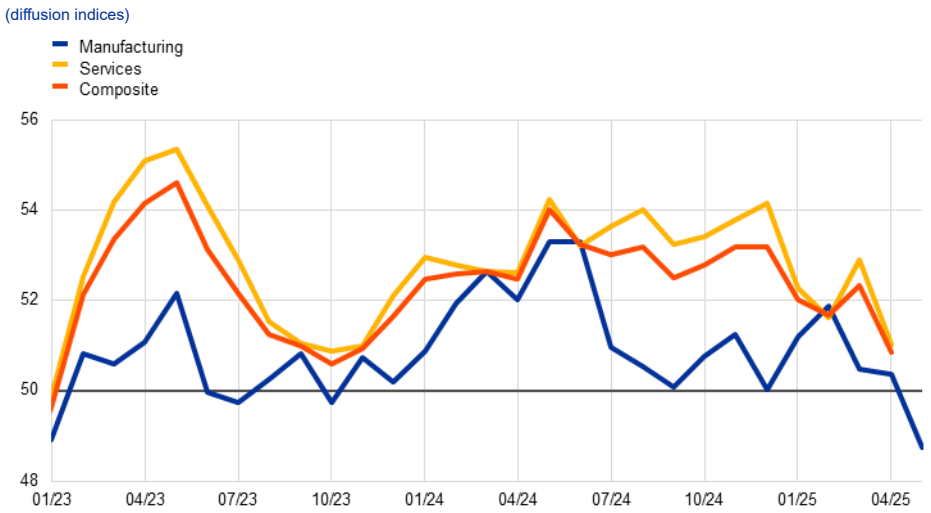
Higher tariff rates imposed by the US Administration, along with elevated trade policy uncertainty, are shaping the global economic outlook. Since the finalisation of the March 2025 ECB staff macroeconomic projections for the euro area on 6 February 2025, the effective tariff rate on goods imports into the United States has increased significantly. Although the US Administration raised tariffs on imports from all its trading partners, the increase in tariffs on China has been most pronounced, notwithstanding a recent agreement to temporarily lower tariff rates. These developments are contributing to frictions in global trade and to higher trade policy uncertainty, which could have knock-on effects on economic activity and dampen the global growth outlook. In the June 2025 Eurosystem staff macroeconomic projections for the euro area, the outlook for global growth was revised down by a cumulative 0.7 percentage points over the projection horizon until the end of 2027. The deterioration of the growth outlook is evident across all key economies, but most notably the United States and China. Globally, headline CPI inflation is expected to moderate over the projection horizon, though projected inflation has been revised upward in the United States, reflecting the impact of the newly announced tariffs.

Growth in global activity declined in the first quarter of 2025 and is expected to moderate further. Global real GDP growth (excluding the euro area) fell to an estimated 0.7% quarter on quarter in the first quarter of 2025, down from 1.1% in the fourth quarter of 2024.[1] Global economic activity is expected to weaken further and remain at subdued levels for the rest of the year. The global economic activity tracker developed by ECB staff points to a moderation in activity as of April, as latest survey data have brought the index below its historical average. The global composite output Purchasing Managers' Index (PMI) declined in April 2025, largely due to slower growth in services sector output (Chart 1).

[1] References to world and/or global aggregates of economic indicators throughout this section exclude the euro area.

Chart 1

Global output PMI (excluding the euro area)



Sources: S&P Global Market Intelligence and ECB staff calculations.
Note: The latest observations are for May 2025 for the manufacturing output index and April 2025 for the services and composite output indices.

Trade conflicts are weakening the global growth outlook. Global growth is projected to slow over the projection horizon, further below its pre-pandemic average. According to the June 2025 Eurosystem staff macroeconomic projections, global real GDP is projected to grow by 3.1% in 2025, a slowdown compared with the 3.6% growth recorded last year.[2] Global real GDP growth is projected to decrease further to 2.9% in 2026 before stabilising at 3.2% in 2027. Compared with the March 2025 ECB staff macroeconomic projections, global growth for both 2025 and 2026 has been revised down by 0.3 percentage points, while remaining unchanged for 2027. The deterioration in the growth outlook is visible across all key economies but is especially pronounced in the United States and China. Tariffs and policy uncertainty are two major factors behind the downward revisions. Tariffs are detrimental to growth as they increase the costs of final and intermediate goods imported from abroad. This in turn weighs on domestic consumption and erodes the competitiveness of exporters by pushing up production costs. Elevated uncertainty prompts precautionary behaviour among consumers and firms, who hold back on consumption and investment. The balance of risks surrounding the global growth projections is tilted to the downside and hinges in particular on future trade policy developments. Specifically, the US Administration and its partners successfully concluding trade negotiations could lead to lower tariffs and support global activity. Conversely, higher tariffs and potential retaliation by trading partners could further dampen growth prospects.

Global trade growth is projected to decrease significantly over the next two years. The monthly global trade tracker developed by ECB staff suggests that global imports started slowing considerably as of April. This reading was driven largely by high-frequency data such as lower commodity imports by China and declining equity

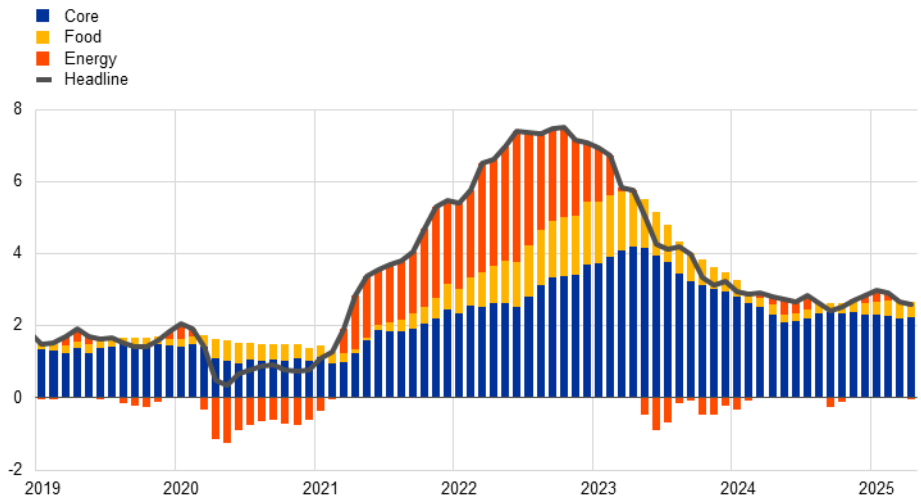
2 For further details, see "Eurosystem staff macroeconomic projections for the euro area, June 2025", published on the ECB's website on 5 June 2025.

prices of companies involved in the global goods trade, including shipping and packaging firms. This finding is also supported by survey indicators. The new orders index in the global manufacturing PMI (excluding the euro area) fell further into contractionary territory in April. The decline was particularly pronounced for Canada and Mexico, while the indices for the United States and China saw smaller declines but remained in expansionary territory. This slowdown follows strong US import growth in the first quarter of 2025, reflecting the frontloading of imports that occurred in anticipation of higher tariffs. In line with this, higher export rates were observed in countries facing higher tariffs, including Canada, several Asian economies and the United Kingdom. According to the June 2025 Eurosystem staff macroeconomic projections, global import growth is expected to decline from 4.1% in 2024 to 3.1% in 2025, before falling further to 1.7% in 2026 and increasing to 3.1% in 2027. The projected sharp slowdown reflects the impact of tariffs and elevated trade policy uncertainty, with the latter weighing heavily on trade-intensive demand components like investment. Compared with the March projections, expected world import growth has been revised down by 0.4 percentage points for 2025 and 1.4 percentage points for 2026, largely owing to the newly implemented tariffs and, to a lesser extent, elevated trade policy uncertainty; it remains unchanged for 2027. These revisions are largely driven by significantly weaker imports in the United States, as well as weaker import growth in the rest of the world, including China.

Headline inflation across the member countries of the Organisation for Economic Co-operation and Development (OECD) has decreased. In April 2025 the annual rate of consumer price index (CPI) inflation across OECD members (excluding Türkiye) edged down to 2.6% from 2.7% in the previous month (Chart 2). This downtick masks two opposing developments, however, as the impact of lower inflation in the food and energy components is set against slightly higher core CPI inflation, which increased to 3.1% from 3.0% in the previous month.

Chart 2
OECD CPI inflation

(year-on-year percentage changes, percentage point contributions)



Sources: OECD and ECB staff calculations.
Notes: The OECD aggregate excludes Türkiye and is calculated using OECD CPI annual weights. The latest observations are for April 2025.

Annual headline CPI inflation across a broad group of advanced economies and emerging markets is projected to moderate over the projection horizon. For the United States, headline CPI inflation was revised up, owing to the impact of significantly higher tariffs affecting more than 80% of the country's goods imports. Among advanced economies, inflation in the United Kingdom was also revised up for this year, driven by higher than previously expected outturns in recent months and stronger wage growth. However, the inflation outlook for the UK economy remains unchanged over the rest of the projection horizon. Inflation projections for emerging market economies remain broadly unchanged compared with the March 2025 projections, as the impact of the worsened inflation outlook in Russia was offset by lower projected inflation in China. Russia's inflation outlook reflects adverse structural developments, while in China, lower inflation reflects weak domestic demand. In annual terms, a global composite of headline CPI inflation is still projected to follow a downward trend, moderating to 3.3% this year from 4.0% in 2024. Over the medium term, inflation is expected to decline further to 2.8% in 2026 and 2.5% in 2027.[3]

Over the review period from 16 April to 4 June 2025, Brent crude oil prices decreased as supply-side factors outweighed the improved market sentiment. Initially, crude oil prices were supported by a recovery in risk sentiment reflecting a de-escalation in trade tensions. However, this was more than offset by supply-side factors, particularly the recent OPEC+ decision to raise production levels by 411,000 barrels per day in July – more than three times the initially planned volume. In April the cartel of oil-producing countries led by Saudia Arabia had already surprised the markets by announcing a similar increase in production for May. If this upturn in production becomes more permanent, it could bring about larger downside risks to the price of oil. Falling oil prices are already weighing on investment plans among US shale oil producers, as current prices are approaching or falling below their marginal breakeven levels – the price needed for them to profitably drill a new well. This is reflected in a sharp decline in the number of oil rigs and active fracking engineering teams. Additionally, several shale oil producers have recently announced cuts to their capital spending.

European gas prices increased over the review period, owing to a combination of supply and demand factors. Initially, gas prices fell, amid trade tensions and discussions within European institutions about easing regulatory storage targets for the upcoming heating season. These developments pushed short-term gas futures below longer-term prices, causing the spread between summer and winter futures to turn negative again, which, in turn, incentivised storage restocking. Gas prices subsequently rebounded on the back of latest trade agreements, unplanned outages at Norwegian liquefied natural gas processing plants and the European Commission's plan to phase out Russian gas imports by 2027. Metal and food prices also increased, driven primarily by demand factors. Food prices were supported by resilient demand for cocoa semi-finished products, despite the sharp surge in cocoa prices earlier this year. Metal prices increased, driven by rising copper prices. The initial support came from sustained precautionary imports in the United States,

[3] ECB staff projections include a broader set of countries, notably large emerging markets (e.g. China, India, Brazil and Russia), which are not accounted for in OECD CPI inflation.

driven by concerns over higher tariffs on imported copper. This was later reinforced by improved market sentiment following the easing of trade tensions between China and the United States.

In the United States, the growth outlook has deteriorated since the finalisation of the March 2025 ECB staff macroeconomic projections on 6 February 2025. Real GDP turned slightly negative in the first quarter of 2025, as the frontloading of imports resulted in a large negative contribution from net trade. At the same time, domestic demand remained relatively solid; it is, however, expected to slow down as the impact of tariffs take hold. In general, the broad and elevated tariffs are projected to increase the cost of imported intermediate and final goods, which will likely spill over to domestic prices. The June 2025 projections point to reduced trade flows and higher production costs, as well as lower domestic demand as households' real disposable incomes declines due to higher inflation. The negative impact of tariffs on the outlook is further compounded by rising policy uncertainty, prompting precautionary saving and delayed investment. Tighter financial conditions, resulting in negative wealth effects and higher financing costs, are also dampening the outlook. On the nominal side, consumer inflation measures are not yet reflecting the impact of tariff-driven price pressures. Annual headline CPI inflation slowed to 2.3% in April from 2.4% in March. Core CPI inflation, which excludes food and energy price components, remained unchanged at 2.8% in April. Although the impact of tariffs is not yet evident in the CPI inflation data, high-frequency price data from large retailers point to upward pressures, mostly stemming from increased prices for imported goods, particularly from China. In May the Federal Open Market Committee kept the target range for the federal funds rate unchanged at 4.25-4.50% amid rising risks and uncertainty about the outlook.

In China, real GDP growth was strong in the first quarter of 2025, boosted by robust domestic demand and frontloaded exports. However, high US tariffs and ongoing adjustments in the real estate sector are expected to weigh on economic activity going forward. Activity indicators softened in April, with annual growth in retail sales declining to 5.1% in April, down from 5.9% in the previous month, but remaining above the January-February average. Annual growth in industrial production declined to 6.1%, while investment eased across all components. The manufacturing PMI for new export orders declined sharply in April. Overall, activity data point to some further softening in already subdued domestic demand, with higher US tariffs weighing on the near-term growth outlook. Deflationary pressures in the Chinese economy persist. Annual headline CPI inflation remained negative in April at -0.1%, while producer price inflation decreased further to -2.7%. As US tariffs on Chinese imports remain high despite the temporary trade agreement, pressure on Chinese exporters continues. The current profit margins of Chinese exporting firms mean they have room to lower export prices further. Combined with continued weak domestic demand and industrial overcapacity, export price deflation is likely to persist going forward.

In the United Kingdom, real GDP growth picked up in the first quarter of 2025, driven by strong investment growth and net trade. This pick-up is likely to be short-lived, however, as growth is expected to decrease, reflecting elevated

uncertainty and global trade tensions. Available short-term indicators, including PMI surveys and trackers of consumer and business confidence, suggest a rather weak start to the second quarter of 2025. Despite recent positive trade policy news – including bilateral trade agreements with the United States and India, as well as a new deal with the EU – uncertainty remains elevated against the backdrop of high tariffs. Annual headline CPI inflation rose sharply in April, up to 3.5% from 2.6% in March. The increase was driven by higher services and energy inflation, while core goods inflation remained unchanged. Looking ahead, headline inflation is projected to remain above the Bank of England's 2% target throughout 2025. At its May meeting, the Bank of England reduced its key policy rate by 25 basis points to 4.25%.

2 Economic activity

According to the information available at the cut-off date, the euro area economy grew by 0.3% in the first quarter of 2025, after expanding by 0.2% in the fourth quarter of 2024, with modest contributions from domestic demand and net trade.[4] *Employment rose by 0.3% in the first quarter, at the same pace as GDP. Across sectors, industrial activity is expected to have recovered, reflecting improved demand for capital goods, partly because trade has been brought forward in anticipation of higher tariffs. At the same time, the services sector is likely to have seen only modest growth. Survey indicators point to a slowdown in activity in the second quarter of 2025. In May, the composite output Purchasing Managers' Index (PMI) fell to close to the level of the growth threshold, while manufacturing output was above the growth threshold for the third consecutive month. At the same time, services fell slightly vis-à-vis the first quarter. Further headwinds are likely to come from rising protectionism and trade-distorting measures, which might disproportionately affect the manufacturing sector compared with other parts of the economy. While the labour market has softened over recent months, it continues to be solid. Looking ahead, the high level of uncertainty, trade tensions and persisting competitiveness losses are expected to limit the speed of the euro area's economic recovery. Nonetheless, the projected recovery should be supported by higher labour incomes and more affordable credit, in part because of past interest rate cuts.*

This outlook is reflected in the baseline scenario of the June 2025 Eurosystem staff macroeconomic projections for the euro area, which foresee annual real GDP growth of 0.9% in 2025, 1.1% in 2026 and 1.3% in 2027.[5] *In addition, two alternative scenarios were prepared to illustrate some of the mechanisms by which different trade policies could affect growth and inflation: (i) a mild scenario which foresees the removal of bilateral tariffs between the United States and the EU, and (ii) a severe scenario which foresees a further increase in US tariffs across the board, symmetric retaliation by the EU and persistently higher trade policy uncertainty. In the mild scenario, growth would be somewhat stronger in 2025-26 than in the baseline projections. In the severe scenario, the growth outlook would be considerably weaker throughout the projection horizon.*

According to Eurostat's flash estimate, real GDP edged up by 0.3%, quarter on quarter, in the first quarter of 2025 (Chart 3). This means that output has risen for five consecutive quarters amid trade tariff discussions, financial market tensions and geopolitical uncertainty, supporting the notion that the euro area economy is building up some resilience to global shocks. Short-term indicators and available country data point to positive, albeit moderate, contributions from private consumption and investment. Net exports are also expected to have made a positive contribution, supported by the frontloading of exports to the United States following the tariff announcements. On the production side, the industrial sector is likely to have recovered on the back of frontloaded exports. Value added in both the construction

4 Quarterly euro area real GDP growth was revised up to 0.6% in the data release on 6 June, two days after the cut-off date for the data in this issue of the Economic Bulletin.

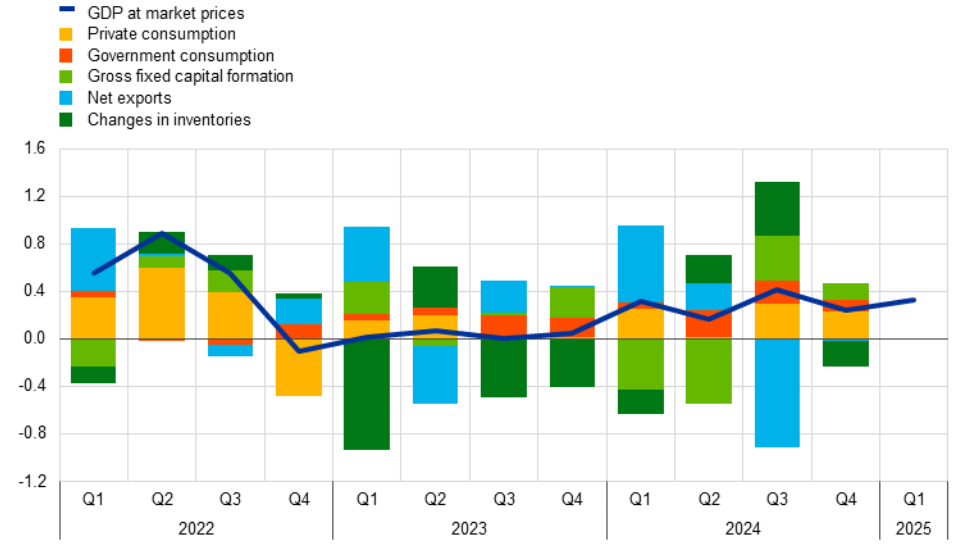
5 For more information, see the "Eurosystem staff macroeconomic projections for the euro area, June 2025", published on the ECB's website.

and services sectors also appears to have shown modest positive growth in the first quarter.

Chart 3

Euro area real GDP and its components

(quarter-on-quarter percentage changes; percentage point contributions)

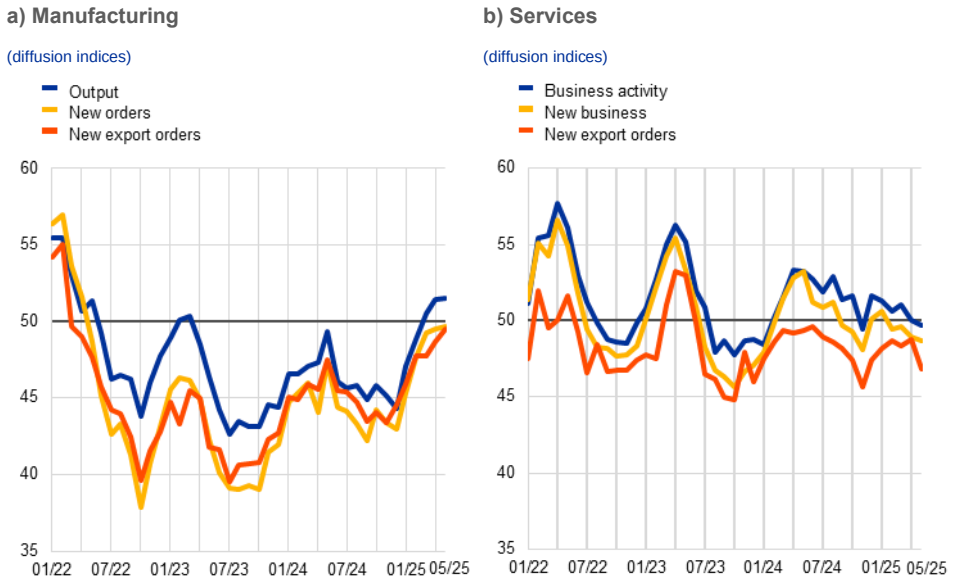


Sources: Eurostat and ECB calculations.
Note: The latest observations are for the first quarter of 2025 for GDP and for the fourth quarter of 2024 for the expenditure breakdown.

Survey data point to a slowdown in growth in the second quarter of 2025, amid elevated uncertainty. Uncertainty surrounding economic policy – including trade policy – at the global level continues to weigh on the near-term outlook. The composite output PMI fell back slightly to 50.3 on average in April and May (from 50.4 in the first quarter), indicating stagnating output. While the manufacturing output PMI has improved to levels not seen since the beginning of 2022, pointing now to growth, business activity in the services sector has declined, standing at levels indicative of falling activity (Chart 4). The PMI for new orders – which is more forward looking by nature – portrays a similar picture, with an overall lacklustre performance masking improving manufacturing and slowing services activity. Following some positive short-term effects, such as increased production from the frontloading of exports, higher tariffs might have a disproportionately adverse effect on the manufacturing sector compared with other parts of the economy in the months ahead.

Chart 4

PMI indicators across sectors of the economy



Source: S&P Global Market Intelligence.
Note: The latest observations are for May 2025.

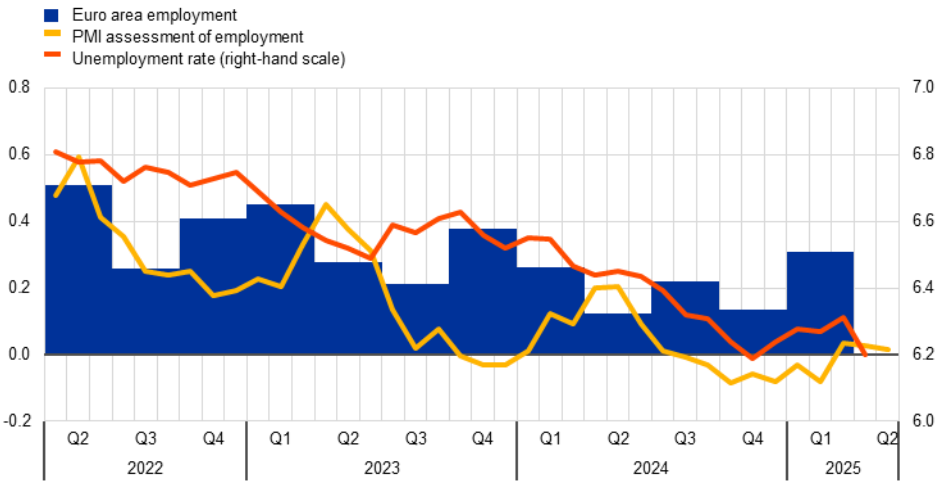
Employment increased by 0.3% in the first quarter of 2025. After a more muted rise of 0.1% in the fourth quarter of 2024, employment growth increased in the first quarter of 2025, standing at 0.3% (Chart 5).[6] This performance masks diverging trends across the euro area. Among the main euro area countries, employment was mainly driven by Italy and Spain. At the same time, the unemployment rate stood at 6.2% in April, remaining broadly at this level since mid-2024. Labour demand declined further, with the job vacancy rate falling to 2.4% in the first quarter, 0.1 percentage points below the level seen in the fourth quarter of 2024.

[6] Quarterly euro area employment growth was revised down to 0.2% in the data release on 6 June, two days after the cut-off date for the data in this issue of the Economic Bulletin.

Chart 5

Euro area employment, PMI assessment of employment and unemployment rate

(left-hand scale: quarter-on-quarter percentage changes, diffusion index; right-hand scale: percentages of the labour force)



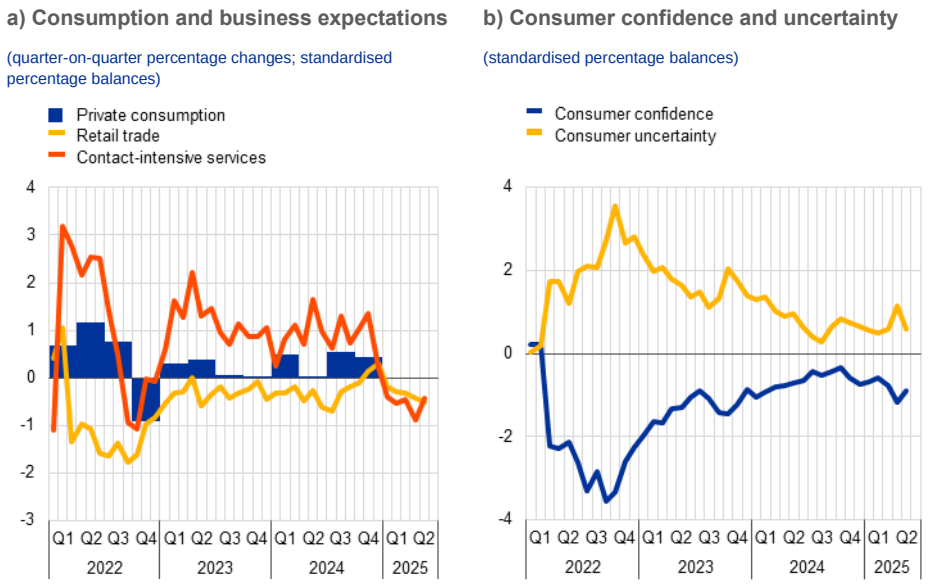
Sources: Eurostat, S&P Global Market Intelligence and ECB calculations.
Notes: The two lines indicate monthly developments, while the bars show quarterly data. The PMI is expressed in terms of the deviation from 50, then divided by 10 to gauge the quarter-on-quarter employment growth. The latest observations are for the first quarter of 2025 for euro area employment, May 2025 for the PMI assessment of employment and April 2025 for the unemployment rate.

Short-term labour market indicators point to flat employment growth in the second quarter. The monthly composite PMI employment indicator declined from 50.3 in April to 50.2 in May, suggesting broadly flat employment growth. The PMI employment indicator for services declined from 51.3 in April to 50.9 in May, while the PMI employment indicator for manufacturing recovered slightly, from 47.4 to 48.1.

Private consumption likely grew at a more moderate pace in the first quarter of 2025. After increasing by 0.4%, quarter on quarter, in the fourth quarter of 2024 (Chart 6, panel a), private consumption growth seems to have slowed slightly in the first quarter of 2025, reflecting moderate spending on services and a renewed softening in the consumption of goods. Incoming data point to moderating momentum in household spending growth in the short term. While the European Commission's consumer confidence indicator improved in May amid easing trade tensions, having declined sharply in April, it remains subdued and well below its average outcome for the first quarter of the year (Chart 6, panel b). Moreover, consumer uncertainty remains elevated. The European Commission's indicators of business expectations for demand in contact-intensive services rose in May after dropping further into negative territory in April (Chart 6, panel a). By contrast, the ECB's latest Consumer Expectations Survey indicates that expected holiday purchases continue to be robust. At the same time, consumer expectations for major purchases in the next 12 months improved in May, while expectations for retail trade declined further for the fifth consecutive month. Looking ahead, despite the ongoing support from recent purchasing power gains, persisting economic policy uncertainty – particularly in the context of global economic developments – should continue to weigh on households' spending decisions.

Chart 6

Private consumption, business expectations for retail trade and contact-intensive services; consumer confidence and uncertainty



Sources: Eurostat, European Commission and ECB calculations.
Notes: Business expectations for retail trade (excluding motor vehicles) and expected demand for contact-intensive services refer to the next three months; "contact-intensive services" refer to accommodation, travel and food services. The contact-intensive services series is standardised for the period from 2005 to 2019 and consumer uncertainty is standardised for the period from April 2019 to May 2025 with respect to the average for the fourth quarter of 2021, owing to data availability, while all other series are standardised for the period from 1999 to 2019. The latest observations are for the fourth quarter of 2024 for private consumption and for May 2025 for all other items.

Business investment was likely bolstered by some frontloading in the first quarter of 2025 but is expected to slow further ahead, given the ongoing trade tensions.[7] Available indicators – such as capital goods production, which grew by 0.6% quarter on quarter, excluding Ireland, in the first quarter – likely reflect frontloaded exports and inventory accumulation following the initial changes (and expected further changes) to US tariffs, rather than any underlying acceleration in investment. Current signals remain mixed, with the PMIs for the capital goods sector – the suppliers of many investment goods – showing notable (but likely temporary) increases in output, while the European Commission's confidence indicator for the sector remains weak amid declining production expectations (Chart 7, panel a). Against this background of heightened trade tensions and associated uncertainty, business investment is likely to be postponed and remain subdued throughout 2025. The most recent biannual investment survey carried out by the European Commission already suggested that growth was likely to be modest in 2025. Information from the latest ECB Investment Survey (see Box 3) and the May 2025 Non-Financial Business Sector Dialogue also points to only a modest increase in investment for the year, as firms delay decisions in the light of prevailing uncertainties.[8] However, barring further escalations in trade tensions, as uncertainty declines, domestic demand strengthens and financing conditions ease, euro area

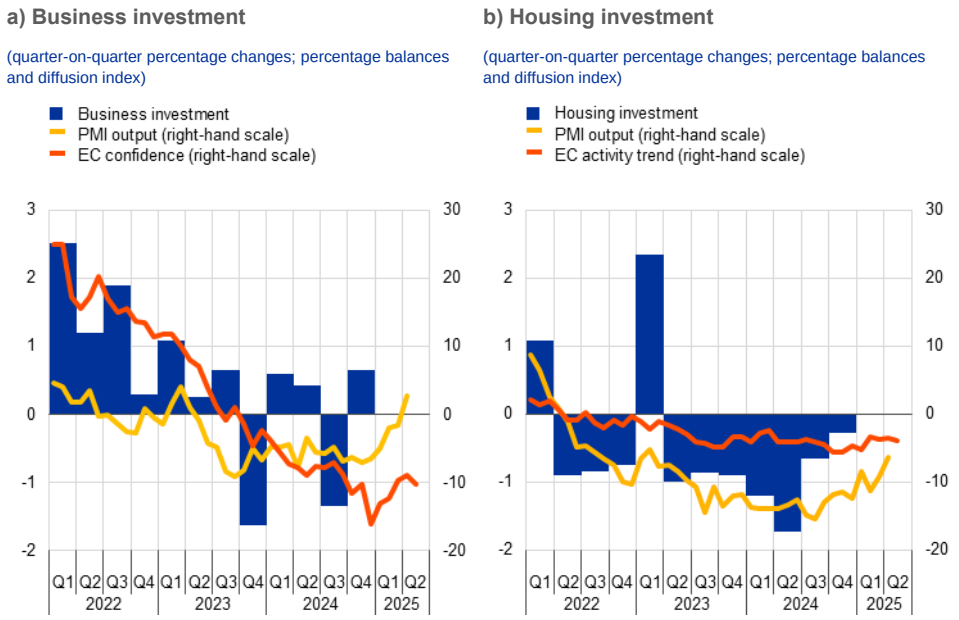
7 National accounts data, published on 6 June following the Governing Council meeting, show steady growth in non-construction investment of 0.7% (excluding Irish intangibles), quarter on quarter, in the first quarter of 2025, in line with the fourth quarter of 2024.

8 For more information, see "Summary of the Non-Financial Business Sector Dialogue on 14 May 2025 via videoconference", ECB, 2025.

investment is expected to gradually recover, also supported by enhanced EU and national policy initiatives.

Chart 7

Real investment dynamics and survey data



Sources: Eurostat, European Commission (EC), S&P Global Market Intelligence and ECB calculations.
Notes: Lines indicate monthly developments, while bars refer to quarterly data. The PMIs are expressed in terms of the deviation from 50. In panel a), business investment is measured by non-construction investment excluding Irish intangibles. Short-term indicators refer to the capital goods sector. In panel b), the line for the European Commission's activity trend indicator refers to the weighted average of the building and specialised construction sectors' assessment of the trend in activity compared with the preceding three months, rescaled to have the same standard deviation as the PMI. The line for PMI output refers to housing activity. The latest observations are for the fourth quarter of 2024 for investment, April 2025 for PMI output and May 2025 for the European Commission's indicators.

Housing investment likely increased noticeably in the first quarter of 2025. According to available country data, housing investment increased by 0.9%, quarter on quarter, in the first quarter of 2025, having contracted further in the fourth quarter of 2024. Building construction production and specialised construction activities grew by 0.3%, following a stronger rise of 0.7% in the previous quarter. Looking ahead, survey-based activity indicators convey mixed signals. The European Commission's trend indicator for building construction output and specialised construction activities remained largely stable on average in April and May, whereas the PMI for residential construction output recorded a notable improvement in April (Chart 7, panel b). Although both indicators remained in negative growth territory, housing investment is expected to see a moderate increase in the near term. This outlook is supported by a continued rise in building permits for residential buildings in the first quarter of 2025, as well as a significant improvement in the European Commission's assessment of order books for building construction companies in April and May compared with the first-quarter average. Together, these developments point to strengthening demand for new residential buildings, which bodes well for the future momentum of housing investment.

Exports of euro area goods rose substantially in the first quarter of 2025, boosted by US tariff-related frontloading; yet challenges persist. Frontloading in

response to impending US tariffs boosted extra-euro area goods export volumes, which rose substantially in the first quarter of 2025 (4.9% in three-month-on-three-month terms). This was driven chiefly by pharmaceutical exports, mainly from Ireland and via Switzerland, but also from Germany, France and Italy. While more frontloading may take place in the coming months, higher tariffs, policy uncertainty and the appreciation of the euro are expected to cause headwinds for export volumes further ahead. On the import side, the appreciation of the euro and trade deflection resulting from US-China trade tensions are likely to dampen import prices given that more than half of the moderate growth in goods imports of 1.3% in three-month-on-three-month terms in the first quarter was driven by increasing imports from China.

Compared with the March 2025 projections, real GDP growth is unrevised for 2025 and 2027 but has been revised down slightly for 2026. According to the June 2025 Eurosystem staff projections, the economy is expected to grow by 0.9% in 2025, 1.1% in 2026 and 1.3% in 2027. The unrevised projection for 2025 reflects a stronger than expected first quarter combined with weaker prospects for the remainder of the year. While the uncertainty surrounding trade policies is expected to weigh on business investment and exports in the short term, rising government investment related to defence and infrastructure spending will increasingly support growth over the medium term. Higher real incomes and a robust labour market will allow households to spend more. Together with more favourable financing conditions, this should make the economy more resilient to global shocks.

3 Prices and costs

Euro area headline inflation is currently at around the Governing Council's 2% medium-term target. According to Eurostat's flash estimate, it decreased to 1.9% in May 2025 from 2.2% in April. This decline solely reflects a drop in HICP inflation excluding energy and food (HICPX), which was driven by a marked fall in services inflation. Food inflation increased, while energy inflation and non-energy industrial goods inflation were unchanged. Most measures of underlying inflation suggest that inflation will stabilise sustainably at the ECB's 2% medium-term target. Wage growth is still elevated but continues to moderate visibly, and profits are partially buffering its impact on inflation. Most measures of longer-term inflation expectations continue to stand at around 2%. Inflation has continued to develop broadly as projected by Eurosystem staff.

The June 2025 Eurosystem staff macroeconomic projections for the euro area foresee headline inflation averaging 2.0% in 2025, 1.6% in 2026 and 2.0% in 2027. The downward revisions in headline inflation for 2025 and 2026 compared with the previous projections mainly reflect lower assumptions for energy prices and a stronger euro, and lower core inflation in 2026.[9] *Amid heightened uncertainty, the June staff projections explored, in alternative illustrative scenarios, some of the mechanisms by which different trade policies could affect inflation. A resolution of trade tensions with a benign outcome would lead to slightly higher inflation compared with the above baseline projections, while an escalation would lower inflation below baseline levels.*[10]

According to Eurostat's flash estimate, euro area headline inflation, as measured by the Harmonised Index of Consumer Prices (HICP), declined to 1.9% in May from 2.2% in April (Chart 8). This decrease resulted solely from a drop in HICP inflation excluding energy and food (HICPX), which was related to lower services inflation. Energy inflation was unchanged at -3.6% in May, reflecting a strong upward base effect, i.e. a significant month-on-month decline was masked by a similarly large decline a year previously. By contrast, food inflation increased to 3.3% in May from 3.0% in April. This increase was driven by a higher annual rate for processed food prices, which more than offset a decline in the annual rate for unprocessed food prices. HICPX inflation decreased to 2.3% in May from 2.7% in April. This reflected a fall in services inflation to 3.2% in May from 4.0% in April, while non-energy industrial goods inflation was unchanged at a moderate rate of 0.6% for the fourth consecutive month. The drop in services inflation in May could be a correction from the April price surge in travel-related services, which was due to the Easter period.

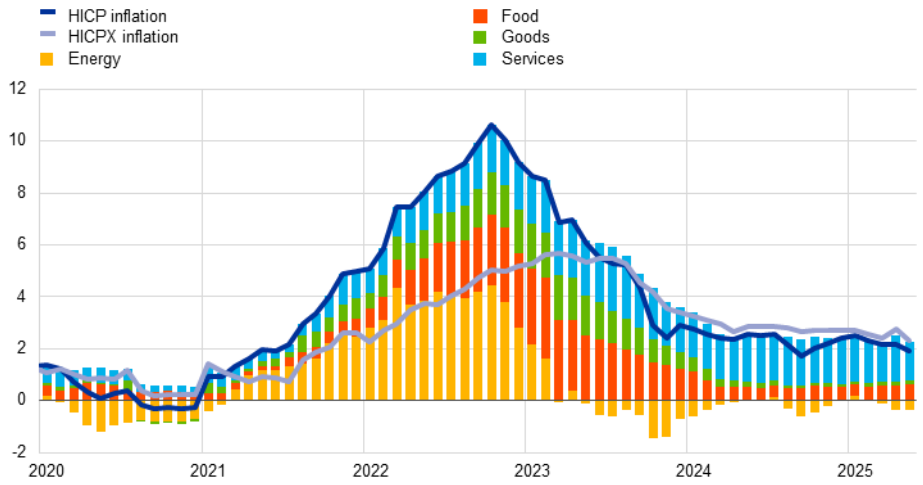
[9] See "Eurosystem staff macroeconomic projections for the euro area, June 2025", published on the ECB's website on 5 June 2025.

[10] For further details on the projections under alternative trade policy scenarios, see Box 2 entitled "US tariffs and trade policy uncertainty", Eurosystem staff macroeconomic projections for the euro area, June 2025.

Chart 8

Headline inflation and its main components

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations.
Notes: "Goods" refers to non-energy industrial goods. The latest observations are for May 2025 (Eurostat's flash estimate).

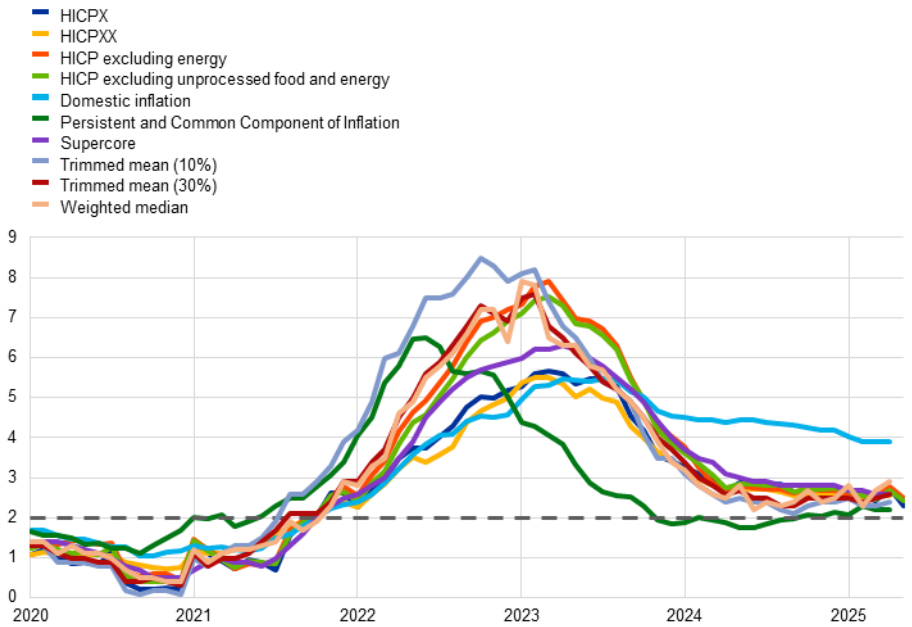
Available data for May indicate that measures of underlying inflation linked to travel-related services eased after rising in April, while other indicators only available until April showed mixed signals. In April 2025 the indicator values for underlying inflation ranged between 2.2% and 2.9%.[11] Data available for May show that HICP excluding energy and HICP excluding energy and unprocessed food, which include travel-related services items, declined to 2.5% and 2.4%, from 2.8% and 2.7% in April respectively. By contrast, HICP inflation excluding travel-related services items, clothing and footwear (HICPXX) was unchanged at 2.6% in April. The Persistent and Common Component of Inflation (PCCI), which tends to be the underlying inflation indicator that performs best as a predictor of future headline inflation, was unchanged at 2.2%, at the lower end of the range, while the weighted median indicator increased to 2.9%. The Supercore indicator (which comprises HICP items sensitive to the business cycle) stayed at 2.6%. Domestic inflation, which excludes some travel-related items but includes accommodation, stood at 3.9% for the third consecutive month.

[11] April 2025 is the latest month for which all indicators are available.

Chart 9

Indicators of underlying inflation

(annual percentage changes)



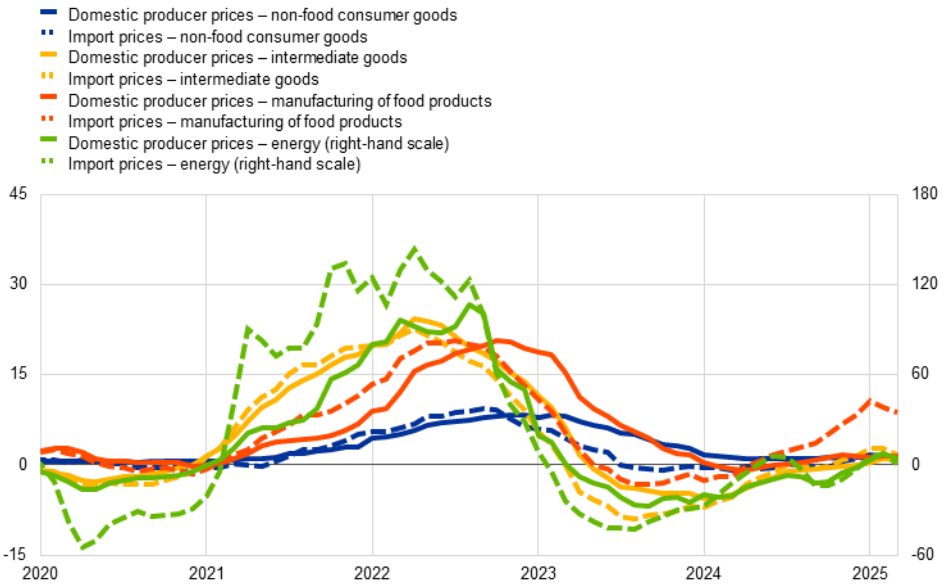
Sources: Eurostat and ECB calculations.
Notes: The grey dashed line represents the ECB's inflation target of 2% over the medium term. The latest observations are for May 2025 (Eurostat's flash estimate) for HICPX, HICP excluding energy and HICP excluding unprocessed food and energy, and for April 2025 for all other indicators.

Most indicators of pipeline pressures for goods eased in March and remain at moderate rates (Chart 10). At the early stages of the pricing chain, producer price inflation for energy decreased to 3.8% in March from 7.6% in February. The annual growth rate of producer prices for domestic sales of intermediate goods edged down to 0.8% in March from 0.9% in February. At the later stages of the pricing chain, domestic producer price inflation for non-food consumer goods fell to 1.4% in March from 1.5% in February, while producer prices for the manufacturing of food products increased to 1.6% from 1.4%. Import price inflation for manufactured food declined to 8.8% in March from 9.6% in February, remaining at an elevated level. For intermediate goods, the annual growth rate of import prices decreased to 1.7% from 2.7%. The lower rates of import price inflation partly reflect the recent appreciation of the euro.

Chart 10

Indicators of pipeline pressures

(annual percentage changes)



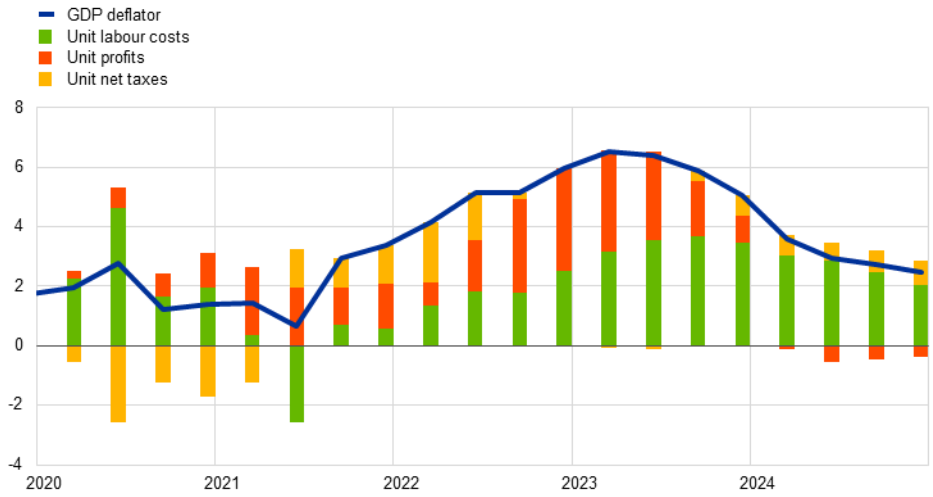
Sources: Eurostat and ECB calculations.
Note: The latest observations are for March 2025.

Domestic cost pressures, as measured by growth in the GDP deflator, eased in the fourth quarter of 2024 for the seventh consecutive quarter (Chart 11). The latest available national accounts data for domestic cost pressures for the euro area refer to the fourth quarter of 2024. The annual growth rate of the GDP deflator slowed to 2.5% in the fourth quarter of 2024, from 2.7% in the previous quarter. This reflects a smaller contribution from unit labour costs and a negative contribution from unit profits, which outweighed the slight increase in unit net taxes. Available indicators on wage growth for the first quarter of 2025 confirm that the growth of labour costs has slowed further. The flash estimate of the labour cost index showed a decline to 3.3% in the first quarter of 2025 from 4.1% in the fourth quarter of 2024. The growth rate of negotiated wages also fell in the first quarter of 2025, to 2.4% from 4.1% in the previous quarter. Looking ahead, the ECB's forward-looking wage tracker, which incorporates data on negotiated wage agreements up to May 2025, continues to point to easing wage growth pressures throughout 2025.

Chart 11

Breakdown of the GDP deflator

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations.
Notes: Compensation per employee contributes positively to changes in unit labour costs. Labour productivity contributes negatively. The latest observations are for the fourth quarter of 2024.

In the period from the April Governing Council meeting there was little change in market-based and survey-based indicators of longer-term inflation expectations, while market-based measures of short-term inflation compensation declined to levels below 2% (Chart 12). In both the ECB Survey of Professional Forecasters for the second quarter of 2025 and the ECB Survey of Monetary Analysts for June 2025, average and median longer-term inflation expectations remained at 2%. Shorter-term survey expectations for 2025 also stood at around 2%, with small changes reflecting recent data outcomes and movements in energy commodity prices. The one-year forward inflation-linked swap rate one year ahead, a market-based measure of short-term inflation compensation, declined by 0.2 percentage points to around 1.7% over the review period, suggesting that trade uncertainty is largely seen as disinflationary for the euro area by market participants. At medium and longer-term maturities, after the US tariff announcements, inflation compensation largely retraced the strong upward repricing which had followed the German Government's fiscal announcement. This development left five-year forward inflation-linked swap rates five years ahead close to 2%. Consumers' short-term inflation expectations increased slightly, while their medium-term expectations remained stable. According to the ECB Consumer Expectations Survey for April 2025, median expectations for headline inflation over the next 12 months rose to 3.1% in April from 2.9% in March. However, expectations for three years ahead were unchanged at 2.5%. Meanwhile, the median rate of perceived inflation over the previous 12 months also stayed at 3.1%. The uptick in short-term inflation expectations may reflect an increase in inflation uncertainty and a deterioration in the economic sentiment of the survey's participants.

Chart 12

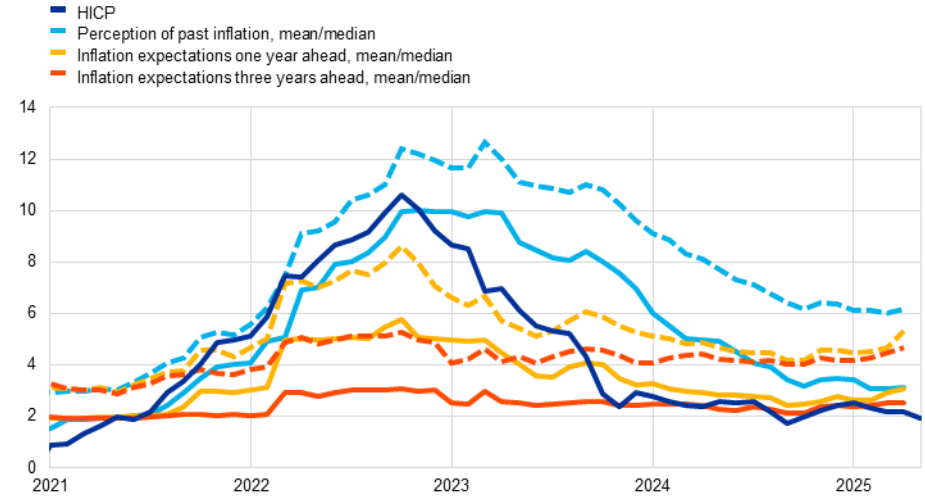
Market-based measures of inflation compensation and consumer inflation expectations

a) Market-based measures of inflation compensation

(annual percentage changes)

b) Headline HICP inflation and ECB Consumer Expectations Survey

(annual percentage changes)



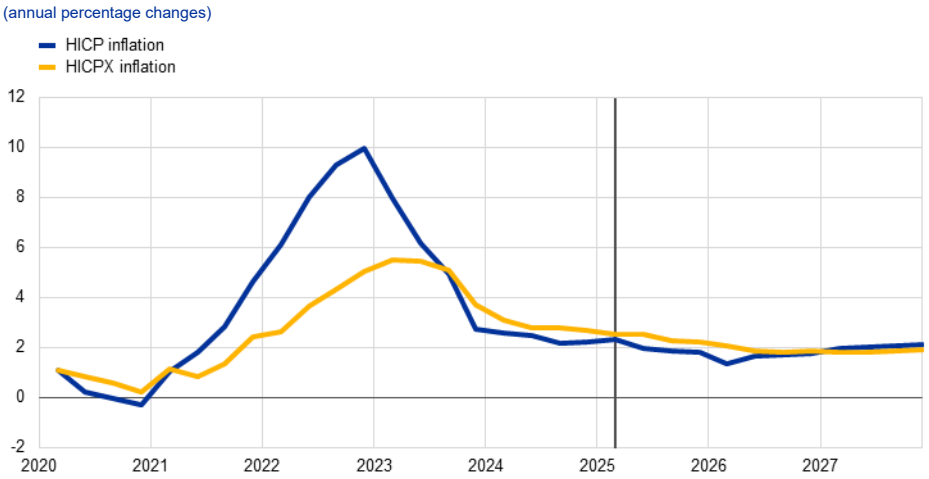
Sources: LSEG, Eurostat, ECB Consumer Expectations Survey and ECB calculations.
Notes: Panel a) shows forward inflation-linked swap rates over different horizons for the euro area. The vertical grey line indicates the start of the review period on 6 March 2025. In panel b), the dashed lines show the mean rate, and the solid lines show the median rate. The latest observations are for 4 June 2025 for panel a), and May 2025 (Eurostat's flash estimate) for HICP and April 2025 for the other measures in panel b).

The June 2025 projections expect headline inflation to average 2.0% in 2025 and 1.6% in 2026, before returning to 2.0% in 2027 (Chart 13). Headline inflation is expected to decline to below 2% in the second quarter of 2025 and to reach a trough of around 1.4% in early 2026, reflecting a decline in all main components: energy, food and core inflation (the latter driven mainly by services). Headline inflation is then expected to increase in 2027. This projected increase mainly reflects a temporary upward impact from energy inflation in 2027, owing to fiscal measures related to the climate transition, particularly the introduction of a new Emissions Trading System. Compared with the March 2025 projections, the outlook for headline

inflation has been revised down by 0.3 percentage points for both 2025 and 2026, while it is broadly unrevised for 2027. The downward revision for 2025 is entirely driven by energy inflation, reflecting weaker than expected data and lower price assumptions for oil, gas and electricity. HICPX inflation is expected to average 2.4% in 2025, and 1.9% in 2026 and 2027, as the effects of past large shocks on services inflation continue to fade. Compared with the March 2025 projections, HICPX inflation has been revised up by 0.2 percentage points for 2025 and has been revised down by 0.1 percentage points for 2026.

Chart 13

Euro area HICP and HICPX inflation



Sources: Eurostat and Eurosystem staff macroeconomic projections for the euro area, June 2025.
Notes: The grey vertical line indicates the last quarter before the start of the projection horizon. The latest observations are for the first quarter of 2025 for the data and the fourth quarter of 2027 for the projections. The June 2025 projections were finalised on 21 May 2025 and the cut-off date for the technical assumptions was 14 May 2025. Both historical and projected data for HICP and HICPX inflation are reported at a quarterly frequency.

4 Financial market developments

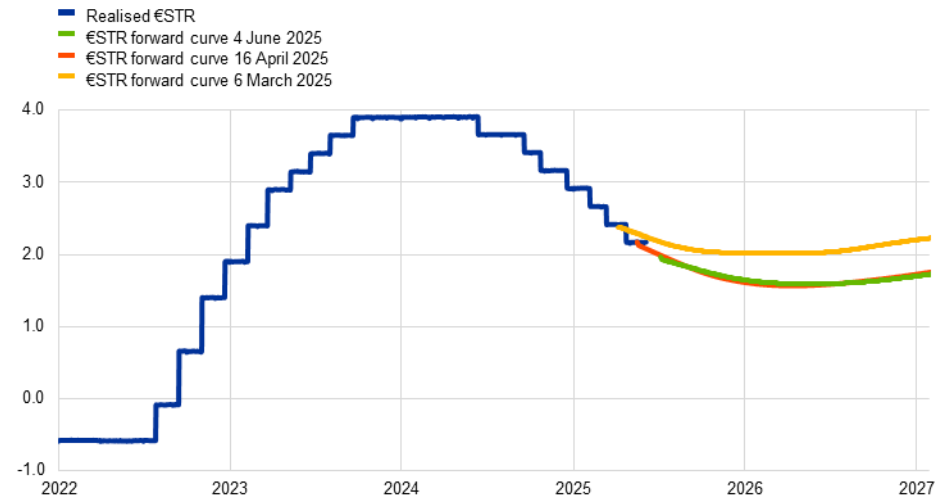
During the review period from 6 March to 4 June 2025, developments in euro area financial markets were predominantly driven by the heightened uncertainty surrounding trade policies. The announcement of sweeping US tariffs on 2 April led to a sharp repricing of financial assets, while relief following the subsequent suspension of these tariffs sparked a recovery in risk asset markets. However, elevated tariff uncertainty and a clouded economic outlook continued to weigh on financial markets. Overall, the risk-free euro short-term rate (€STR) forward curve shifted down, with markets at the end of the review period pricing in almost 60 basis points of cumulative interest rate cuts in the euro area by the end of 2025. Long-term sovereign bond yields also declined amid trade tensions, accompanied by a compression of spreads relative to the corresponding overnight index swap (OIS) rates. There was a pronounced V-shaped pattern in global equity markets, with the euro area equity index ending the review period broadly unchanged despite significant fluctuations. Euro area corporate bond spreads widened for both investment-grade and, particularly, high-yield issuers. In the foreign exchange market, the euro appreciated significantly both against the US dollar (5.4%) and in trade-weighted terms (2.5%).

During the review period, euro area risk-free rates declined significantly as market participants increased their expectations of near-term cuts to the deposit facility rate (Chart 14). The benchmark euro short-term rate (€STR) stood at 2.17% at the end of the review period, following the Governing Council's widely anticipated decisions to lower the key ECB interest rates by 25 basis points at both its March and April meetings. Excess liquidity decreased by around €117 billion to €2,710 billion. This mainly reflected the decline in the portfolios of securities held for monetary policy purposes, with the Eurosystem no longer reinvesting the principal payments from maturing securities in its asset purchase programmes. After shifting upwards following the announcements made just before the start of the review period of a planned fiscal expansion in Germany and initiatives to boost military spending in the EU (the ReArm Europe Plan), the forward curve gradually reversed a significant proportion of this upward shift on the back of mounting international trade tensions. The US tariff announcement on 2 April 2025 and subsequent escalation of global trade tensions triggered a pronounced downward repricing of the €STR forward curve, reflecting expectations of a faster pace of monetary policy easing in the euro area. The stream of positive tariff-related news – primarily the 90-day suspension of additional US tariffs announced in early April and the agreement of US-UK and US-China tariff deals – brought relief to financial markets. Subsequently, however, further negative trade-related news once again weighed on the interest rate outlook. By the end of the review period, market participants were pricing in cumulative interest rate cuts of nearly 60 basis points by the end of 2025, around 35 basis points more than that priced in at the start of the review period. Longer-term euro area risk-free rates also declined during the review period, albeit to a lesser extent than shorter-term risk-free rates, as the ten-year nominal OIS rate fell by 18 basis points to 2.4% over this period.

Chart 14

€STR forward rates

(percentages per annum)

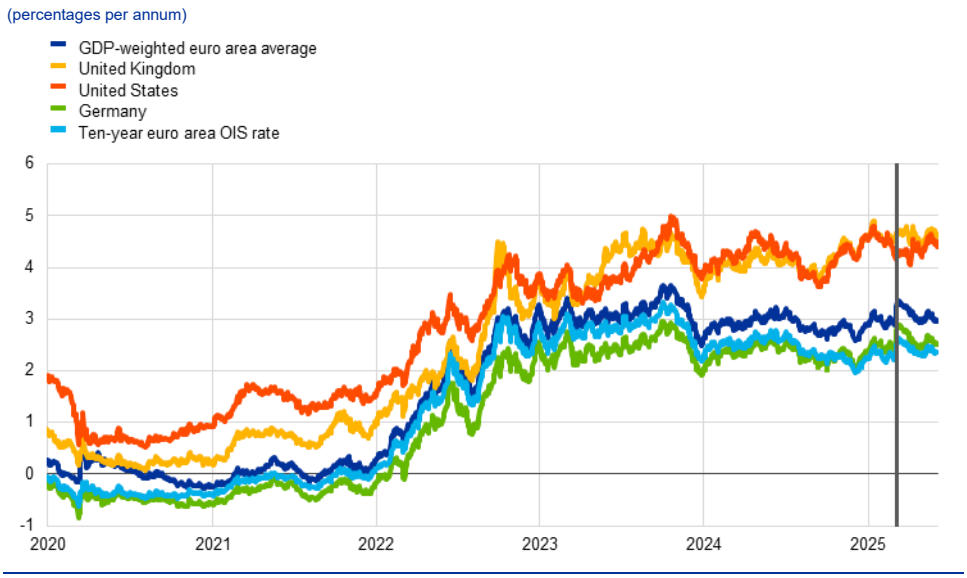


Sources: Bloomberg and ECB calculations.
Note: The forward curve is estimated using spot OIS (€STR) rates.

Long-term sovereign bond yields also declined amid the trade tensions, accompanied by a compression of spreads (Chart 15). The ten-year GDP-weighted euro area sovereign bond yield closed the review period at around 3%, a decline of 36 basis points from its initial level, with spreads relative to the OIS rate narrowing by 19 basis points. There were intermittent fluctuations over the review period, as well as cross-country variations linked to trade developments. Immediately after the initial US tariff announcement on 2 April 2025 and the resulting rise in uncertainty, euro area sovereign bond prices increased, with German bond prices recording notable gains. Meanwhile, US Treasuries (along with the US dollar) came under market pressure amid emerging doubts about their safe haven status and the impact of tariffs on US inflation. Some of these effects have since reversed following the announcement of a 90-day pause on the additional tariffs and the de-escalation of US-China trade tensions, which pushed German bond yields up and narrowed the spreads of higher-yield euro area countries. The ten-year US Treasury yield fluctuated significantly over the review period, ultimately ending at approximately 4.4%, around 13 basis points higher than at the start of the period. This increase in US bond yields was driven by a combination of factors, including, most recently, heightened scrutiny over the country's rising debt levels and Moody's recent decision to downgrade its credit rating.

Chart 15

Ten-year sovereign bond yields and the ten-year OIS rate based on the €STR

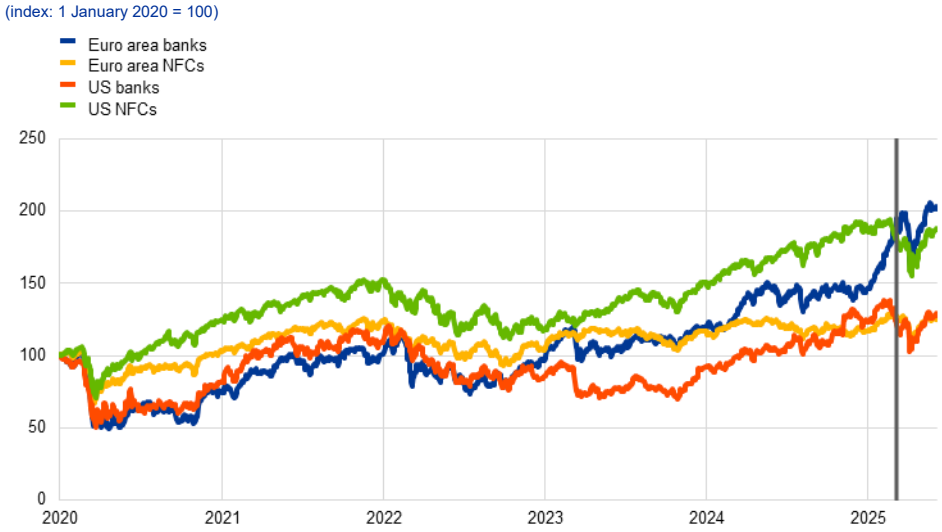


Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 6 March 2025. The latest observations are for 4 June 2025.

There was a pronounced V-shaped pattern in global equity markets, with the euro area equity index ending the review period broadly unchanged (Chart 16). The German fiscal spending announcement in early March drove a surge in European equity markets. However, the US tariff announcement on 2 April triggered a sharp sell-off in global equity markets, leading to spikes in market volatility. Equity prices across the globe quickly recovered from these US tariff-related losses following the announcement of their 90-day suspension, despite lingering trade uncertainty. Towards the end of May, European equity prices dipped slightly after the US Administration announced plans to impose 50% tariffs on European imports but quickly rebounded as these tariffs were held off until 9 July. Over the review period as a whole, euro area stock market indices were broadly unchanged, with equities declining by 1.4% for non-financial corporations (NFCs) and rising by 3.3% for banks. By contrast, US stock market indices strengthened by approximately 4.4% overall, with gains of 4.9% for banks and 4.8% for NFCs. Nevertheless, uncertainty surrounding trade policies remains a significant source of downside risks for risk asset markets.

Chart 16

Euro area and US equity price indices

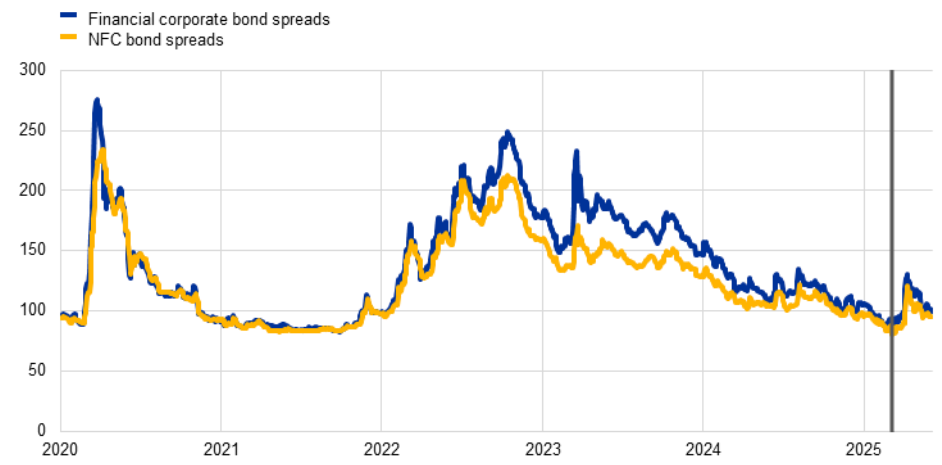


Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 6 March 2025. The latest observations are for 4 June 2025.

Corporate bond spreads widened in both the investment-grade and high-yield segments (Chart 17). Downside risks to the economic outlook weighed on corporate bond markets, particularly following the US tariff announcements in early April 2025. Despite some recent narrowing, spreads in the investment-grade and high-yield segments widened by approximately 13 and 34 basis points respectively over the review period. Within the high-yield segment, spreads on NFC bonds increased by 25 basis points, while spreads on bonds issued by financial corporations widened by around 66 basis points.

Chart 17

Euro area corporate bond spreads



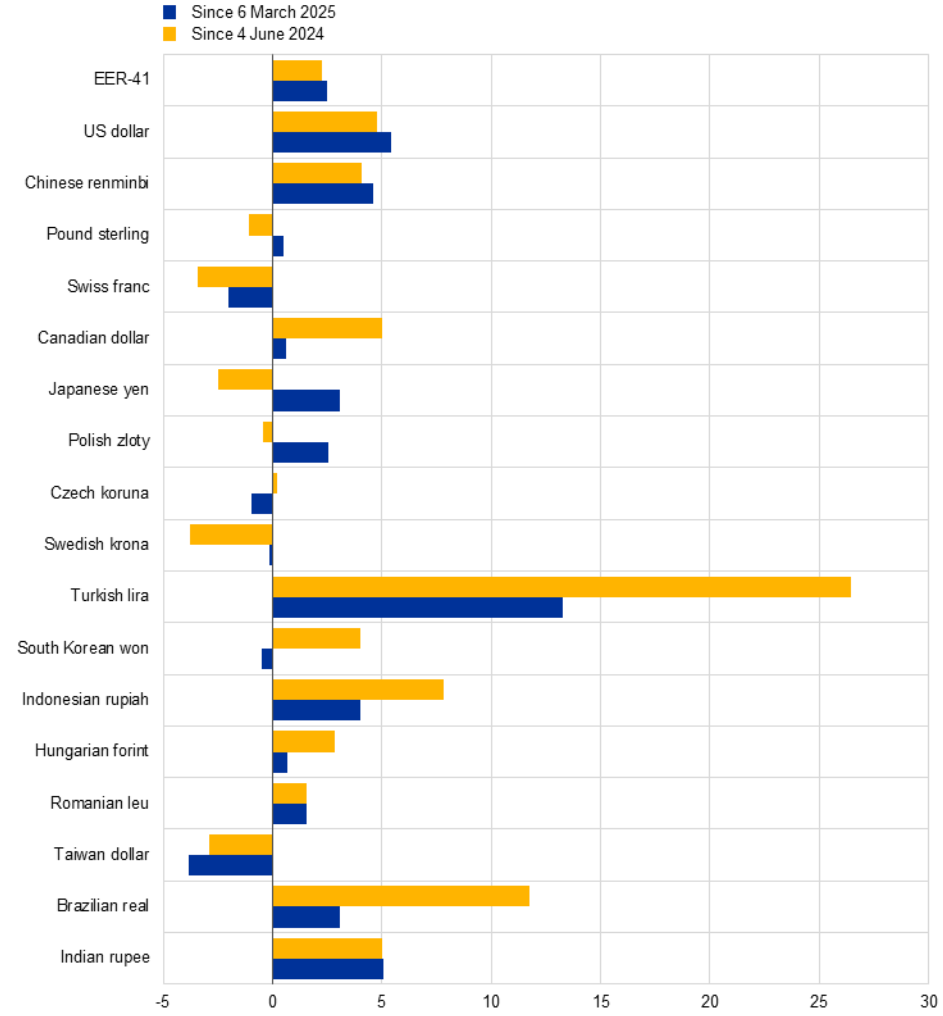
Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 6 March 2025. The latest observations are for 4 June 2025.

In foreign exchange markets, the euro appreciated significantly both against the US dollar and in trade-weighted terms (Chart 18). The nominal effective exchange rate of the euro – as measured against the currencies of 41 of the euro area's most important trading partners – rose by 2.5% during the review period. This appreciation was broad-based. A strong appreciation of 5.4% against the US dollar was largely driven by a shift in market expectations regarding the growth and inflation outlook for the United States and the potential impact of the US Administration's policies on demand for US assets, particularly in the aftermath of its tariff announcements in early April. It may also be attributed to more positive investor sentiment towards the euro following Germany's fiscal spending announcement and the special European Council on strengthening the EU's defence capabilities in early March. The euro also strengthened by 4.6% against the Chinese renminbi, with the latter initially weakening owing to the expected adverse impact of the US tariffs but recovering somewhat after a partial de-escalation of the US-China trade tensions. The euro appreciated significantly against the currencies of emerging market economies, which were also weighed down by US tariff and global growth concerns. Conversely, it depreciated by 2.0% against the Swiss franc, a traditional safe haven, amid overall cautious market sentiment.

Chart 18

Changes in the exchange rate of the euro vis-à-vis selected currencies

(percentage changes)



Source: ECB calculations.
Notes: EER-41 is the nominal effective exchange rate of the euro against the currencies of 41 of the euro area's most important trading partners. A positive (negative) change corresponds to an appreciation (depreciation) of the euro. All changes have been calculated using the foreign exchange rates prevailing on 4 June 2025.

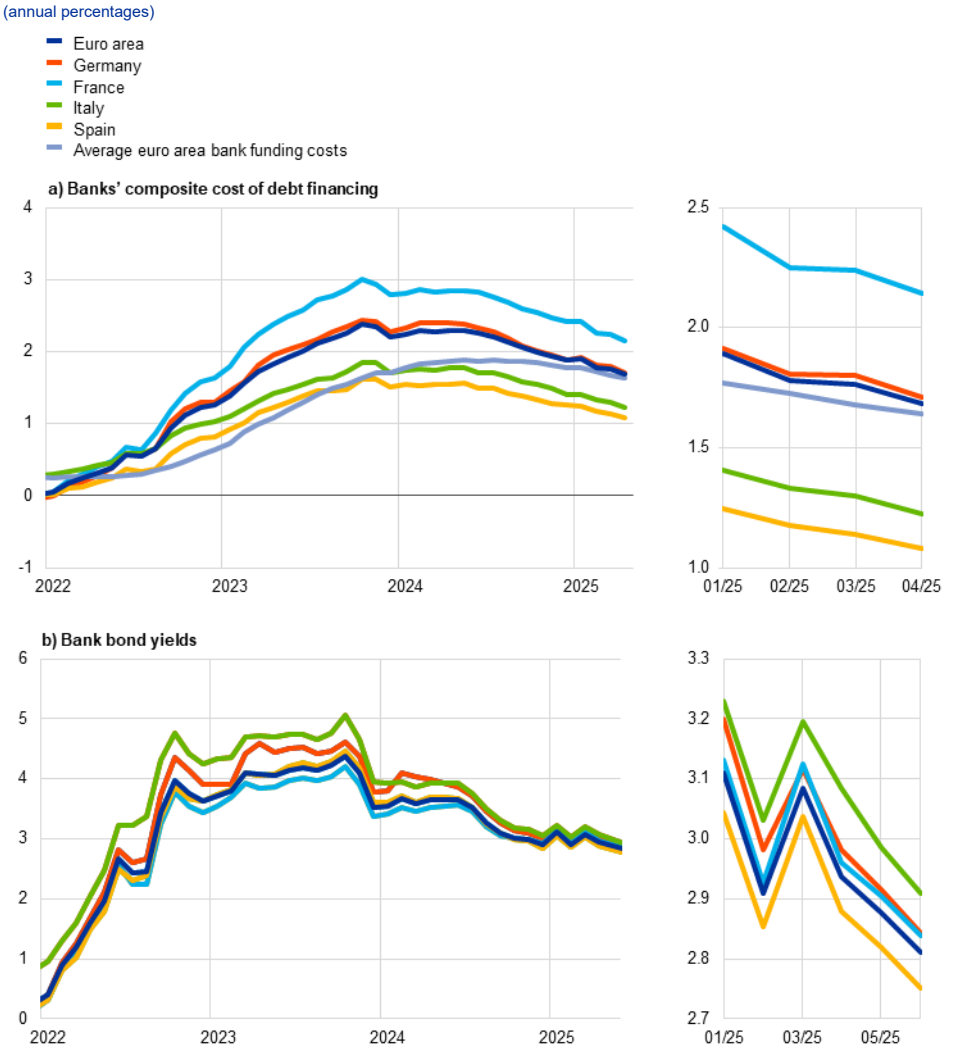
5 Financing conditions and credit developments

In April, bank funding costs continued to fall, reflecting lower policy rates. Average interest rates on new loans to firms declined in April to 3.8%, whereas average interest rates for households on new mortgages remained at 3.3%. The disparity between lending rates for households and those for firms reflects differences in loan fixation periods. Growth in loans to firms and households continued to recover gradually in April but remained far below historical averages, reflecting a weak macroeconomic outlook and high uncertainty. Over the review period from 6 March to 4 June 2025, the cost to firms of equity financing rose slightly, owing to the somewhat higher equity risk premium, while the cost of market-based debt financing decreased marginally. The annual growth rate of broad money (M3) increased to 3.9% in April.

Bank funding costs continued to fall in April 2025. The composite cost of debt financing for euro area banks, i.e. the index which measures marginal bank funding costs, moderated further in April (Chart 19, panel a), reflecting the ECB's policy rate cuts, whereas the overall decline in average bank funding costs was more modest over the course of the month. Deposit rates and interbank money market rates continued to fall, with the composite deposit rate standing at 1.0% in April, down from its peak of 1.4% in May 2024. Bank bond yields remained broadly stable in March and April 2025 and edged down in May, despite heightened volatility in financial markets at the beginning of the month which was partly related to recent US tariff announcements (Chart 19, panel b). As in previous months, interest rates on the time deposits of firms and households fell more sharply than those on overnight deposits, narrowing the significant gap between interest rates on time deposits and those on overnight deposits for both firms and households.

Chart 19

Composite bank funding costs in selected euro area countries



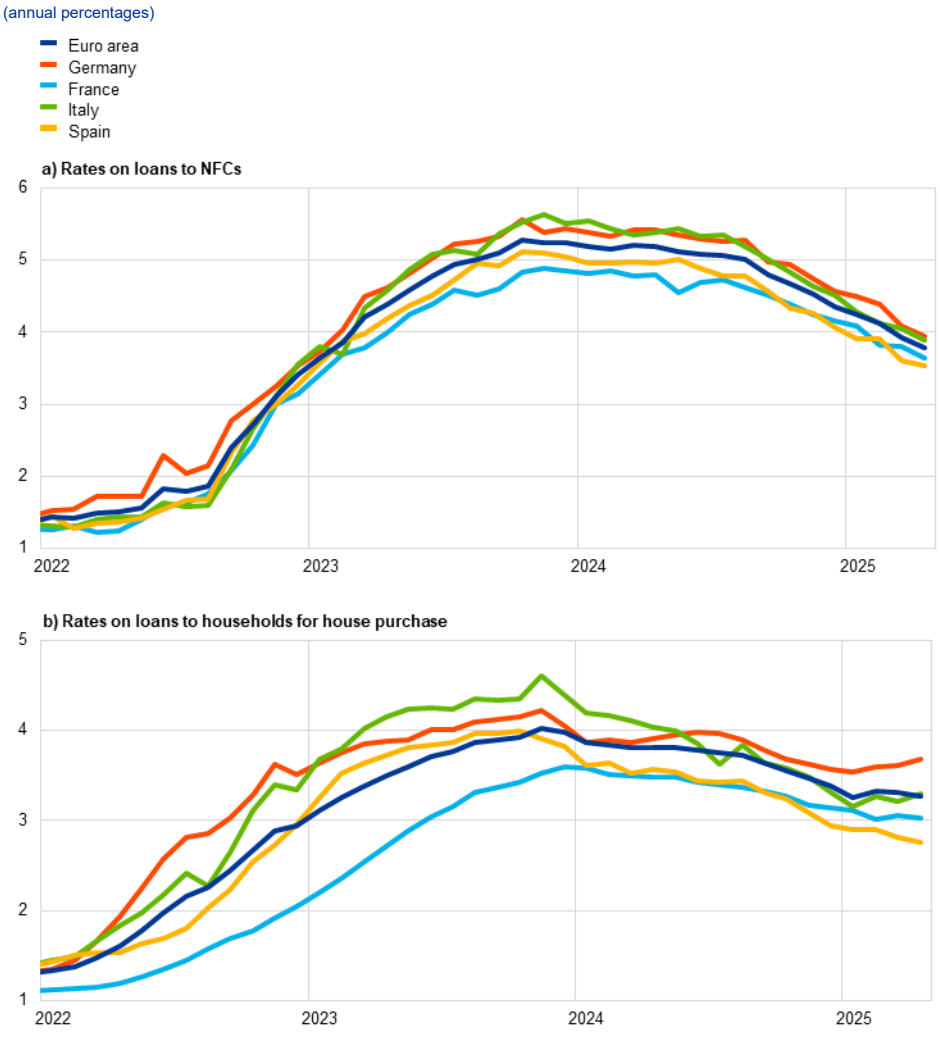
Sources: ECB, S&P Dow Jones Indices LLC and/or its affiliates, and ECB calculations.
Notes: Composite bank funding costs are an average of new business costs for overnight deposits, deposits redeemable at notice, time deposits, bonds and interbank borrowing, weighted by their respective outstanding amounts. Average bank funding costs use the same weightings but are based on rates for outstanding deposits and interbank funding, and on yield to maturity at issuance for bonds. Bank bond yields are monthly averages for senior tranche bonds. The latest observations are for April 2025 for the composite cost of debt financing for banks (panel a) and for 4 June 2025 for bank bond yields (panel b).

Bank lending rates for firms continued to decline while mortgage rates for households remained broadly stable, reflecting differences in loan fixation periods. In April 2025, lending rates for new loans to non-financial corporations (NFCs) fell by 14 basis points to stand at 3.79%, a decline of around 1.5 percentage points from their October 2023 peak (Chart 20, panel a). This decline was broad-based across the largest euro area countries and was driven by short-term loans with a maturity of up to one year. By contrast, lending rates on loans with longer maturities remained broadly unchanged, reflecting higher longer-term risk-free rates. The spread between interest rates on small and large loans to firms remained stable in April at 46 basis points, slightly above its historical low and with some variation across countries. For households, lending rates on new loans for house purchase fell by 5 basis points to stand at 3.27% in April, around 80 basis points below their

November 2023 peak, albeit with some variation across countries (Chart 20, panel b). That said, mortgage rates on purely new loans, i.e. excluding renegotiations, remained broadly stable. The disparity between lending rates for households and those for firms reflects differences in loan fixation periods. Household loans typically have longer fixation periods, making them less sensitive to short-term market rate fluctuations.

Chart 20

Composite bank lending rates for firms and households in selected euro area countries



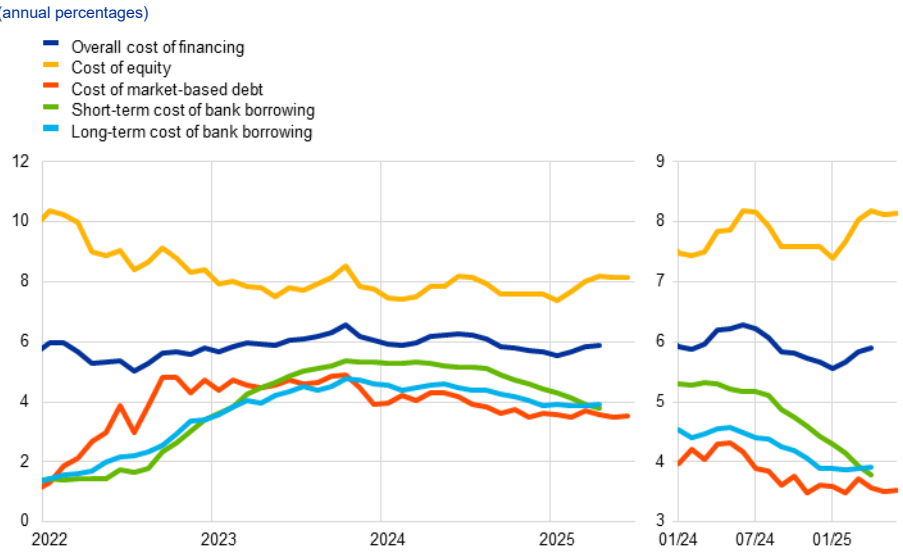
Sources: ECB and ECB calculations.
Notes: NFCs stands for non-financial corporations. Composite bank lending rates are calculated by aggregating short and long-term rates using a 24-month moving average of new business volumes. The latest observations are for April 2025.

Over the review period from 6 March to 4 June 2025, the cost to firms of equity financing rose slightly, whereas the cost of market-based debt financing decreased marginally. Based on the monthly data available until April 2025, the overall cost of financing for NFCs – i.e. the composite cost of bank borrowing, market-based debt and equity – increased in April compared with the previous month

and stood at 5.9% (Chart 21).[12] This was the result of an increase in the cost of equity owing to a somewhat higher equity risk premium. All other cost components either declined or remained unchanged. Daily data covering the review period up to 4 June 2025 show that the cost of market-based debt financing further decreased marginally. This was driven by a downward shift in the overnight index swap (OIS) curve across all maturities, which was only partially offset by the widening of corporate bond spreads, particularly on bonds in the high-yield sector. The cost of equity financing rose slightly over the same period in response to a small increase in the equity risk premium, despite the decline in the long-term risk-free rate, as approximated by the ten-year OIS rate.

Chart 21

Nominal cost of external financing for euro area firms, broken down by component



Sources: ECB, Eurostat, Dealogic, Merrill Lynch, Bloomberg, LSEG and ECB calculations.
Notes: The overall cost of financing for non-financial corporations (NFCs) is based on monthly data and is calculated as a weighted average of the long and short-term costs of bank borrowing (monthly average data), market-based debt and equity (end-of-month data), based on their respective outstanding amounts. The latest observations are for 4 June 2025 for the cost of market-based debt and the cost of equity (daily data), and for April 2025 for the overall cost of financing and the cost of borrowing from banks (monthly data).

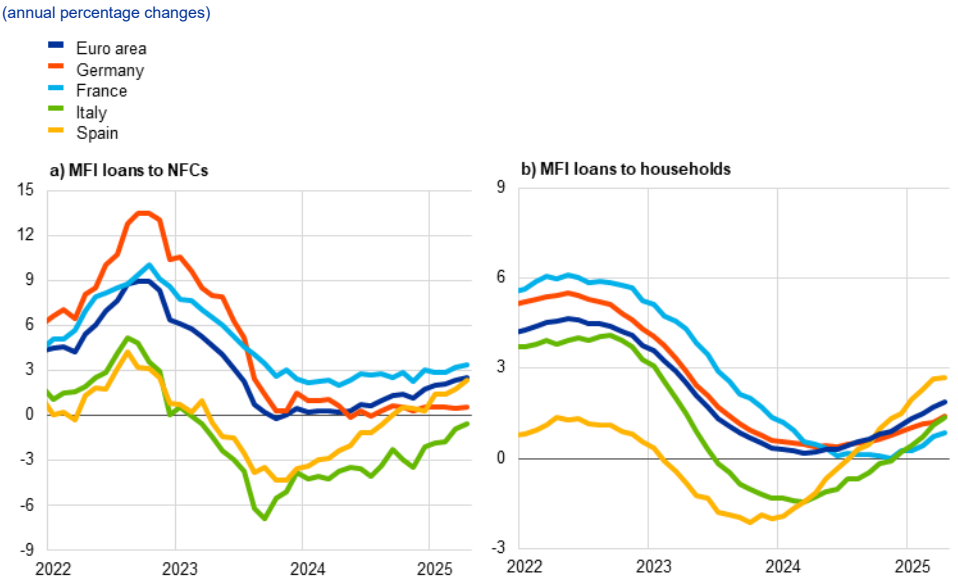
Growth in loans to firms and households continued to increase gradually in April, reflecting weaker short-term dynamics. The annual growth rate of bank lending to firms rose to 2.6% in April 2025, up from 2.4% in March, but remained well below its historical average of 4.3% since January 1999 (Chart 22, panel a). By contrast, the annual growth rate of corporate debt securities decreased to 2.1% in April, from 3.0% in March, contributing to a slight weakening in the growth of firms' total debt financing. Meanwhile, the annual growth rate of loans to households continued to increase gradually, reaching 1.9% in April, after 1.7% in March. However, this growth rate of loans to households has lost its momentum, remaining significantly below its historical average of 4.1% (Chart 22, panel b). Loans for house purchases continued to be the primary driving force behind this upward trend, with consumer credit also seeing a modest rise and an annual growth rate of 4.3% in

[12] Owing to lags in data availability for the cost of borrowing from banks, data on the overall cost of financing for NFCs are only available up to April 2025.

April, despite signs of weakening short-term dynamics.[13] By contrast, other forms of household lending, including loans to sole proprietors, remained weak. Household sentiment regarding credit access deteriorated sharply in April. According to the ECB's Consumer Expectations Survey for April, the percentage of households perceiving tighter credit access increased, surpassing the percentage reporting easier credit access, marking the largest monthly increase on record. Looking ahead, households expect credit access to tighten further over the next 12 months.

Chart 22

MFI loans in selected euro area countries



Sources: ECB and ECB calculations.
Notes: Loans from monetary financial institutions (MFIs) are adjusted for loan sales and securitisation; in the case of non-financial corporations (NFCs), loans are also adjusted for notional cash pooling. The latest observations are for April 2025.

Growth in broad money (M3) picked up in April 2025, driven by overnight deposits and inflows from abroad in a context of high uncertainty (Chart 23). Annual M3 growth rose to 3.9% in April, up from 3.7% in March, supported by a moderately strong monthly inflow over the course of the month. Annual growth of narrow money (M1), which comprises the most liquid assets of M3, increased significantly to 4.7% in April, up from 3.9% in March. With regard to the individual components, the increase in M3 in April was driven by inflows into overnight deposits and, to a lesser extent, by repurchase agreements held by firms and institutional investors. The annual growth rate of overnight deposits held by firms and households rose to 5.3% in April, up from 4.1% in March, reflecting a strong preference for liquidity by investors amid volatility in an uncertain environment and lower interest rates on savings deposits. This partly offset the weakening in time deposits, explaining the contrasting dynamics in M1 and M3. With regard to the various counterparts, the recovery in M3 growth was driven by net foreign inflows.

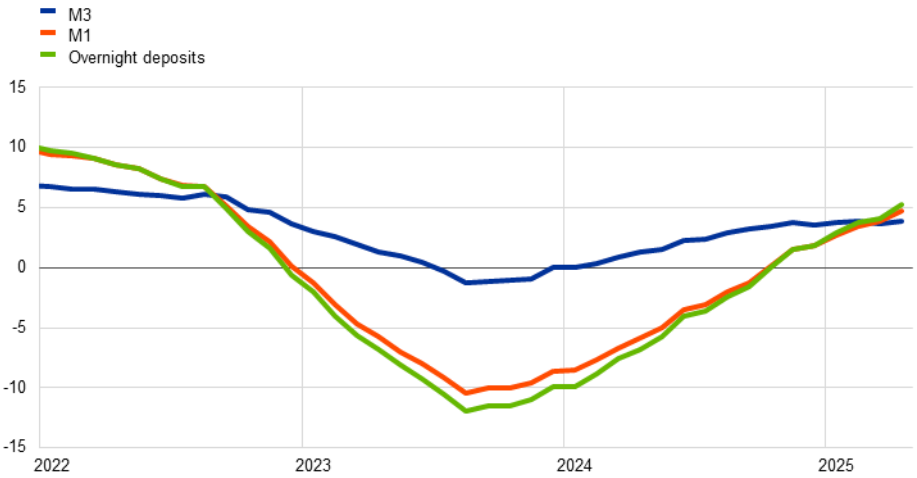
[13] Simulations using the current distribution of loans across households indicate that, despite recent interest rate cuts, a significant portion of the past monetary tightening is still in the pipeline. Estimates suggest that up to 35% of the total impact on consumption through the mortgage cash flow channel has yet to materialise. For further details, see the article entitled "The transmission of monetary policy: from mortgage rates to consumption" in this issue of the Economic Bulletin.

However, the figure for April was overestimated because of special factors – unrelated to US tariff announcements – which had boosted government deposits, with the underlying inflows likely to have been more moderate. Bank lending to firms and households continued to contribute positively to money creation in April. While the ongoing contraction of the Eurosystem balance sheet continued to contribute negatively to M3 growth, robust net purchases of government securities by banks helped to offset this impact.

Chart 23

M3, M1 and overnight deposits

(annual percentage changes, adjusted for seasonal and calendar effects)



Source: ECB.
Note: The latest observations are for April 2025.

6 Fiscal developments

According to the June 2025 Eurosystem staff macroeconomic projections for the euro area, the general government budget deficit, which stood at 3.1% of GDP in 2024, is estimated to remain unchanged in 2025 and then increase substantially to 3.5% of GDP in 2027. The euro area fiscal stance is projected to tighten only slightly in 2025, loosen noticeably in 2026 and then tighten again, somewhat more strongly, in 2027. The projected loosening in 2026 is mainly on account of higher public investment and consumption, partly related to increased defence and infrastructure spending, as well as lower direct taxation. The tightening in 2027 reflects primarily lower assumed government spending related to the discontinuation of the grants offered under the Next Generation EU (NGEU) programme. The euro area debt-to-GDP ratio is seen as being on an increasing path, to over 90% of GDP, as the continuous primary deficits and positive deficit-debt adjustments more than offset favourable interest rate-growth differentials. Currently 11 euro area countries have decided to request the activation of the national escape clause of the Stability and Growth Pact (SGP) in order to facilitate higher defence spending.

According to the June 2025 Eurosystem staff macroeconomic projections, the euro area general government budget balance is expected to decline over the projection horizon (Chart 24).[14] Looking back, the euro area budget deficit declined from 3.5% in 2023 to 3.1% of GDP in 2024. This was due to the unwinding of most of the remaining energy and inflation-related fiscal support measures. Looking ahead, it is expected to remain unchanged in 2025 and then increase to 3.4% of GDP in 2026 and further to 3.5% of GDP in 2027. This path mainly reflects the projected evolution of the fiscal stance – as measured by the cyclically adjusted primary balance adjusted for NGEU grants – and, in 2027, the discontinuation of grants offered under the NGEU programme, which ends in 2026.[15] The cyclical component of the budget balance, which reflects output gap developments, is projected to be broadly neutral over the projection horizon.

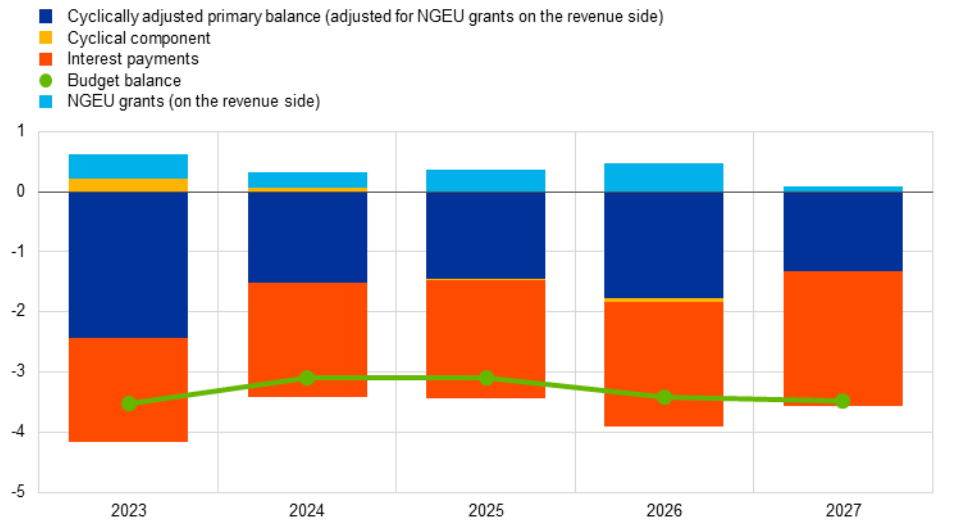
[14] See "Eurosystem staff macroeconomic projections for the euro area", June 2025, published on the ECB's website on 5 June 2025.

[15] The fiscal stance reflects the direction and size of the stimulus from fiscal policies to the economy beyond the automatic reaction of public finances to the business cycle. It is measured here as the change in the cyclically adjusted primary balance ratio net of government support to the financial sector. Given that the higher budget revenues related to NGEU grants from the EU budget do not have a contractionary impact on demand, the cyclically adjusted primary balance is adjusted to exclude those revenues. For more details on the euro area fiscal stance, see the article entitled "The euro area fiscal stance", *Economic Bulletin*, Issue 4, ECB, 2016.

Chart 24

Budget balance and its components

(percentages of GDP)



Sources: ECB calculations and Eurosystem staff macroeconomic projections for the euro area, June 2025.

The budget deficit in 2024 turned out to be 0.1 percentage points lower in the June 2025 projections than estimated in the March 2025 ECB staff macroeconomic projections for the euro area, but has been revised upwards over the projection horizon. This surprise was driven mainly by higher than initially anticipated direct tax revenues and social contributions at the euro area level. Despite this slightly better starting position, the budget balance has been revised down by 0.1 percentage points of GDP in 2026 and by 0.2 percentage points of GDP in 2027. This loosening is due mostly to fiscal policy measures in Germany, endorsed by the Coalition Agreement and related to higher defence and infrastructure spending, particularly in the period 2026-27. Other contributing factors to the deterioration in the budget balance include Germany's ongoing provision of support to Ukraine and reductions in direct and indirect taxes, as well as, to some extent, higher projected defence spending and support to Ukraine in several other euro area countries.

Following a significant tightening in 2024, the euro area aggregate fiscal stance is projected to tighten only slightly in 2025, loosen markedly in 2026 and then tighten again, somewhat more strongly, in 2027. The considerable fiscal tightening of 0.9 percentage points in 2024 resulted mainly from the withdrawal of most of the energy and inflation-related support and other fiscal stimulus measures that had been implemented during earlier crises. In 2025 discretionary fiscal policy measures are translating into ongoing fiscal tightening, albeit at a slower pace. This reflects increases in social security contributions and indirect taxes, which are nevertheless being largely offset by continued public spending growth. In 2026 the fiscal stance is projected to loosen based on recent government announcements, mainly on account of higher public investment and consumption, partly related to increased defence and infrastructure spending, as well as lower direct taxation. In

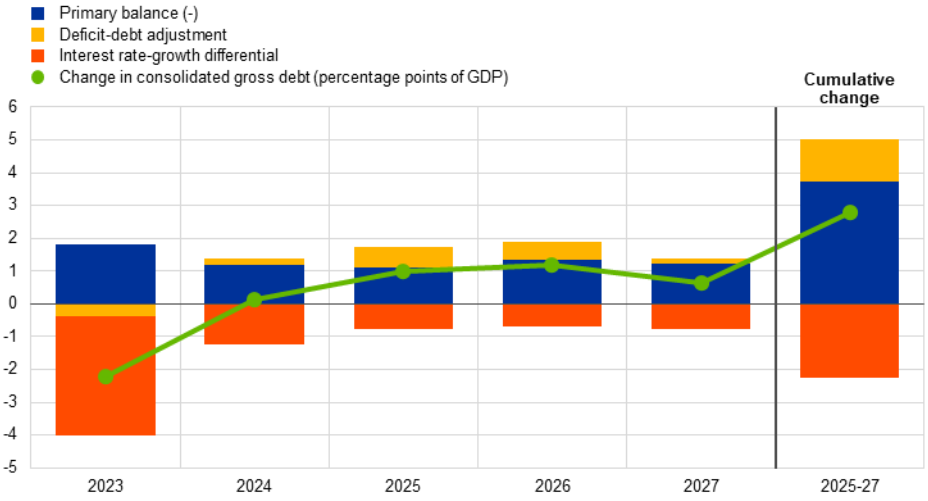
2027 the tightening in the fiscal stance primarily reflects lower government spending following the expiry of the NGEU grant funding.

The euro area debt-to-GDP ratio is seen as being on an increasing path over the projection horizon, rising to above 90% of GDP in 2027 (Chart 25). During the COVID-19 pandemic, the euro area debt-to-GDP ratio rose significantly, to around 97% in 2020, but fell gradually thereafter. However, since 2023 it has been following an upward trend, reaching 87.5% in 2024, with the lowest debt-to-GDP ratio in Estonia (23.6%) and the highest in Greece (153.6%). It is projected to increase further to 90.3% in 2027, driven by primary deficits and, in some countries, sizeable deficit-debt adjustments.

Chart 25

Drivers of change in euro area government debt

(percentages of GDP, unless otherwise indicated)



Sources: ECB calculations and Eurosystem staff macroeconomic projections for the euro area, June 2025.

Currently 11 euro area countries have decided to request the activation of the SGP's national escape clause to finance expenditure on defence. The activation of the national escape clause is part of the ReArm Europe Plan/Readiness 2030 package, which allows EU Member States to quickly and significantly boost their defence spending by a maximum of 1.5% of GDP over a period of four years. It should not have any other impact on countries' medium-term fiscal-structural plans for 2025-28 and rests on the premise that fiscal sustainability over the medium term is safeguarded.[16] The European Commission, as part of its 2025 European Semester Spring Package released on 4 June, recommends that the Council approve the requests of ten euro area countries to activate the escape clause (Belgium, Estonia, Greece, Croatia, Latvia, Lithuania, Portugal, Slovenia, Slovakia

[16] See the article entitled "Medium-term fiscal-structural plans under the revised Stability and Growth Pact", *Economic Bulletin*, Issue 3, ECB, 2025.

and Finland).[17] Governments should ensure sustainable public finances in line with the EU's economic governance framework, while prioritising essential growth-enhancing structural reforms and strategic investment.

[17] The Recommendations on activating the national escape clause are available on the European Commission's website. Although the EU Council and the European Commission have received a request from Germany to activate the national escape clause, Germany has not yet submitted its medium-term fiscal-structural plan. The Commission will therefore assess the request together with the medium-term fiscal-structural plan upon receipt.

Boxes

1 US financial conditions and their link to economic activity: the role of equity valuations

Prepared by Cajsa Klass and Ana-Simona Manu

Financial conditions matter for economic activity and inflation. Financial conditions indices (FCIs) provide a consolidated measure of how easily and cheaply households, firms and governments can access financing, which in turn influences spending and investment decisions across the economy. Various FCIs have been proposed by practitioners and scholars. These differ in specification and scope, but typically include key financial variables such as interest rates, equity prices, corporate bond spreads and exchange rates.[1] Central banks, for instance, examine FCIs because these offer insights into how monetary policy decisions affect financial markets and, by extension, economic activity and inflation.

Stock prices are typically part of FCIs as these influence consumption and investment. Stock markets play a significant role in shaping decisions of households and firms. For instance, declining equity prices can weaken household' consumption and borrowing capacity due to declines in wealth, potentially exacerbated by diminished confidence. Lower equity valuations can also have a direct impact on worker' pensions, affecting future retirement security and spending behaviour. For listed firms, lower equity prices can increase the cost of equity financing, making it more challenging for them to invest and expand. Declines in US equity prices since their peak in February have therefore tightened FCIs. However, since these declines occurred from potentially overvalued levels, this box examines whether the economic impact of such a tightening is different than in periods of equity prices being more aligned with historical norms.

Since late February 2025, US financial conditions have started to tighten as risky assets sold off amid waning US growth expectations and uncertainty surrounding tariffs. When proxying the US FCI by a weighted average of short-term and long-term interest rates, corporate credit spreads, the cyclically adjusted price-to-earnings (CAPE) ratio for the S&P 500, and the US nominal effective exchange rate – in the spirt of Arrigoni et al. – we observe a significant tightening during April (Chart A, panel a).[2] The optimism of market participants about the US

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1 See, among others, Davis, E.P. et al., "The Estimation of Financial Conditions Indices for the Major OECD Countries", *OECD Economics Department Working Papers*, 1335, OECD Publishing, 2016; International Monetary Fund, *Global Financial Stability Report*, Chapter 3, April 2017; Goldman Sachs, "Financial conditions: A unified approach", *Research Note*, 2016; and Arrigoni, S. et al., "The simpler, the better: Measuring financial conditions for monetary policy and financial stability", *Working Paper Series*, No 2451, ECB, 2021.

2 Both the choice of variables and the weights are as in Arrigoni, S. et al., op. cit., who based their choice on the FCIs developed by Goldman Sachs, where the weights are based on the effects of the financial variables on real GDP growth over a one-year horizon. One difference is that the FCI in this analysis employs the CAPE ratio of the S&P 500, rather than the traditional price-to-earnings ratio used in the original paper, but the weight of the equity index in the FCI is the same (25%). A high weight attributed to equity prices in this specific FCI might affect the results.

growth outlook started to fade due to a series of unfavourable data releases, including faltering consumer confidence. On 2 April announcement by the US Administration of large-scale reciprocal tariffs triggered a sharp sell-off in US equities and corporate bond markets, resulting in increased financial market volatility and widening credit spreads. Combined with rising recession concerns in the United States and retaliatory measures announced by China, these events triggered the S&P 500 index to drop by 12% in the space of a few days. Equity prices rebounded following the suspension of reciprocal tariffs on 9 April and the China-US trade agreement of 12 May, although the S&P 500 index remained 3.8% on May 30 below its historical peak reached in February. Consequently, the US FCI tightened to levels last seen in early 2023, before easing back to levels seen prior to 2 April.[3] A daily Bayesian vector autoregression (BVAR) model, which identifies the driving factor behind this tightening in the US FCI, confirms that most of it was due to adverse shocks to the domestic macro outlook in the United States (Chart A, panel b).[4]

US equity prices remain at levels that had raised overvaluation concerns. Measures of US stock valuations indicate that equity valuations overall remain high compared with usual benchmarks. The CAPE ratio for the S&P 500 currently stands at around 34, above the 75th percentile of its historical distribution. This suggests that the equity market is still more expensive than indicated by historical norms (Chart B, panel a), even though it slightly came down from its all-time high of 36. During such periods of stretched valuations, the contribution of equity price changes to overall US FCI developments tends to be large, reflecting the weight of equities in this specific index as well as the remarkable equity price returns when stock prices enter the overvaluation range (Chart B, panel b). For instance, when the CAPE is above its 75th percentile, the equity price component accounts for around 40% of the variation in the FCI, more than doubling its contribution compared with a situation when it is below the 75th percentile.

[3] It is important to note that this index comprises only a limited set of variables, and other indices might weight equities differently, potentially leading to somewhat different interpretations.

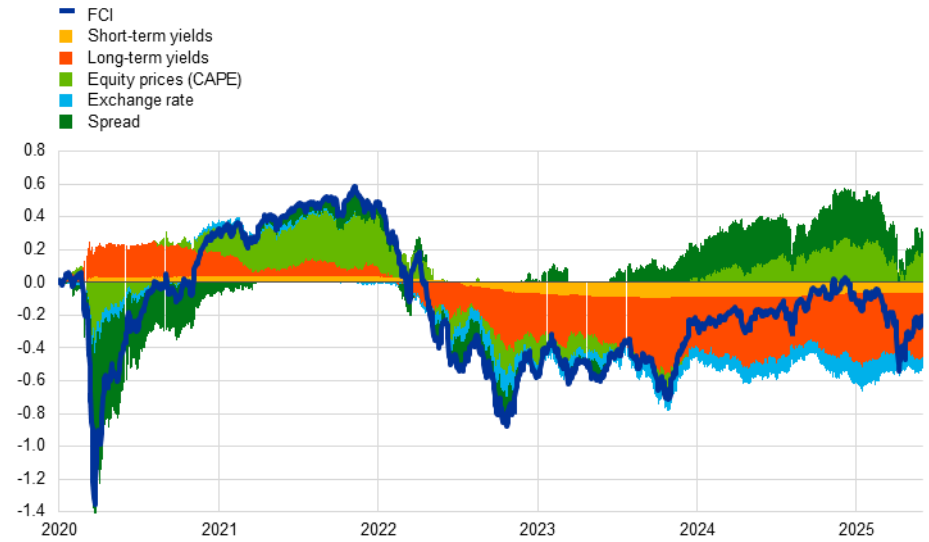
[4] The BVAR model is based on Chițu, L., Grothe, M., Schulze, T. and Van Robays, I., "Financial shock transmission to heterogeneous firms: the earnings-based borrowing constraint channel", *Working Paper Series*, No 2860, ECB, 2023.

Chart A

Components of the US financial conditions index (FCI)

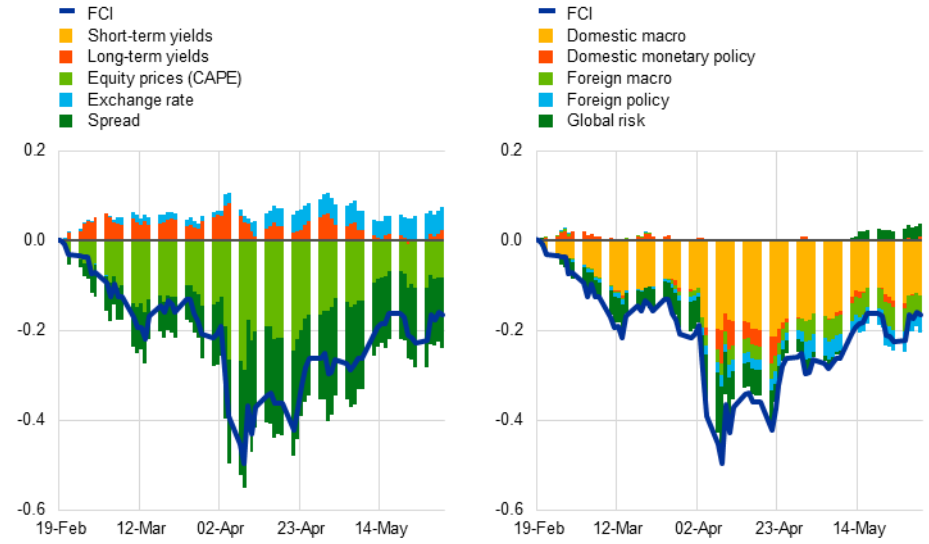
a) Components of the US FCI

(standardised index, cumulative changes since 2 January 2020)



b) Components of the US FCI and structural drivers since the S&P 500 February peak

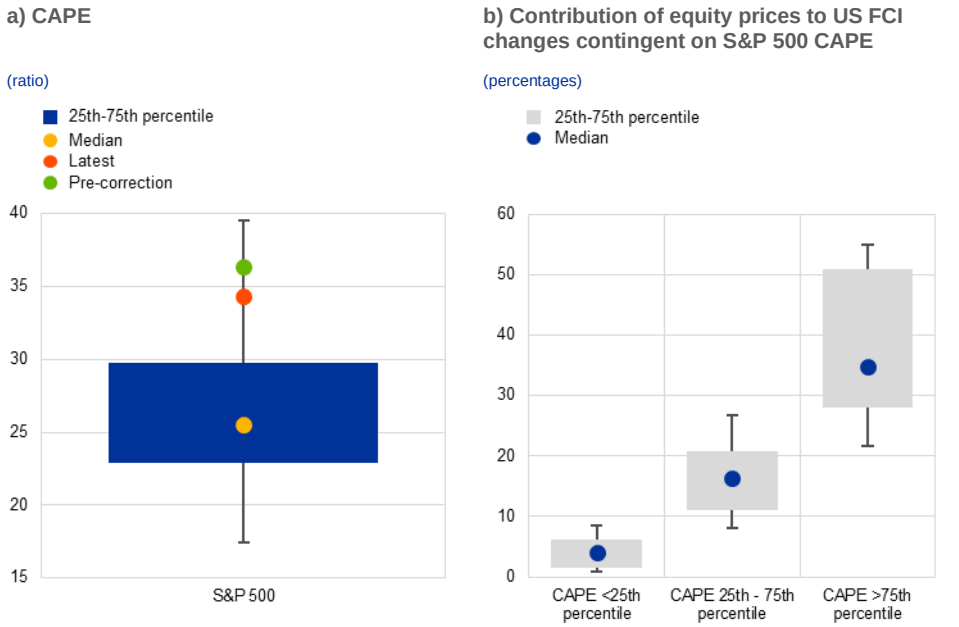
(standardised index, cumulative changes since 19 February 2025)



Sources: LSEG and ECB staff calculations.
Notes: The FCI is computed as a weighted average of five financial variables, i.e. 10-year government bond yields, short-term interest rates, cyclically adjusted price-to-earnings (CAPE) ratio, the nominal effective exchange rate and corporate spreads. The charts show changes since January 2020 (panel a) and since 19 February 2025 (panel b) and the latest observation is for 22 April 2025 (daily data). The structural decomposition is derived from a daily structural BVAR model for the United States using short-term interest rates, 10-year government bonds yields, USD NEER, CAPE ratio and corporate spreads. A combination of sign, relative magnitude and narrative restrictions is used based on an extended version of the BEAR toolbox, see Dieppe, A., van Roye, B. and Legrand, R., "BEAR toolbox", *Working Paper Series*, No 1934, ECB, Frankfurt am Main, July 2016.

Chart B

Contribution of equity prices to the US FCI contingent on equity valuations levels



Sources: LSEG and ECB staff calculations.
Notes: Panel a: The sample spans the period since the beginning of 1995. "Pre-correction" refers to the historical peak of the S&P 500 on 19 February 2025. The latest observation is for 6 May 2025 (daily data). Panel b: Share of changes in equity variables relative to absolute overall changes in the FCI since 1995.

Empirical analysis suggests that the influence of financial conditions on economic activity weakens when equity markets are highly valued. To explore whether the impact of financial conditions is contingent on the state of the US equity market, we apply a two-step procedure. First, we focus on the part of our US FCI measure that is driven by domestic macro shocks, as estimated in the BVAR model. This is because these shocks capture the shifts in market participants' perception of the US macroeconomic outlook, which were the important driver behind the recent tightening in the US FCI (Chart A, panel b). Focusing on this aspect also helps filter out changes in the FCI that may have less direct connections to US economic growth, such as shifts in global risk sentiment. Second, to determine whether the economic effect is dependent on the state of the equity market, we estimate the impact of US macro-driven FCI changes on future US economic activity using local projection methods that allow for non-linear interaction effects based on the S&P 500 CAPE ratio. Our findings suggest that the adverse effect of an FCI tightening on US activity is considerably weaker when equity markets are above the 75th percentile, although there is significant uncertainty around such estimates (Chart C). While our analysis does not delve into the specific reasons behind the weaker signal observed during periods of elevated equity valuations, there may be several contributing factors.[5] During such periods, equity price changes tend to disproportionately affect high-income households, which are more heavily invested in stocks and generally have a lower marginal propensity to consume. Additionally, if aggregate equity price movements are dominated by a handful of companies that are not representative of

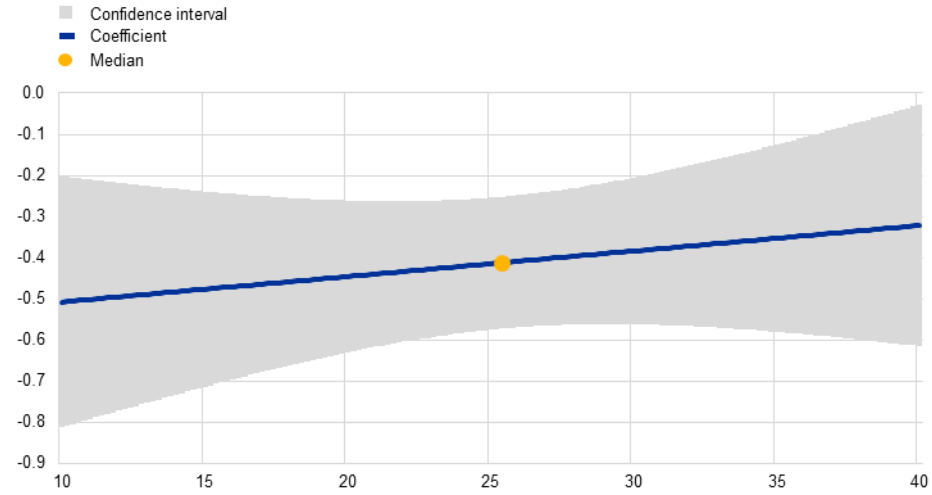
[5] For caveats on the use of FCIs, see also Bullard, J.B., "What Do Financial Conditions Indexes Tell Us?", *The Regional Economist*, Federal Reserve Bank of St. Louis, March 2023.

the broader economy, such as the “Magnificent Seven” – the seven largest US tech companies – the signal may be weakened further.

Chart C

Impact of US macro-driven FCI tightening on US GDP after one year contingent on the level of equity valuation

(x-axis: CAPE ratio, y-axis: percentages)



Source: ECB staff calculations.
Notes: The chart shows the response of US GDP to a one standard deviation shock of the US FCI driven by domestic macro shocks on GDP growth estimated via local projections. The change in the US FCI driven by macro shocks is interacted with the CAPE ratio, lagged by one month. The impact is shown after 12 months. The sample is based on monthly data from 1995 to February 2025.

In conclusion, a change in financial conditions should not be assessed mechanically, in particular as inflated equity prices can skew financial conditions and potentially weaken their economic growth signal. While the broad indication provided by an FCI is valuable, policymakers and analysts should remain attentive to the role of individual components and the broader economic context, especially during periods of stretched valuations.

2 US trade policies and the activity of US multinational enterprises in the euro area

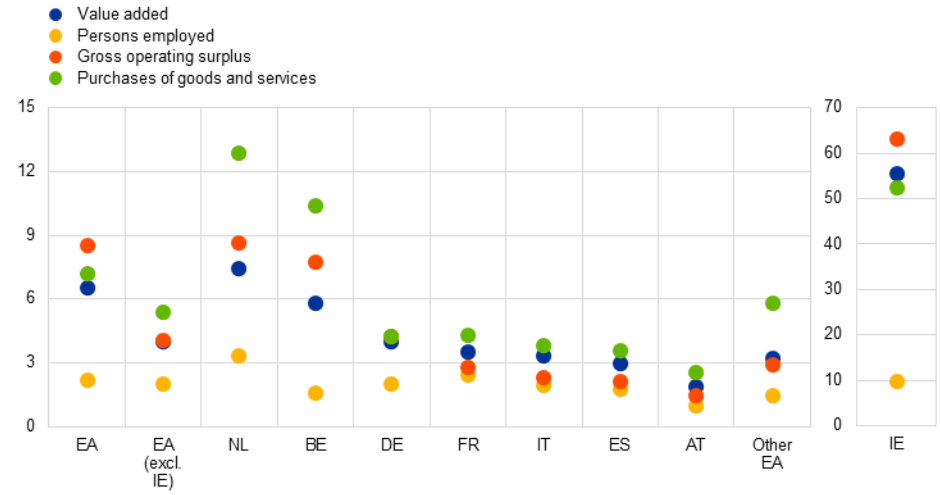
Prepared by Lorenz Emter, Michael Fidora, Fausto Pastoris, Martin Schmitz and Tobias Schuler

Affiliates of multinational enterprises (MNEs) headquartered in the United States contribute substantially to euro area economic activity. Hence, ongoing trade tensions have potentially important implications for their operations. US MNEs serve the euro area market either by exporting goods and services directly to euro area customers or via affiliates located in the euro area.[1] These affiliates may trade with the United States and third markets, so ongoing trade tensions could affect US MNEs in the euro area via higher tariffs and disruptions to intra-firm trade, as well as via any resulting changes in tax planning strategies. Euro area affiliates of US MNEs account for over 5% of euro area value added, gross operating surplus and purchases of goods and services, and 2% of persons employed, with substantially higher shares for Ireland (Chart A).[2]

Chart A

Activity of US multinational enterprises in the euro area

(proportion of US-controlled affiliates in country's total; 2022)



Sources: Eurostat foreign affiliates statistics (FATS) and ECB staff calculations.
Notes: "EA" stands for "euro area". "Other EA" comprises all euro area countries with less than 2% of total euro area gross value added. Data for Cyprus and Portugal are not included as they are not available for all the variables shown.

The dynamics of the euro area bilateral current account with the United States also reflect the activity of US MNE affiliates in the euro area. The euro area current account with the United States was nearly balanced in 2024, as the

1 A multinational enterprise (MNE) is composed of a parent entity and its foreign affiliates. The latter are enterprises resident in one country that are controlled and/or owned by MNEs residing in another country.

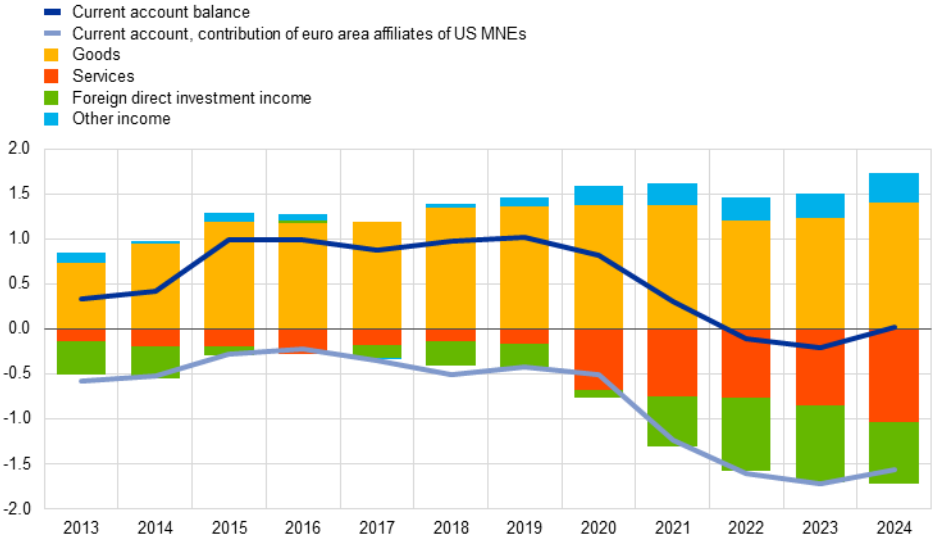
2 For additional information on the impact of US MNEs in Ireland, see Irish Economic Analysis Division, "Geoeconomic risks to the outlook: The possible impact of escalating trade tensions, alternative tariff and tax regimes on the Irish economy", *Quarterly Bulletin*, Issue 4, Central Bank of Ireland, December 2024.

increasing surplus in goods trade was almost entirely offset by deficits in services trade and foreign direct investment income, with US MNEs contributing significantly to these components (Chart B). ECB estimates suggest that almost 30% of the euro area goods surplus with the United States in 2024 involved trade by euro area affiliates of US MNEs, while these companies accounted for around 90% of the euro area deficit in services trade.

Chart B

Euro area current account balance vis-à-vis the United States

(annual flows as a percentage of GDP)



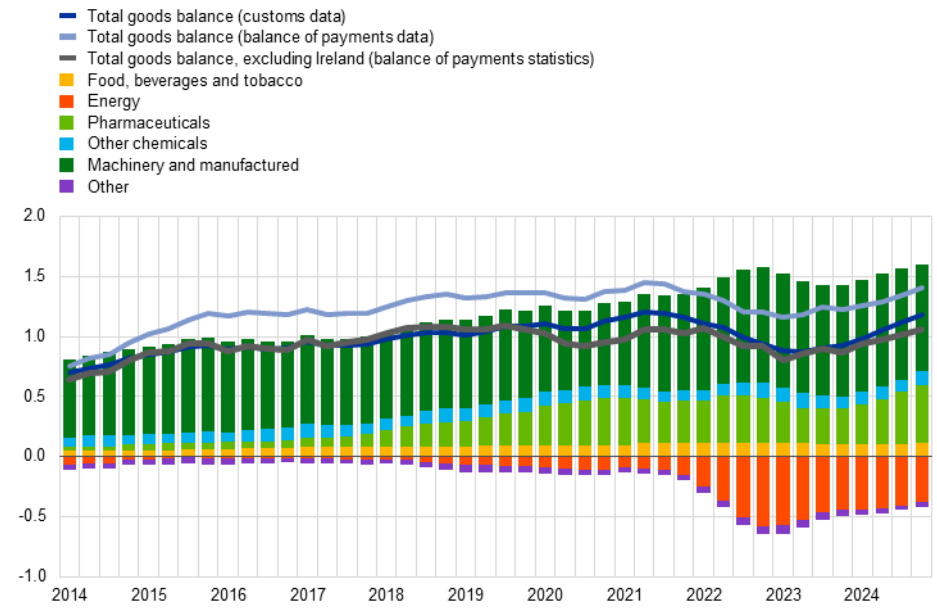
Sources: ECB, Eurostat and ECB staff calculations.
Notes: The contributions by euro area affiliates of US MNEs are estimated by combining data on bilateral trade in goods and services and foreign direct investment income flows from the ECB's balance of payments statistics with information on trade by type of ownership (domestic and foreign-controlled) from Eurostat's goods and services trade by enterprise characteristics (TEC/STEC) datasets and information on the proportion of US-controlled affiliates' turnover and purchases of goods and services from Eurostat's FATS.

US MNEs shape euro area trade in goods with the United States via substantial intragroup trade, exports of pharmaceutical products and contract manufacturing. The widening goods trade surplus vis-à-vis the United States is driven mostly by a pronounced increase in exports of pharmaceutical products (Chart C), which are mostly attributed to trade flows of Irish affiliates of US MNEs. Moreover, US MNEs resident in the euro area engage in contract manufacturing arrangements by contracting firms outside the euro area to produce goods that are sold in third countries (including the United States) without ever entering the euro area. These exports are recoded in the balance of payments statistics, driving up the goods surplus.

Chart C

Euro area goods trade balance vis-à-vis the United States

(four-quarter moving sums as a percentage of GDP)

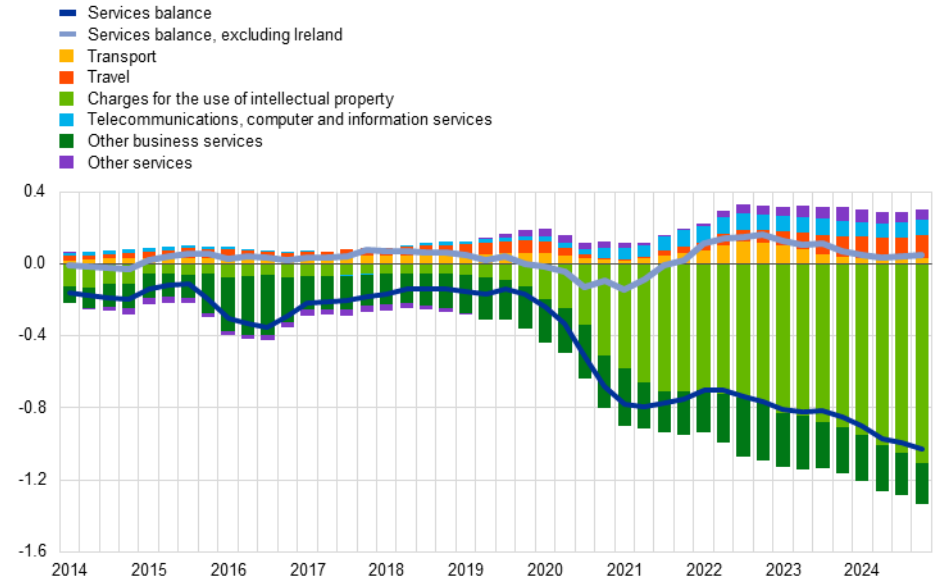


Sources: ECB, Eurostat and ECB staff calculations.
Notes: The latest observations are for the fourth quarter of 2024. The decomposition of the goods trade balance by product category follows the Standard International Trade Classification, Revision 3, in trade in goods statistics.

Chart D

Euro area services trade balance vis-à-vis the United States

(four-quarter moving sums as a percentage of GDP)



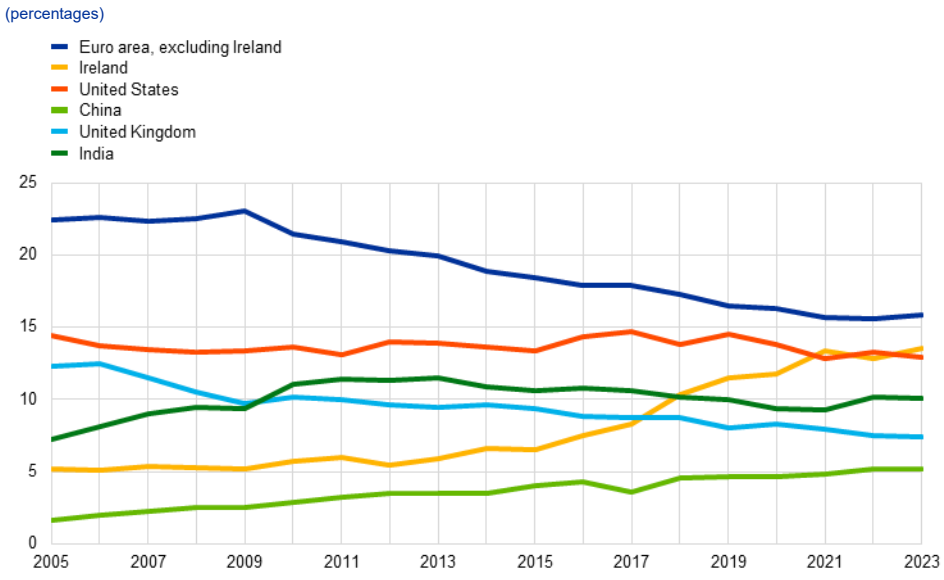
Sources: ECB, Eurostat and ECB calculations.
Note: The latest observations are for the fourth quarter of 2024.

Production linked to US MNEs in the euro area is closely connected to corresponding services imports, reflecting their supply chains and tax optimisation strategies. US MNEs use imported intellectual property products

(IPPs) as central inputs in their euro area production activities. Since 2020 the euro area has recorded increasingly high values of services imported from the United States. These are driven by IPP usage charges linked to US MNE affiliates in the euro area, mainly in Ireland (Chart D).[3] Apart from supporting the production of high value-added goods – for example medicines – these IPP imports are also used to produce information and communications technology (ICT) services. This means that the presence of US MNEs in the euro area also increases euro area services exports, boosting the euro area's export market shares, particularly in ICT services, via Ireland which accounts for a comparable share to that of the United States of about 14% (Chart E). This particular configuration of supply chains, involving imports of IPP-related services, enables US MNEs to accrue substantial profits in the euro area and benefit from more favourable corporate taxation, which is mirrored in the euro area's substantial foreign direct investment income deficit vis-à-vis the United States (Chart B).[4]

Chart E

Export market shares of information and communications technology services



Sources: OECD-WTO balanced trade in services dataset and ECB staff calculations.
Notes: Figures for euro area countries consider only extra-euro area exports. The latest observations are for 2023.

Higher tariff barriers could affect the output and profits of US MNEs in the euro area, including in the pharmaceutical sector, depending on whether these enterprises adjust prices or move production. Given that pharmaceutical exports from the euro area to the United States are strongly linked to supply chain and tax optimisation strategies of US MNEs, these trade flows are vulnerable to relocation risks. While the high profitability of their subsidiaries (Chart F) may allow US MNEs

3 Charges for the use of IPPs include royalties paid on patents, trademarks, copyrights, algorithms, etc.

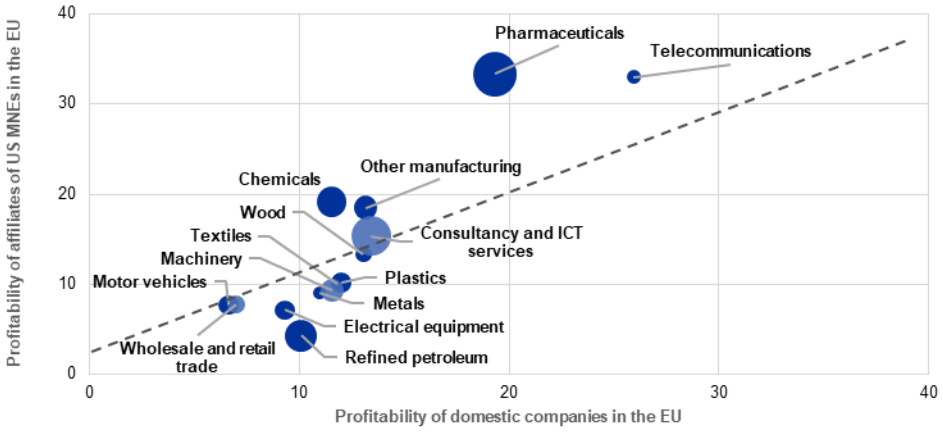
4 Recent corporate tax and regulatory reforms in the United States and Ireland prompted US MNEs to shift IPP ownership from offshore centres to the United States, increasing services payments and income flows between the euro area and the United States that were previously routed through offshore centres and outside the euro area-US current account. For additional details, see Boller, L., et al., "The End of the Double Irish: Implications for US Multinationals and Global Tax Competition", *Budget Model*, Penn Wharton University of Pennsylvania, October 2024.

to partially absorb additional US tariffs, these could render their business model less attractive, especially if accompanied by changes in US taxation and regulatory regimes incentivising onshoring of production to the United States.[5] US trade policies could also indirectly affect US MNE affiliates in the euro area if these are subjected to EU retaliatory measures.

Chart F

Sectoral profitability for affiliates of US multinational enterprises in the EU

(ratio of gross operating surplus over net turnover)



Sources: Eurostat FATS and ECB staff calculations.
Notes: Data refer to available information for the years 2021-22. Profitability is calculated as a ratio of gross operating surplus to net turnover. A data point above (below) the 45-degree line indicates that, for that specific sector, affiliates of US MNEs show a higher (lower) profitability than domestic companies. The size of the bubble shows the relevance, in terms of turnover, of US MNE affiliates for each sector (calculated as the proportion of net turnover from affiliates of US MNEs compared with those of domestic companies).

A relocation of US MNEs' operations away from the euro area could result in lower euro area GDP via reduced production and exports, although gross national income (GNI) and employment would likely be less strongly affected.

For cases where IPP ownership remains with the parent US MNE, the relocation of US MNE operations away from the euro area would reduce euro area GDP primarily through lost exports, which are only partly offset by lower IPP services imports. However, employment and, in particular, GNI would be less strongly affected as US MNE production is capital-intensive and highly reliant on imported IPPs, which generate large payments in the form of profits repatriated to the United States (Chart B). In cases where euro area affiliates of US MNEs own the IPP underpinning production and exports, their relocation to the United States would also negatively affect euro area GDP as a result of a mechanical depreciation effect.[6] Over a longer

5 Operations of US pharmaceutical MNEs in the euro area could also be affect by Trump, D.J., "Executive Order 14297—Delivering Most-Favored-Nation Prescription Drug Pricing to American Patients", in Peters, G. and Woolley, J.T. (eds.), *The American Presidency Project*, University of California, Santa Barbara, May 2025, which directs US agencies to align Medicare drug prices with the lowest prices paid by comparable developed countries.

6 The immediate effect of IPP imports on GDP tends to be largely offset by the corresponding investment (as the acquisition of IPPs is included in national accounts). In subsequent years, however, the depreciation of the acquired capital stock (consumption of fixed capital) adds to investment and thereby mechanically increases GDP. For more details, see Andersson, M., et al., "Intangible assets of multinational enterprises in Ireland and their impact on euro area activity", *Occasional Paper Series*, No 350, ECB, 2024.

period, productivity may suffer if the domestic economy is no longer gaining the positive spillovers from engagement with US MNEs.[7]

[7] See Di Ubaldo, M., Lawless, M. and Siedschlag, I., "Productivity spillovers from multinational activity to local firms in Ireland", *OECD Productivity Working Papers*, Organisation for Economic Co-operation and Development, 30 November 2018.

3 The outlook for euro area business investment – findings from an ECB survey of large firms

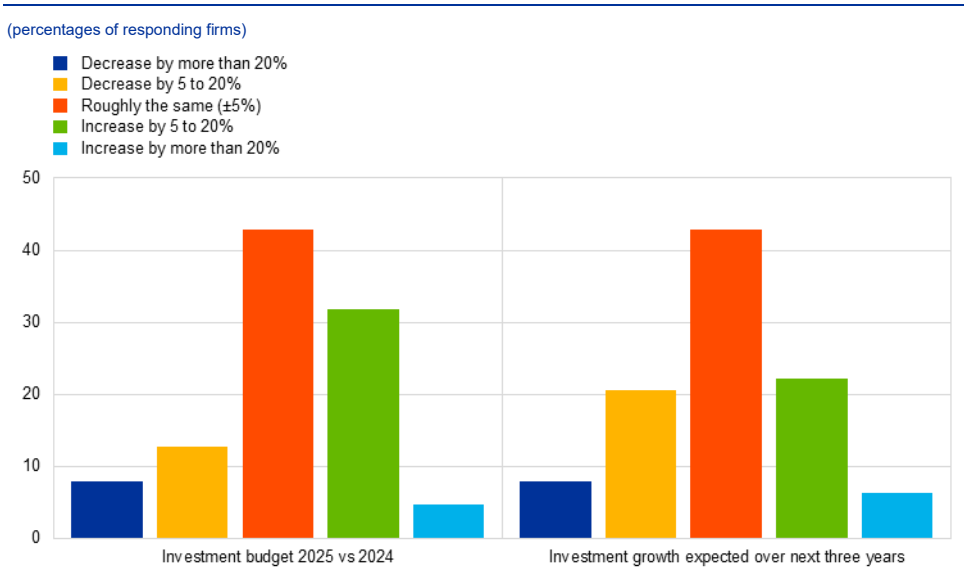
Prepared by Malin Andersson, Valerie Jarvis, Gwenaël Le Breton and Richard Morris

This box summarises the findings of a recent ECB survey of leading non-financial companies on the outlook for business investment.[1] The survey, carried out between 7 April and 14 May, asked firms about recent and expected euro area and global investment decisions and the factors driving or constraining these. Responses were received from 64 companies with an aggregate global revenue equivalent to almost 4% of euro area GDP. Of these, 39 are mainly active in the industrial sector, while the other 25 focus primarily on services.

The responding firms see a more subdued outlook for euro area investment ahead than in 2025 (Chart A). Asked how their investment budgets had evolved in 2025 compared to 2024, significantly more firms reported increases than decreases. However, over the next three years, 40% expected investment to remain broadly constant, with the numbers of firms expecting their investment to decrease or increase being roughly equal. This subdued outlook mainly reflects the feedback from industrial firms, one-third of which expected their investment in the euro area to decline over the next three years, while only a quarter expected it to increase.

Chart A

Investment in the euro area: current and evolution over the next three years



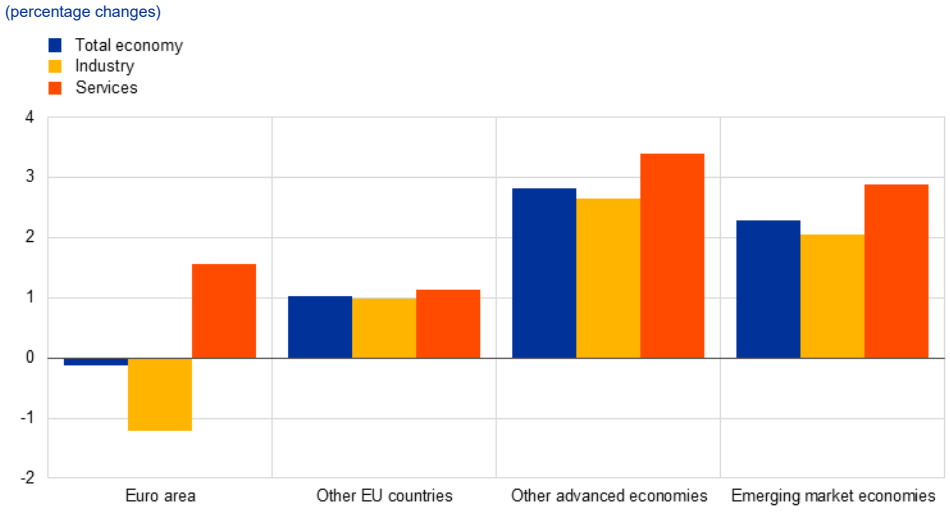
Source: ECB.
Note: The chart depicts responses to the questions "How has your total investment budget in the euro area evolved in 2025 compared to 2024?" and "How do you expect your investment in the euro area to evolve over the next three years?".

[1] The survey was sent to firms with which the ECB maintains regular contacts for the purpose of gathering business intelligence, as explained in the article entitled "The ECB's dialogue with non-financial companies", *Economic Bulletin*, Issue 1, ECB, 2021.

The subdued outlook for investment in the euro area contrasts with expectations of increasing investment in other geographical areas (Chart B). Almost two-thirds of the surveyed firms' current investment is located in the euro area, around 5% in other EU economies and around one-sixth each in other advanced economies and emerging markets.[2] Net responses indicate expectations of near stagnation in euro area business investment over the next three years, but increasing investment outside the euro area, especially in non-EU advanced economies and emerging markets. The subdued investment outlook for the euro area relative to other advanced economies and emerging markets reflects industrial firms' expectations of contracting investment in the euro area, but growing investment outside the euro area. By contrast, services firms expected increasing investment both inside and outside the euro area, and at more similar rates. Demand was the main factor influencing the geographical focus of investment, ahead of higher growth opportunities and the desire to enter new markets. Other frequently cited factors relate to the wish to diversify and build supply chain resilience, proximity to customers ("local-for-local"), different tariffs, more favourable regulation, and economic and political stability.[3]

Chart B

Investment by region: evolution over the next three years



Source: ECB.
Notes: The chart depicts responses to the question "How do you expect your investment in the following geographical areas to evolve over the next three years?". Expected investment is derived by aggregating the shares of firms replying "decrease by more than 20%" (rounded to -20%), "decrease by 5-20%" (averaged to -12.5%), "roughly the same (±5%)" (averaged to 0%), "increase by 5-20%" (averaged to 12.5%), and "increase by more than 20%" (rounded to 20%).

Technological change and evolving geopolitics have become key considerations for firms' investment strategies (Chart C). Asked about the importance of five major recent developments and events in causing firms to rethink

[2] The industrial firms surveyed are on average more global, with only half of their investment in the euro area and around one-fifth each in non-EU advanced economies and emerging markets. The activities of the services firms are on average more concentrated, with three quarters of their investment in the euro area and around one-tenth each in non-EU advanced economies and emerging markets.

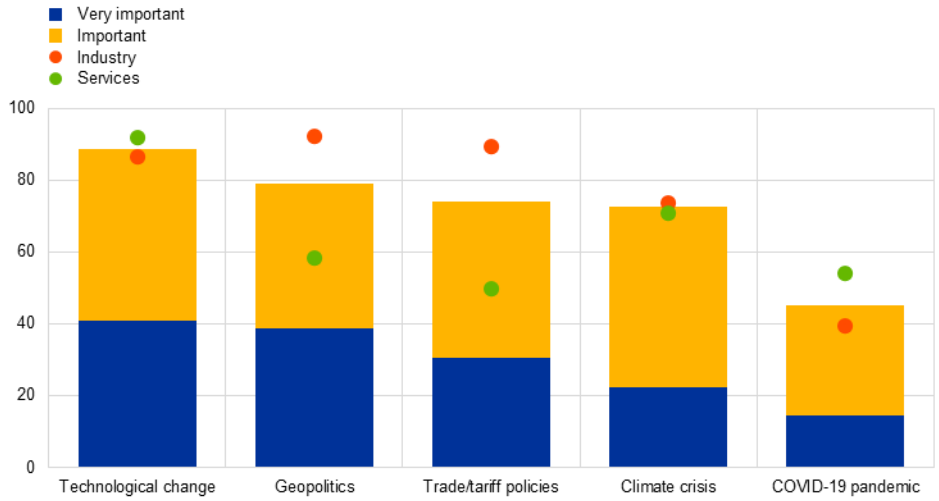
[3] For earlier findings from a similar survey in relation to diversification, supply chain resilience and proximity to customers, see the box entitled "Global production and supply chain risks: insights from a survey of leading companies", *Economic Bulletin*, Issue 7, ECB, 2023.

their global investment strategies in recent years, technological change ranked highest in the full sample. For industrial companies, geopolitics and trade/tariff policies were deemed slightly more important than technological change, with firms in the services sector less exposed to these forces. The climate crisis also scored relatively highly, while the COVID-19 pandemic was considered somewhat less important (at least in retrospect).[4]

Chart C

Importance of major developments and events of the 2020s in causing firms to rethink their investment strategies

(percentages of responding firms)



Source: ECB.
Notes: The chart depicts responses to the question "How important have the following major developments and events been in causing you to re-think your global investment strategy in recent years?". Bars relate to percentages of all 64 firms responding to the survey. Dots show combined percentages for "important" and "very important" factors by sector.

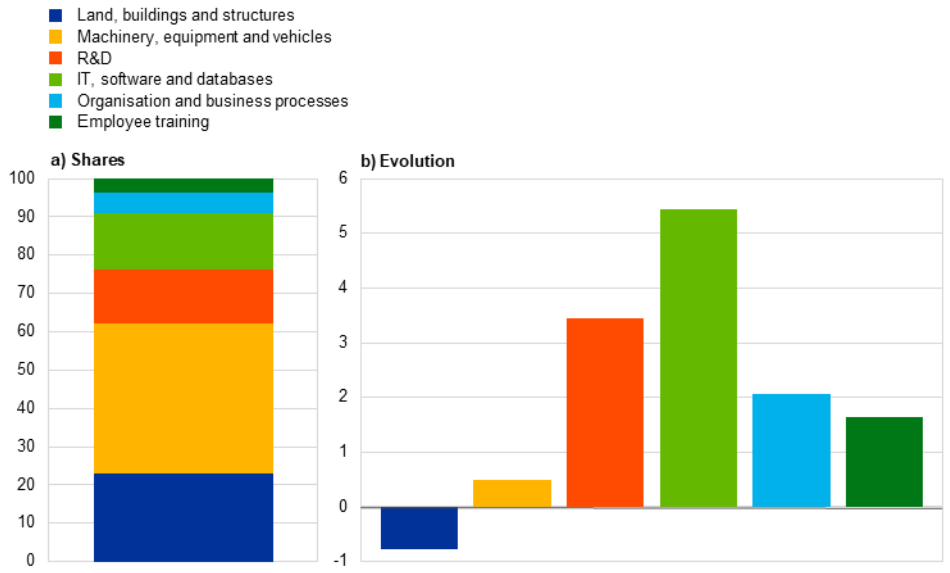
The responding firms expect their euro area investment over the next three years to be driven mainly by intangibles, especially IT, software and databases. On average, firms reported that around 60% of their investment expenditure in the euro area was on "tangibles" (such as machinery and equipment); 30% on "intangibles" (research and development (R&D) and IT, software and databases), which are typically allocated to operational expenditure in company accounts but are counted as investment in national accounts; and 10% on organisation and business processes and employee training (Chart D, panel a). Over the next three years, firms expected their tangible investment to broadly stagnate, while expenditure on R&D and, in particular, on IT, software and databases was expected to increase (Chart D, panel b).

[4] However, according to regular contacts with firms at the time, the pandemic did lead to a considerable reorganisation of supply chains and a growing shift from "just in time" to "just in case" inventory strategies.

Chart D

Investment by asset: shares in 2025 and evolution over the next three years

(panel a: percentages of total investment in 2025; panel b: percentage changes over the next three years)



Source: ECB.
Notes: The chart depicts responses to the questions "Of your total euro area investment, roughly what share is dedicated to each of the following areas?" and "How do you expect your euro area investment in each of these areas to evolve over the next 3 years?". Evolution over the next three years is derived by aggregating the shares of firms replying "decrease by more than 20%" (rounded to -20%), "decrease by 5-20%" (averaged to -12.5%), "roughly the same (±5%)" (averaged to 0%), "increase by 5-20%" (averaged to 12.5%), and "increase by more than 20%" (rounded to 20%).

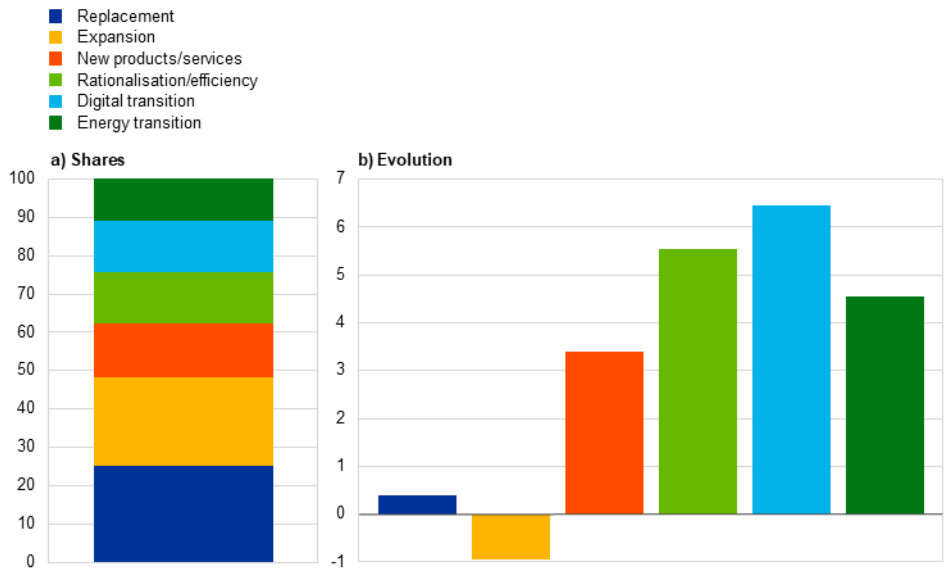
The focus on intangible investment likely reflects increasing prioritisation of the digital and energy transitions, as well as rationalisation and efficiency. On average, respondents categorised around half of their investment as being focused on replacement and expansion, with the remainder, in broadly equal measure, dedicated to the development of new products, rationalisation and efficiency objectives, the digital transition, and the energy transition (Chart E, panel a).[5] Over the next three years, the strongest driver of current investment plans was expected to be the digital transition, followed by rationalisation and efficiency, the energy transition, and the development of new products and services (Chart E, panel b).

[5] It should be noted that many investments have more than one purpose, and identifying the purpose of investments using the categories listed may be rather subjective.

Chart E

Investment by purpose: shares in 2025 and evolution over the next three years

(panel a: percentages of total investment in 2025; panel b: percentage changes over next three years)



Source: ECB.
Notes: The chart depicts responses to the questions "Of your total euro area investment, roughly what share is dedicated to each of the following purposes?" and "How do you expect your euro area investment for each of these purposes to evolve over the next 3 years?". The sum of the shares reported by firms has been rescaled to 100% (the total exceeded 100% as some responses reflected the multiple purpose of some investments). The evolution over the next three years is derived by aggregating the shares of firms replying "decrease by more than 20%" (rounded to -20%), "decrease by 5-20%" (averaged to -12.5%), "roughly the same (±5%)" (averaged to 0%), "increase by 5-20%" (averaged to 12.5%), and "increase by more than 20%" (rounded to 20%).

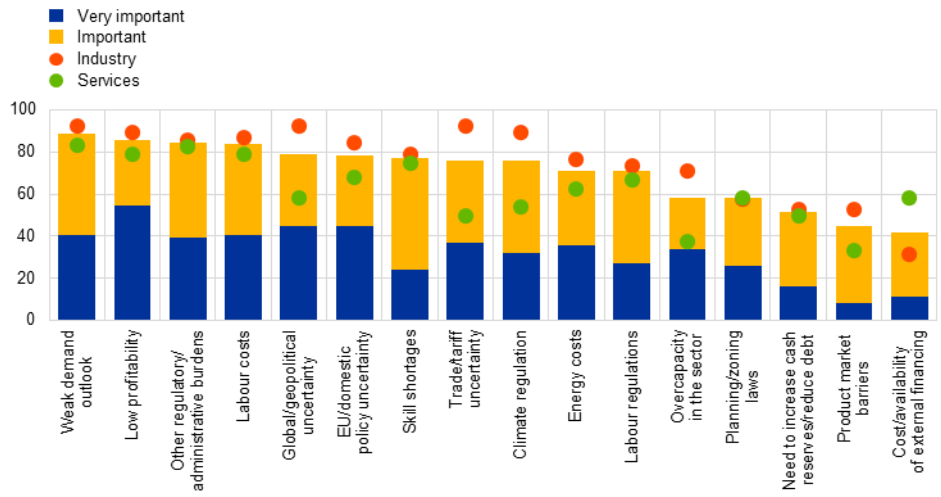
A weak demand outlook and low profitability top the list of constraints on euro area investment (Chart F). Nine out of ten respondents reported weakness in demand as the most important (often "very important") constraint on euro area investment, closely followed by low profitability, other regulatory and administrative burdens, and labour costs (cited by 80-85% of firms).[6] Among industrial firms, global geopolitical uncertainty, trade uncertainty and EU/domestic policy uncertainty featured particularly strongly. Asked about what changes could be expected to encourage higher investment in the euro area, more than half of the respondents pointed to lower and/or more stable regulation. A more growth-friendly and predictable climate policy also featured strongly, as well as more demand stimulus, political and economic stability, and lower labour and energy costs. The cost and availability of external financing was deemed of much lower importance, probably reflecting in part the easier availability of external finance for the large firms surveyed than for smaller firms.

6 Labour regulations and climate regulation were listed as separate factors in the questionnaire.

Chart F

Factors constraining investment in the euro area

(percentages of responding firms)



Source: ECB.
Notes: The chart depicts responses to the question "How important are the following factors in constraining your investment in the euro area?". Bars relate to percentages of all 64 firms responding to the survey. Dots show combined percentages for "important" and "very important" factors by sector.

Anticipated increased defence spending is quite widely perceived as a potential catalyst for investment. Half of the industrial firms and a fifth of services respondents expected increased defence spending to support their investment over the next three years. These firms tended to be supplying the defence industry already (directly or indirectly), or exploring or intending to explore opportunities to adapt current production to growth opportunities related to recent defence spending announcements, or they expected to benefit indirectly from the resulting boost in overall economic activity. By comparison, only around one in five respondents (predominantly firms based in southern Europe) perceived the Next Generation EU programme as having supported investment in their sector. Where support was perceived, it tended to be focused on projects related to environmental and digital infrastructure.

4 Where do we stand with inflationary pressures arising from price resetting?

Prepared by Katalin Bodnár, Andrea Fabbri, Ieva Rubene and Zivile Zekaite

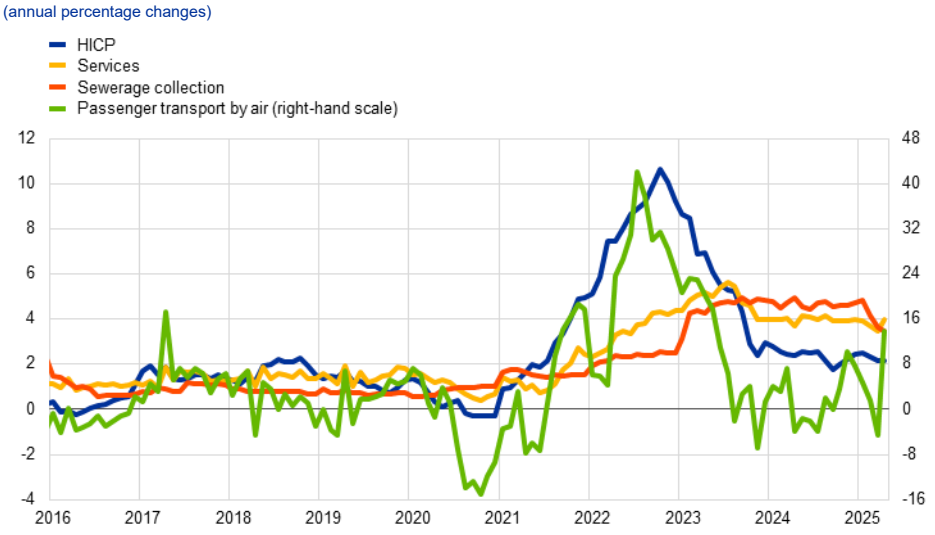
The disinflation in euro area services has been slower than that of the overall headline Harmonised Index of Consumer Prices (HICP) (Chart A). This is can be attributed to a combination of factors: a delayed response to the general inflation surge by some services prices, elevated wage pressures and strong demand for services (especially recreation services).[1] This box focuses on the first factor and examines the role of the services items in the HICP basket that tend to be repriced less frequently and thus may still push up price pressures while other items are already experiencing disinflation.

The HICP services consumption basket comprises price indices with very different annual inflation rates. On the one hand, services include items related to travel, where prices tend to adjust to economic conditions and shocks very quickly. For example, the annual increase in prices for passenger transport by air shot up to 40% in mid-2022, ahead of the peak in total services in July 2023. Since mid-2023 it has occasionally recorded negative rates. On the other hand, prices of other components have shown stable annual increases, with very low volatility; for example, sewerage collection, where prices have risen very gradually, lagging the total services prices (Chart A).

[1] For information on the role of energy and wage input costs for services prices, see the box entitled "Decomposing HICPX inflation into energy-sensitive and wage-sensitive items", *Economic Bulletin*, Issue 3, ECB, 2024.

Chart A

Euro area headline HICP, services and selected services components

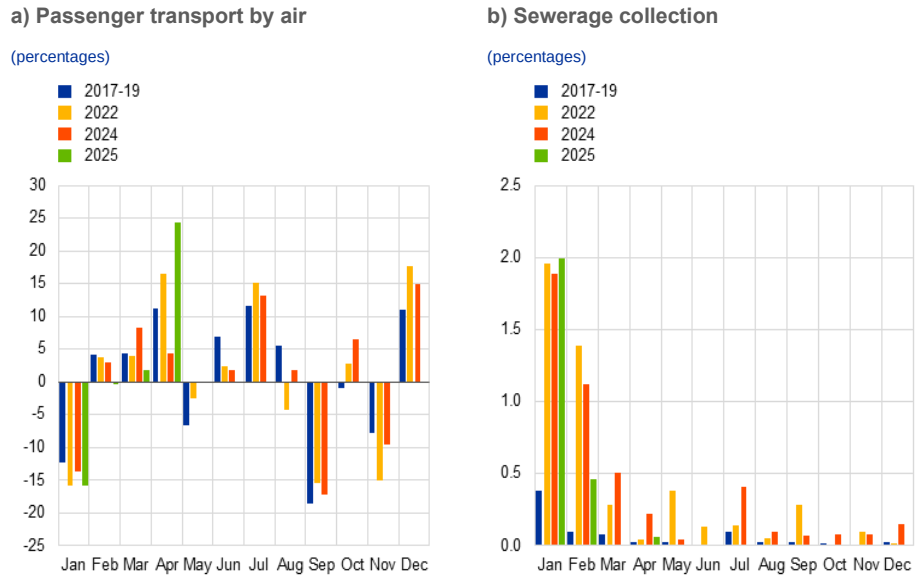


Sources: Eurostat and ECB staff calculations.
Note: The latest observations are for April 2025.

The differences in annual inflation rates across components of services inflation are partly the result of a different frequency of price changes within the year. For instance, prices for passenger transport by air are highly volatile and the price index can rise or fall by more than 10% every month, depending on demand linked to the holiday seasons (Chart B, panel a). By contrast, price changes in other items, such as sewerage collection, are concentrated at certain points in the year (Chart B, panel b). Prices for services with less frequent price changes can be expected to react to general price and cost shocks with some lag. For both these categories, and also more generally, price changes have increased in the last few years but these continue to be aligned with pre-pandemic patterns in terms of their timing within the year (i.e. occurring in the same months, with seasonal swings for passenger transport by air and the largest change taking place in January for sewerage collection).

Chart B

Month-on-month price changes for selected HICP services items



Sources: Eurostat and ECB staff calculations.
Notes: "2017-19" refers to the average of the monthly rates of change over this period. The latest observations are for April 2025.

Infrequent price adjustments may be the consequence of longer-term relations between sellers and buyers, or of prices being directly set or heavily influenced by governments. Changing prices can be costly, leading to infrequent price adjustments, with the contractual relationship between the service provider and the customer fixed or prolonged for a specific time period. For example, housing rents or health insurance contracts tend to be renewed or repriced annually. Prices of non-contractual services may also be changed infrequently to preserve long-term relations between sellers and buyers, e.g. repairs of household appliances, such as sports or gardening equipment, haircuts, etc. Furthermore, the prices of some services items are set or significantly influenced by the government, i.e. for "administered" services. Prices for administered services are generally adjusted less frequently than prices for non-administered services.[2] Typical examples of such services are utilities (refuse and sewerage collection), tertiary education and social protection services (e.g. childcare). As administered prices are classified at the national level, there are many services items for which prices are administered in some countries but not in others – and this may blur the euro area pattern somewhat.

The price changes in around a quarter of all services items are concentrated in one or two months of the year. Repricing can happen at different times in different countries, which means that finding a clear repricing pattern for the euro area aggregate is not a straightforward process. Our approach is based on the 39 euro area services items in the 4-digit Classification of Individual Consumption by

2 See Fritzer, F., "Administered Prices, Inflation and the Business Cycle – Selected Aspects", *Monetary Policy & the Economy*, Oesterreichische Nationalbank (Austrian Central Bank), Issue 1, 2011, pp. 41-57. See also the box entitled "Measuring and assessing the impact of administered prices on HICP inflation", *Monthly Bulletin*, May 2007, ECB.

Purpose (COICOP-4) over the period from 2016 to 2024. For each item, the following selection approach is applied. First, we calculate the month-on-month percentage price change for each calendar month, using non-seasonally adjusted price indices. Second, we calculate the average change for each calendar month over all the years in the period. Third, we calculate the relative importance, as a percentage share, of each month with respect to the total price change for the whole year. For the second and third steps, we use absolute values because these allow us to assess the relative magnitude of all price changes, independently of the direction of the change. For example, the share for January is the average of the monthly absolute price changes in the month of January for all years between 2016 and 2024 divided by the sum of the averages of all monthly absolute price changes over the same period. Fourth, we identify the calendar months where either (i) the percentage share of a price change in any single month is above 25%, or (ii) the combined share of any two months with the highest shares is above 35% of the total change over the sample period. Finally, a services item is assigned to the "annual repricing" category if it fulfils these criteria and the month-on-month price change for the identified calendar months is positive on average between 2016 and 2024.[3] The thresholds are based on judgement but are relatively high in assuming that, at a minimum, between one-quarter and one-third of the change in a price index takes place in only one or two months of a year. For example, the results show that 48% of the total absolute price change for hospital services over the period occurred in the month of January in each year (Chart C).[4] The approach identifies 16 services items – around 25% of total services (based on 2025 weights) – as having an annual repricing pattern. Around one-half of the items that are repriced annually fall into the administered prices category.

[3] This final condition ensures that items that have large seasonal price swings (i.e. up in one month and down in another owing to factors such as holiday seasons) are excluded.

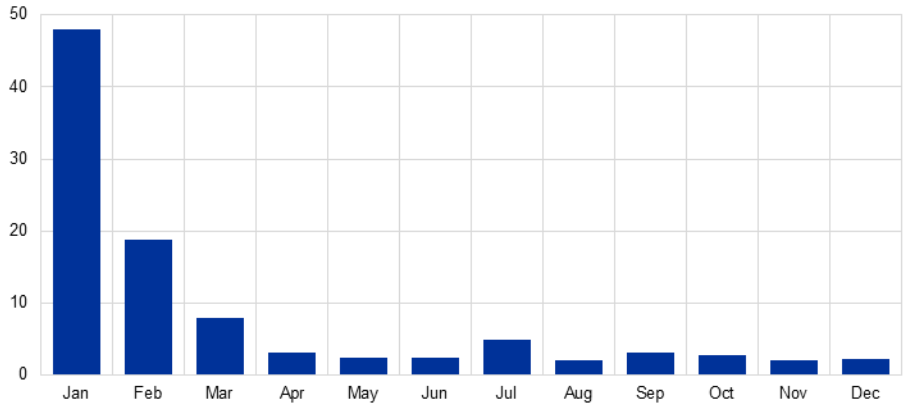
[4] The items classified in the "annual repricing" category according to the COICOP 4-digit classification are: 043200, 053300, 111200, 073600, 044200(A), 044300(A), 044400, 063000(A), 073500(A), 081000(A), 100000(A), 124000(A), 125300, 125500, 126000, 127000, where (A) denotes an item with an administered price. The selection at the euro area level may differ from selection at the country level.

Chart C

An example of annual repricing: hospital services

Distribution of price index changes within a year

(percentages of the price change in each month relative to the change over the whole year, on average over the 2016-24 sample period)



Sources: Eurostat and ECB staff calculations.

For most items with an annual repricing pattern, the change in the price index mainly occurs early in the year. For most of the 16 items in the annual repricing category, January is the month, or one of the two months, showing the largest proportion of the price change in one year. There are a few exceptions – for example, education and canteens, where price changes mainly occur close to the start of the school year. The pattern for combined passenger transport is blurred by the impact of the introduction of the German public transport ticket and the subsequent price changes applied to it. Given the sheer size of this effect, it is helpful to exclude the impact of this item to gain a better understanding of the underlying services price dynamics.[5]

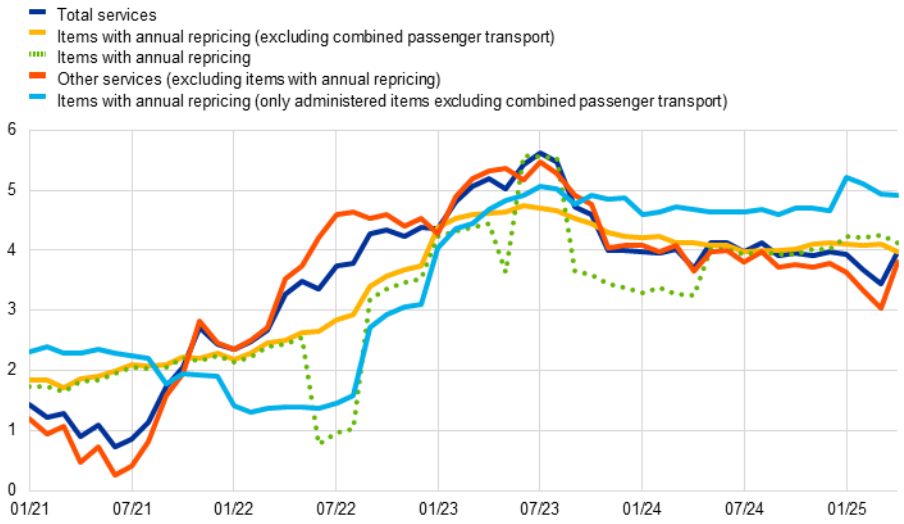
Items that show an annual repricing pattern have played an increasing role in keeping services inflation elevated. During the latest inflation surge, the inflation rates of items without an annual repricing pattern rose earlier and more sharply than those of items with an annual repricing pattern, especially for administered items (Chart D). As the upward cost shocks started to unwind, inflation for items with non-annual repricing declined more noticeably, while the inflation rate of services items with annual repricing (excluding combined passenger transport) hovered at slightly above 4.0% in the second half of 2023 and in 2024. The inflation rate of items with a repricing pattern has been slightly above the rate of services without annual repricing since the end of 2023. This is mainly a result of the particularly high inflation rate of administered items within the annual repricing group.

5 A reduced-price public transport ticket was introduced in Germany for three months in the summer of 2022 and then introduced again in May 2023 at a higher price. The price was increased further in January 2025. The price of this ticket is part of the “combined passenger transport” HICP category and the price changes caused large swings in this index, with visible effects on the euro area index.

Chart D

HICP services items with an annual repricing pattern

(annual percentage changes)

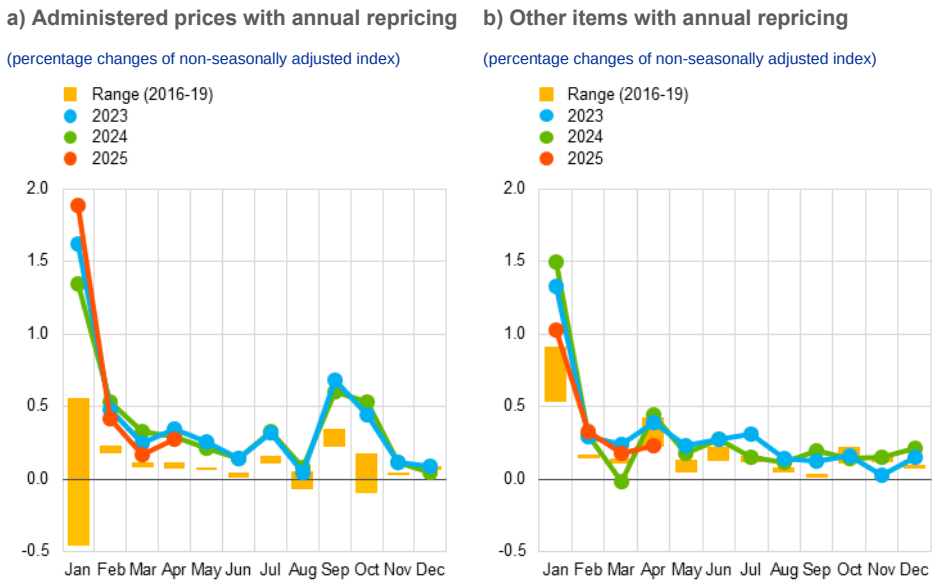


Sources: Eurostat and ECB staff calculations.
Notes: Based on the COICOP-4 classification. The latest observations are for April 2025.

At the beginning of 2025, items that are repriced annually remained an important factor behind the persistence of services inflation. As price changes for items with annual repricing occur predominantly in January, their month-on-month changes in January offer useful insights into annual inflation developments. In January 2025 annually repriced items with administered prices showed the strongest month-on-month increase, which even surpassed the rise seen a year ago. By contrast, price changes in non-administered annually repriced items eased compared with the previous year (Chart E). The inflation rate of services items without a repricing pattern has also declined visibly as of January 2025. However, part of the drop in March and the rebound in April reflects the different Easter dates in 2024 and 2025. The decoupling of administered price inflation from broader services inflation should be closely monitored, as forecasting models are not able to appropriately capture the drivers of price dynamics for these services, which are often strongly linked to fiscal considerations.

Chart E

Month-on-month price changes for items with an annual repricing pattern



Sources: Eurostat and ECB staff calculations.
Notes: Aggregates are based on the chain-linked aggregation of the components. Administered prices exclude combined passenger transport. The latest observations are for April 2025.

To conclude, the disinflation in services is expected to be supported by a normalisation of annual repricing patterns. While inflation for items with a repricing pattern, especially those with administered prices, remains persistent, most of the delayed adjustment to past shocks should now be largely completed. Hence, future repricing steps should become smaller and more in line with general inflation trends.

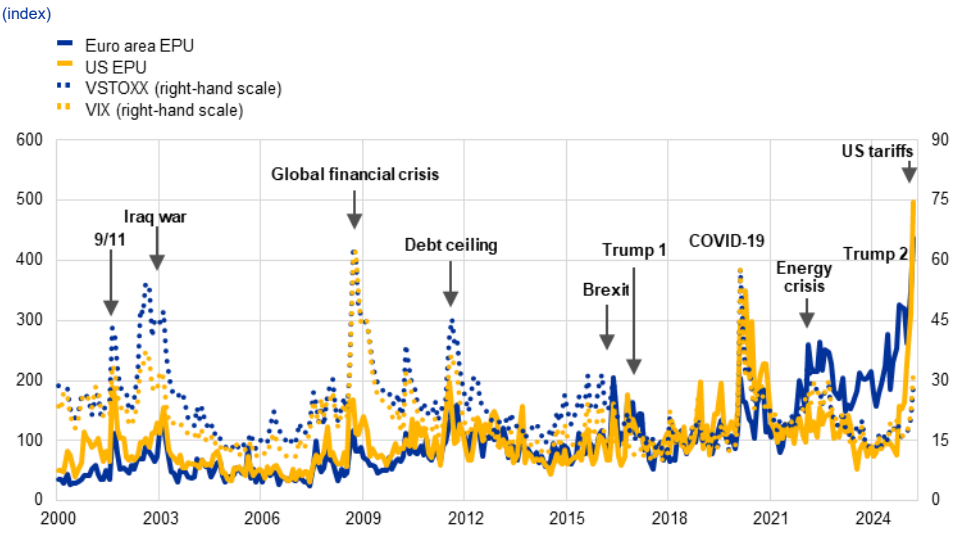
5 Financial market volatility and economic policy uncertainty: bridging the gap

Prepared by Giulia Martorana and Jakub Mistak

Following the 2 April tariff announcement by the US Administration, financial market volatility spiked from previously subdued levels, becoming more aligned with the surge in economic policy uncertainty (EPU) observed since the autumn of last year. Chart A illustrates financial market volatility measures for the euro area (VSTOXX) and the United States (VIX) alongside the corresponding EPU indices. EPU indices are news-based measures of economic policy uncertainty that have gained in popularity for their ability to track major economic and political events.[1] Since last autumn, EPU indices have surged on both sides of the Atlantic, with this upward trend continuing into 2025 amid enduring geopolitical risk and increasing uncertainty surrounding tariff policies. In contrast, financial market volatility in both the euro area and the United States remained relatively muted until March on the back of strong momentum in equity markets. However, both the VIX and the VSTOXX spiked following the equity market sell-off triggered by the announcement of US tariffs on 2 April.

Chart A

Financial market volatility and EPU in the euro area and the United States



Sources: Baker, Bloom and Davis, Bloomberg and ECB staff calculations.
Notes: US EPU is estimated by Baker, Bloom and Davis, while euro area EPU is calculated as the GDP-weighted average of the German, French, Italian and Spanish EPU indices by the same authors. Both indicators are normalised to have a mean of 100 between January 2000 and the latest observation. The latest observations are for April 2025.

Historically, measures of EPU and financial market volatility have displayed close co-movement, albeit diverging at times and across countries. Historically, disconnects between EPU and financial market volatility have emerged following

[1] For more on the EPU methodology, see Baker, S.R., Bloom, N. and Davis, S.J., "Measuring Economic Policy Uncertainty", *The Quarterly Journal of Economics*, Vol. 131, No 4, November 2016, pp. 1593-1636.

significant events, such as the 2016 US presidential election, the UK Brexit referendum and the recent energy crisis. This has sparked a large body of research, which has offered various interpretations of the muted reaction of financial market volatility to changes in policy uncertainty. These include, for instance, a deterioration in the quality of political signals, differences in investor opinions and the role played by strong economic conditions.[2]

The recent increase in euro area EPU reflects an intensification of an upward trend observed over a number of years. Since 2021 movements in euro area EPU have been heterogeneous across countries, with the indicators for Germany and France consistently remaining above their historical averages.[3] Particularly striking is the upward trend in German EPU, which reached historical highs in April 2025 at the time of the US Administration's tariff announcement (Chart B, panel a). For this reason, and for reasons of data availability, the analysis in this box focuses on Germany. A database of news articles is used to replicate German EPU.[4] Specifically, the replicated index relies on a database of 1,857,207 German news articles spanning the period from January 2000 to April 2025 and closely tracks the original EPU index. When plotted alongside the index of German equity market volatility (VDAX), it is evident that the disconnect between the two measures observed from the autumn of last year and into the first three months of 2025 reflects an intensification of a trend observed over a number of years. This divergence persisted until early April, when a sharp rise in the VDAX, which coincided with the sell-off in global equity markets, brought it into line with the earlier increase in the EPU index.

2 See Białkowski, J., Dang, H.D. and Wei, X., "High policy uncertainty and low implied market volatility: An academic puzzle?", *Journal of Financial Economics*, Vol. 143, No 3, March 2022, pp. 1185-1208; Dumas, B., Kurshev, A. and Uppal, R., "Equilibrium Portfolio Strategies in the Presence of Sentiment Risk and Excess Volatility", *The Journal of Finance*, Vol. 64, No 2, April 2009, pp. 579-629; and Pástor, L. and Veronesi, P., "Political uncertainty and risk premia", *Journal of Financial Economics*, Vol. 110, No 3, December 2013, pp. 520-545.

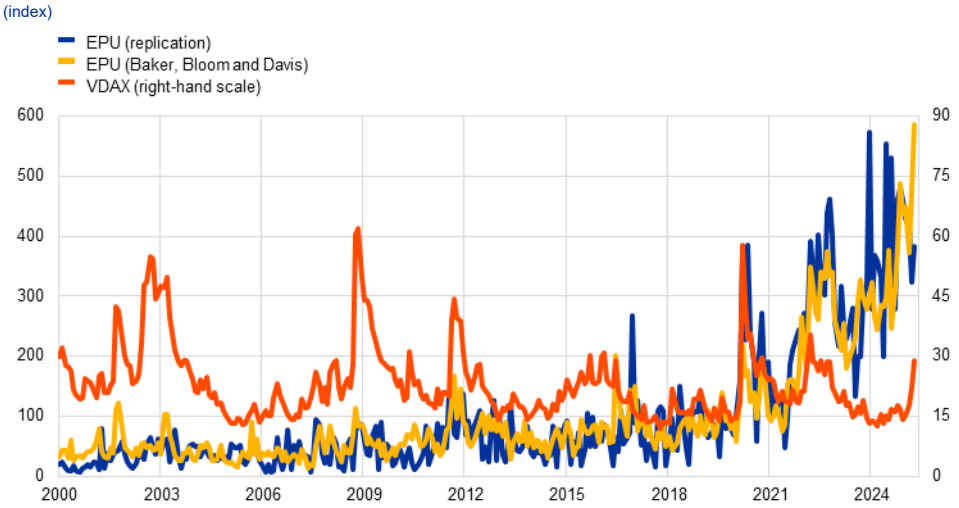
3 For the EPU indicators for the big four euro area countries, see Baker, Bloom and Davis, op. cit.

4 The methodology used to replicate the German EPU index follows Baker, Bloom and Davis, op. cit. The indicator is normalised by newspaper source and rescaled by the number of articles per month.

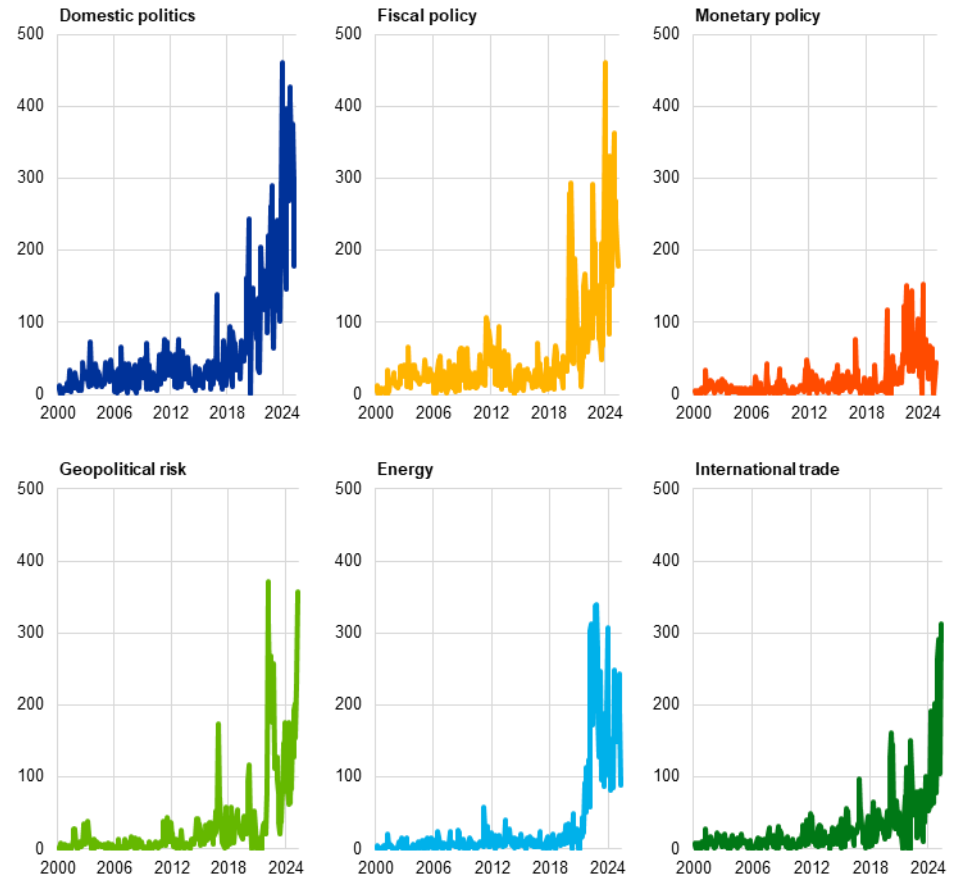
Chart B

EPU index and uncertainty categories

a) EPU index and implied market volatility in Germany



b) German EPU by topic



Sources: Dow Jones Factiva and ECB staff calculations.
Notes: Panel a) compares the original EPU index from Baker, Bloom and Davis and its replicated version with the VDAX. Panel b) shows the decomposition of topics extracted from the replicated EPU index using an LLM. Each article may be assigned to multiple categories. The latest observations are for April 2025.

A topic-based analysis of newspaper articles using a large language model (LLM) identifies domestic and global uncertainties as being behind the recent surge in German EPU. The analysis leverages the flexibility and contextual understanding of LLMs to extract different economic topics driving German EPU. Specifically, OpenAI's GPT-4o is used to identify multiple topics within each newspaper article.[5] Chart B, panel b), presents the six uncertainty categories identified. The main drivers of the increase in German EPU include domestic uncertainty, particularly related to politics and fiscal policy, and global uncertainty, captured by the geopolitical, energy and, more recently, trade categories. The rise in domestic and fiscal policy uncertainty reflects internal issues, including developments in the real economy, industrial policy, fiscal budget, political coalition dynamics and elections. Meanwhile, geopolitical risk intensified following Russia's unjustified invasion of Ukraine and during the escalation of the conflict in Gaza. Energy-related uncertainty also surged in the wake of the Russian invasion of Ukraine, amplified by Germany's heavy dependence on Russian gas at that time. Monetary policy uncertainty increased in line with post-pandemic inflation trends, as echoed by various market-based indicators. Finally, international trade uncertainty encompasses significant events and shocks, such as Brexit, the 2016 US presidential election, the COVID-19 pandemic and recent developments in US tariff policy, all of which tested global supply chain resilience.

A formal empirical analysis can help in understanding recent developments, including those following the US tariff announcement on 2 April, when the spike in financial market volatility aligned with persistently high levels of policy uncertainty amid a significant sell-off in equity markets. Drawing on US literature, this box examines whether the relationship between financial market volatility and German EPU has been affected by the "momentum" in the equity market, defined as the number of months with positive returns in the equity index over a given period. Specifically, the empirical analysis models implied volatility ("$\log(\mathrm{VDAX_t})$") as a function of the identified EPU categories.[6] Chart C plots the marginal effects of increases in the six uncertainty categories on implied stock market volatility, conditional on equity market performance. In the six months to April 2025, the equity market recorded four months with positive returns (highlighted by the grey columns in the panels).

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5 On the use of LLMs to extract uncertainty categories, see Audrino, F., Gentner, J. and Stalder, S., "Quantifying uncertainty: a new era of measurement through large language models", *SNB Working Papers*, No 12/2024, Swiss National Bank, October 2024.

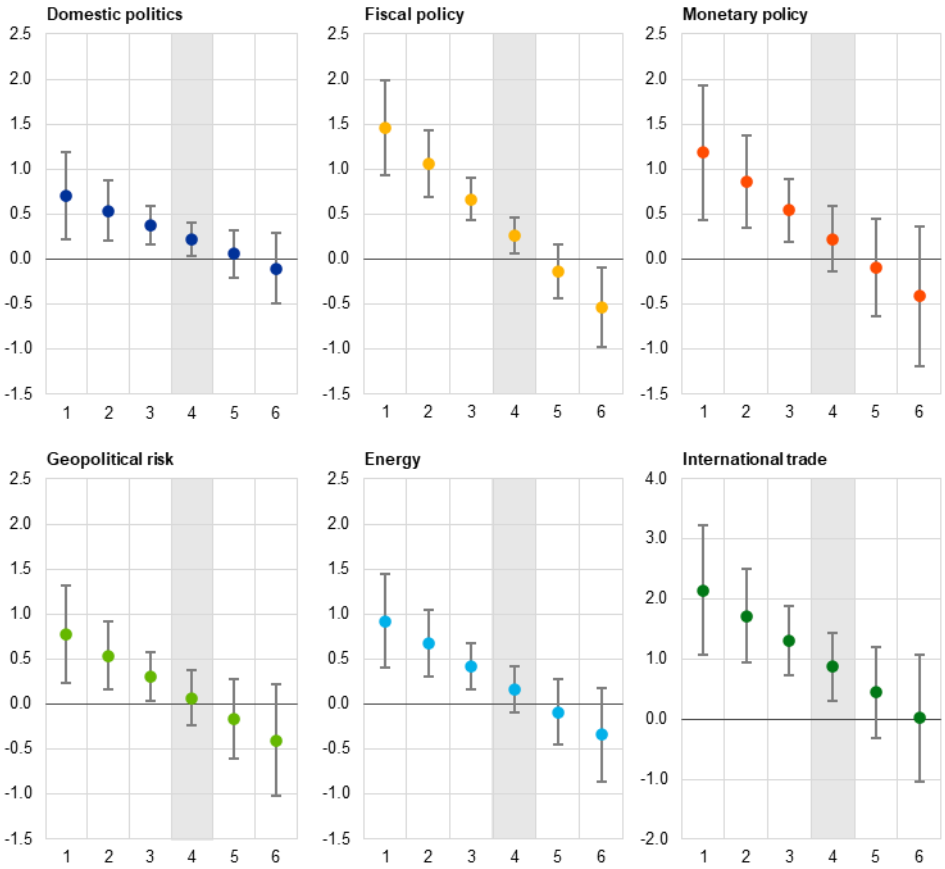
6 The empirical approach follows Białkowski, Dang and Wei, op. cit. It includes controlling for the log of the daily stock market return ("r_t"), the log of 30 days' realised volatility ("$\log(\mathrm{V_t})$"), and a proxy for equity market momentum constructed as the number of positive return months of the DAX index over the preceding six months ("PM_t"). The regression specification can be summarised as follows:

$$\log(\mathrm{VDAX_t}) = \beta_0 + \beta_1 \mathrm{PM_t} + \beta_2 (\mathrm{PM_t} \cdot \mathrm{EPU_{i,t}}) + \beta_3 \mathrm{EPU_{i,t}} + \beta_4 \mathrm{r_t} + \beta_5 \log(\mathrm{V_t}) + \beta_6 \mathrm{Trend_t} + \varepsilon_t$$

Chart C

Marginal effects of EPU categories on financial market volatility

(index)



Sources: Dow Jones Factiva and ECB staff calculations.
Notes: The panels plot the marginal coefficients of an increase in the German EPU categories on $\log(VDAX_t)$, conditional on different levels of the number of positive return months in the preceding six months, using daily observations spanning the sample period from 2 January 2000 to 16 April 2025. For trade policy uncertainty, the sample is constrained to 2015-2025. In the six months to April 2025 there were four positive return months (highlighted by the grey columns in the panels). The grey whiskers represent 95% confidence bands. The latest observations are for 16 April 2025.

The results indicate that a disconnect between financial market volatility and EPU is more likely to emerge when equity market momentum is strong. Conversely, co-movement is more likely when that momentum is weak. These results hold across different categories and are robust across various specifications. This pattern is consistent with the growing disconnect between financial market volatility and the EPU index observed in the six months to February 2025, a period of particularly strong equity market momentum. Similarly, the same findings also explain the closing of the gap between financial market volatility and EPU following the US tariff announcement on 2 April. During this episode, the spike in volatility aligned with persistently high policy uncertainty on the back of a significant stock market sell-off. A possible interpretation of these findings is that political uncertainty commands a larger risk premium during periods of weaker stock market performance, particularly when the uncertainty is perceived to have significant implications for economic outcomes.

6 Determinants of inflation expectations of firms in the SAFE

Prepared by Annalisa Ferrando, Sara Lamboglia and Judit Rariga

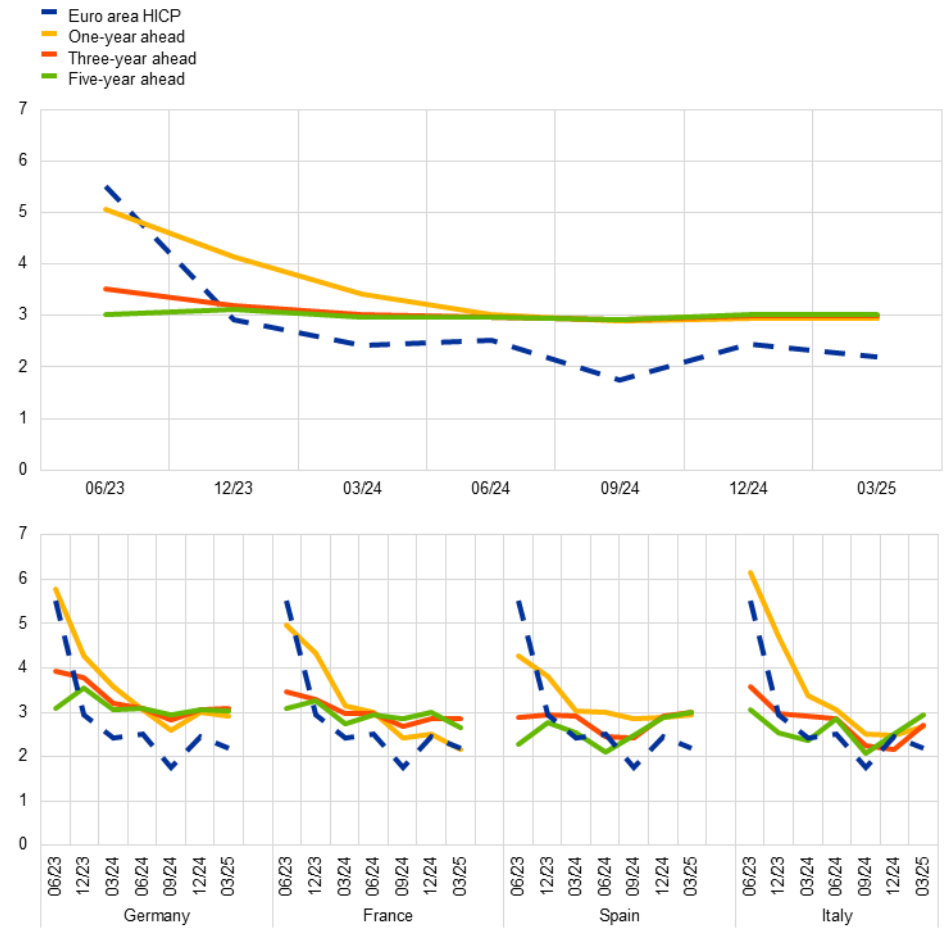
This box looks at the formation of the euro area inflation expectations captured in the survey on access to finance of enterprises (SAFE). Since June 2023 the SAFE has collected information on euro area inflation expectations for one-year, three-year and five-year horizons.[1] Since March 2024 it has also covered firms' perceived uncertainty about their five-year inflation expectations.

The short-term inflation expectations of firms are more volatile, also across countries, compared with medium-term and longer-term expectations, which are rather stable over time (Chart A). In June 2023 the median one-year ahead inflation expectations of firms stood at around 5%, reflecting the persistence of high inflation at that time. Gradually, median inflation expectations came down to close to 3% at the one-year horizon, with the dynamics of short-term inflation expectations broadly evolving in line with Harmonised Index of Consumer Prices (HICP) inflation. And yet, heterogeneities across countries still prevail. At the three-year and five-year horizons, firms' inflation expectations are rather stable and stand at 3%.

[1] For more information on the SAFE, see the article entitled "The Survey on the Access to Finance of Enterprises: monetary policy, economic and financing conditions and inflation expectations", *Economic Bulletin*, Issue 7, ECB, 2024. Following two pilot rounds, the SAFE became quarterly in March 2024.

Chart A

SAFE inflation expectations



Sources: SAFE, Eurostat and ECB calculations.
Notes: This chart shows the survey-weighted median of euro area firms' expectations for euro area inflation in one year, three years and five years. The statistics are computed after trimming the data at the country-specific first and 99th percentiles. Quarterly SAFE data are for survey rounds 30-34 (January-March 2024 to January-March 2025), and semi-annual data for earlier survey rounds. Euro area HICP refers to the annual rate of growth of the HICP in the euro area.

Inflation expectations are influenced by firm characteristics, by sector and by country of operation across all horizons, while the correlation with actual euro area inflation is highest for the short-term horizon (Chart B). A regression analysis helps identify the main determinants of inflation expectations. It considers factors such as firm demographics (including age, size, exporter status, ownership and past turnover trends), future business decisions related to investment, employment and turnover and euro area inflation rates, and the industry and country of operation of the firms.[2] Firm-specific factors aim to capture firm fundamentals and

[2] These factors are common to several studies. For example, see Bryan, M., Meyer, B. and Parker, N., "The inflation expectations of firms: what do they look like, are they accurate, and do they matter?", FRB Atlanta Working Paper, No 2014-27, Federal Reserve Bank of Atlanta, 2015.

serve as a proxy for how informed a firm is, whereas industry and country fixed effects account for the broader macroeconomic environment influencing the firm.[3]

The analysis reveals that smaller, younger and non-exporting firms, along with those in the service and construction sectors, tend to expect higher inflation at the one-year, three-year and five-year horizons. This is likely related to the fact that small firms often have limited information when forming their expectations and are also less exposed to international markets.[4] Considering all survey rounds, among major countries, firms in Germany report higher inflation expectations on average than those in other euro area countries. In addition, firms across all countries consistently report a positive relation with realised euro area inflation across all horizons, with the strength of the relationship being highest for the short-term horizon.

3 These characteristics may include shared historical inflation experiences, fiscal policy environments, and cultural and behavioural norms – all factors that influence how firms within the same country respond similarly to potential inflationary pressures and form their inflation expectations.

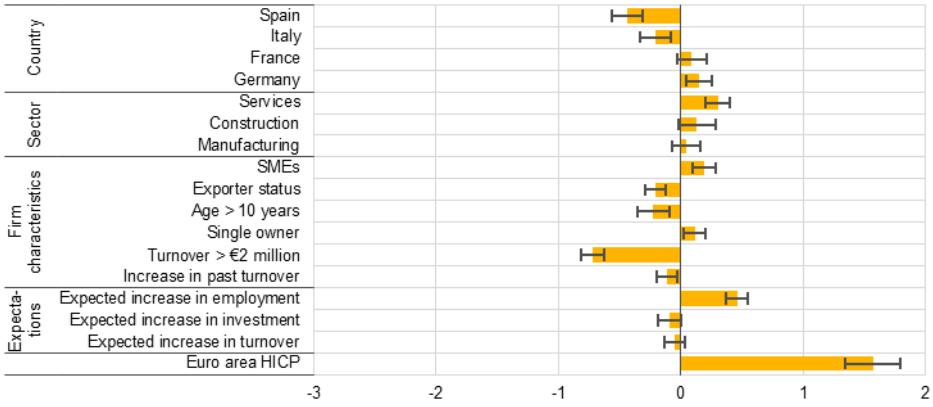
4 See Baumann, U., Ferrando, A., Georgarakos, D., Gorodnichenko, Y. and Reinelt, T., "SAFE to update inflation expectations? New survey evidence on euro area firms", *Working Paper Series*, No 2949, ECB, Frankfurt am Main, 2024.

Chart B

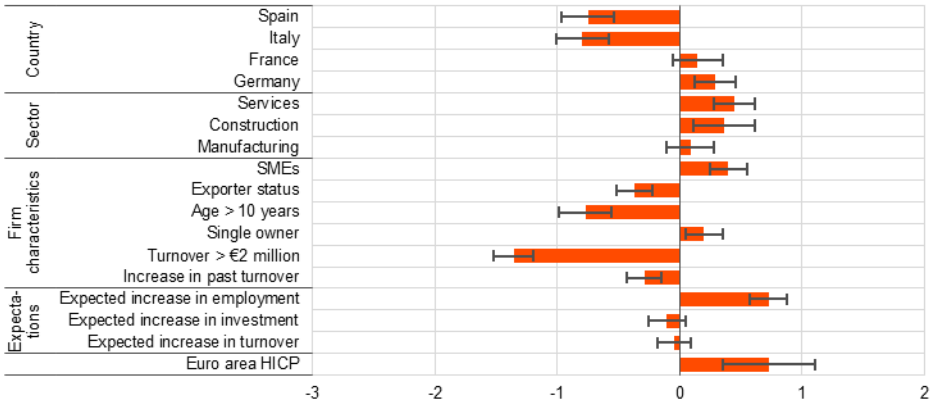
Determinants of firms' inflation expectations at different horizons

(percentage points)

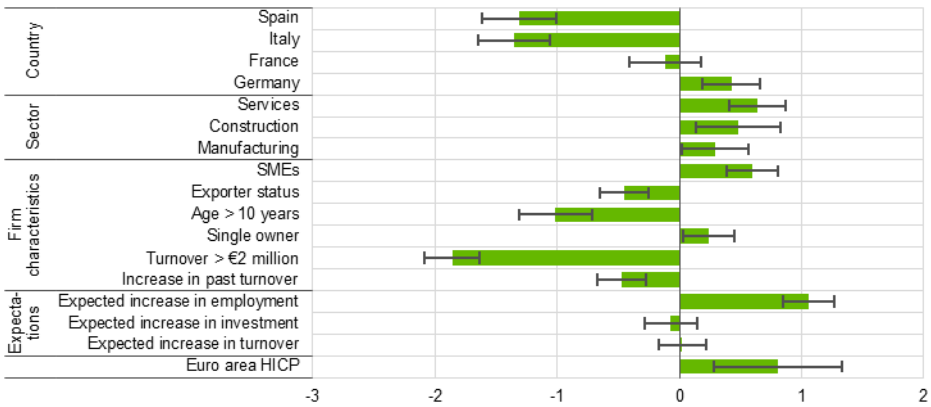
a) One-year ahead



b) Three-year ahead



c) Five-year ahead

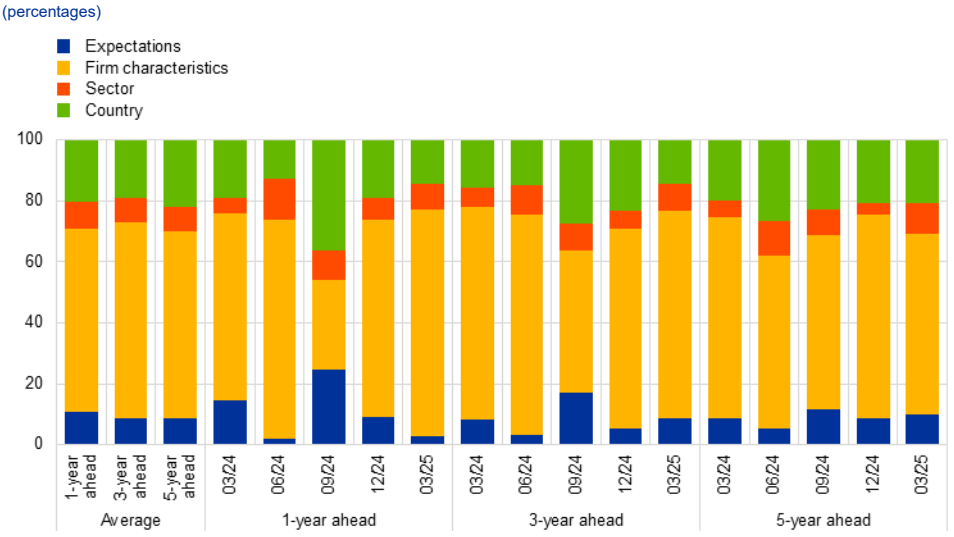


Sources: SAFE, Eurostat and ECB calculations.
Notes: This chart shows the coefficient estimates from regressions of the one-year, three-year and five-year ahead inflation expectations for the covariates indicated on the y-axis. The covariates are all measured as dummy variables except from the euro area HICP. SMEs are firms with less than 250 employees and "increase" signals a dummy variable equal to 1 if firms report an increase in a specific factor, and 0 otherwise. For the country variable, the omitted category includes all other euro area countries, while for sector, the omitted category is trade. Euro area HICP is the annual rate of growth of the Harmonised Index of Consumer Prices in the euro area. Whiskers show 95% confidence intervals. Estimation is based on the survey rounds 30-34 (quarterly data from January-March 2024 to January-March 2025), and semi-annual data for earlier survey rounds.

Most of the variation in inflation expectations across all horizons can be attributed to individual firm characteristics, followed by country-specific factors (Chart C). An additional step in analysing inflation expectations is determining how much of their variation can be attributed to the factors identified above.[5] On average, across horizons and over time, firm characteristics contribute to most of this variation (62%), while the contribution of country fixed effects is 21%. Expectations about future business decisions and industry affiliation account for a similar percentage, each contributing less than 10%. Examining trends across survey rounds: in September 2024 country fixed effects and expectations about investment and employment temporarily had increased influence on inflation expectations for short-term and medium-term horizons. In contrast, the relative importance of factors influencing inflation expectations over longer horizons showed greater stability over time.

Chart C

Main drivers of inflation expectations of firms over time



Sources: SAFE and ECB calculations.
Notes: This chart shows the decomposition of the adjusted R-squared of regressions in Chart B using Shapley values. For a description of the variables see the notes to Chart B. Estimations are based on the survey rounds 30-34 (quarterly data from January-March 2024 to January-March 2025), and semi-annual data for earlier survey rounds.

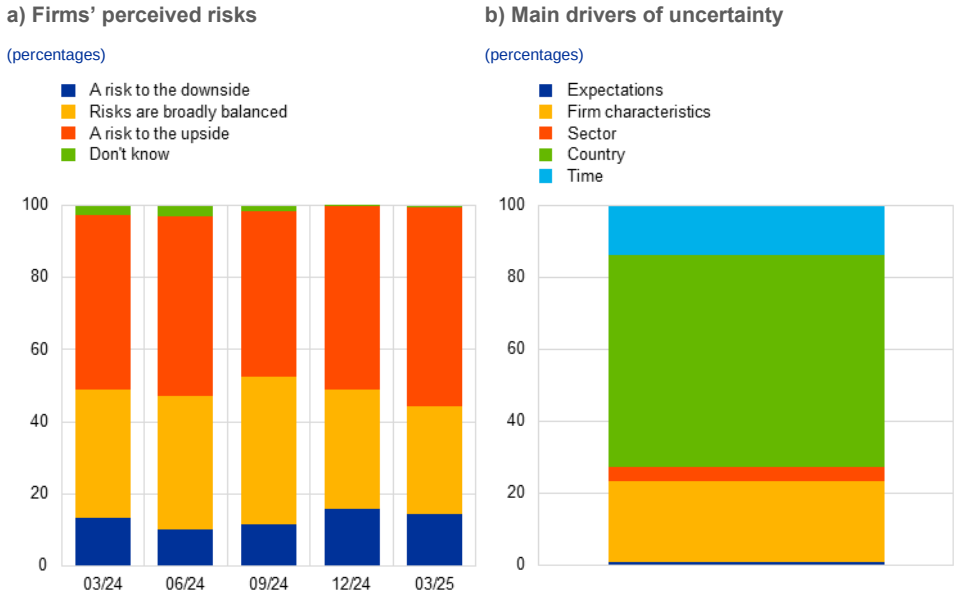
Since early 2024 more than half of euro area firms considered uncertainty surrounding their five-year inflation expectations to be tilted to the upside (Chart D, panel a). Starting in March 2024, firms were asked whether they considered the risks to the long-term inflation outlook to be balanced or tilted to the upside or downside relative to their baseline expectations. In the most recent survey for the first quarter of 2025, 30% of firms perceived the risks to their inflation outlook over the next five years as broadly balanced, while over half identified upside risks and around 14% saw the risks tilted to the downside.

5 Technically, the Shapley-Owen method is used to measure the share of R-squared of the four groups of variables (firm characteristics, sector, country, expectations about business decisions) included in the firm-level regression analysis. The analysis at the survey-round level does not allow to estimate the contribution of euro area HICP.

The level of uncertainty about a firm's long-term inflation outlook is mainly influenced by the country where it operates (Chart D, panel b). The factors influencing inflation expectations likely also explain the degree of variance firms attach to their expectations.[6] By using a similar approach as that outlined above, we identify the share of variation in uncertainty attributable to the various factors. Country-specific features account for most of the overall variation, followed by firm characteristics. This finding highlights, once again, the importance of where a business is located in shaping its long-term inflation expectations.

Chart D

Uncertainty surrounding the five-year ahead inflation expectations and factors accounting for its variation



Sources: SAFE and ECB calculations.
Notes: Panel a) shows survey-weighted percentages of firms' subjective uncertainty regarding the inflation outlook over the next five years. Panel b) shows the Shapley values decomposition of the adjusted R-squared of a regression of uncertainty (a dummy equal to 1 if the firm reports upside risks to its five-year ahead inflation expectations) on the covariates described in the notes to Chart B. Estimations are based on the survey rounds 30-34 (quarterly data from January-March 2024 to January-March 2025).

Overall, understanding what influences the expectations of firms about inflation is crucial for assessing how changes in their business environment might affect the way they form their expectations. Analysis reveals that, in addition to firms' individual characteristics, the countries where they operate play a significant role. This highlights the importance of country-specific common factors that lead firms to adjust their inflation expectations in a similar way.

6 Similar models are found in Baumann et al., op.cit., and McClure, E. M., Yaremko, V., Coibion, O. and Gorodnichenko, Y., "The Macroeconomic Expectations of U.S. Managers", *Journal of Money, Credit and Banking*, forthcoming.

7 Liquidity conditions and monetary policy operations from 5 February to 22 April 2025

Prepared by Samuel Bieber and Anne-Lise Nguyen

This box describes the Eurosystem liquidity conditions and monetary policy operations in the first and second reserve maintenance periods of 2025. Together, these two maintenance periods ran from 5 February to 22 April 2025 (the "review period").

Average excess liquidity in the euro area banking system continued to decline. Liquidity provision decreased, owing to lower Eurosystem holdings under the asset purchase programme (APP) and pandemic emergency purchasing programme (PEPP) following the discontinuation of APP reinvestments at the beginning of July 2023 and PEPP reinvestments at the end of December 2024. The decline in liquidity provision also reflects the maturing of the last operation under the third series of targeted longer-term refinancing operations (TLTRO III) on 18 December 2024, because this operation continued to have an impact on the average figures for the previous review period. The decrease was partly offset by the continuing reduction in liquidity absorption through net autonomous factors.

Liquidity needs

The average daily liquidity needs of the banking system, defined as the sum of net autonomous factors and reserve requirements, decreased by €69 billion to €1,354 billion over the review period. This reflected the fact that liquidity-absorbing autonomous factors increased by less than liquidity-providing autonomous factors (Table A). Minimum reserve requirements rose by €3 billion to €167 billion, having only a marginal effect on the change in aggregate liquidity needs.

Liquidity-absorbing autonomous factors increased by €61 billion over the review period, owing mainly to a rise in other autonomous factors. On average, net other autonomous factors grew by €63 billion. This was due primarily to an increase of around €79 billion in the revaluation accounts as a result of higher gold prices (see the paragraph on liquidity-providing autonomous factors below), which was partially offset by a decrease in capital and reserves following the losses in 2024. Government deposits fell slightly by €2 billion to €109 billion. The overall decrease in this item since 2022 reflects the normalisation of cash buffers held by national treasuries and changes in the remuneration of government deposits held with the Eurosystem that have made it financially more attractive to place funds in the market. The average value of banknotes in circulation was stable over the review period, at €1,569 billion. Banknote demand continued to be broadly stable, having peaked in July 2022.

Liquidity-providing autonomous factors rose by €133 billion, owing primarily to an increase of €85 billion in net foreign assets. This rise in net foreign asset

holdings was driven mainly by higher gold prices. Net assets denominated in euro grew by €48 billion over the review period.

Table A

Eurosystem liquidity conditions

Liabilities

(averages; EUR billions)

	Current review period: 5 February-22 April 2025						Previous review period: 23 October 2024-4 February 2025	
	First and second maintenance periods		First maintenance period: 5 February-11 March 2025		Second maintenance period: 12 March-22 April 2025		Seventh and eighth maintenance periods	
Liquidity-absorbing autonomous factors	2,801	(+61)	2,772	(+16)	2,825	(+53)	2,739	(+54)
Banknotes in circulation	1,569	(-0)	1,567	(-10)	1,571	(+4)	1,569	(+7)
Government deposits	109	(-2)	119	(+12)	101	(-18)	111	(-7)
Other autonomous factors (net)[1)]	1,122	(+63)	1,086	(+14)	1,152	(+67)	1,059	(+54)
Current accounts above minimum reserve requirements	5	(-0)	6	(-1)	5	(-0)	6	(-1)
Minimum reserve requirements[2)]	167	(+3)	167	(+3)	166	(-0)	164	(+1)
Deposit facility	2,825	(-92)	2,847	(-58)	2,807	(-40)	2,917	(-115)
Liquidity-absorbing fine-tuning operations	0	(+0)	0	(+0)	0	(+0)	0	(+0)

Source: ECB.
Notes: All figures in the table are rounded to the nearest €1 billion. Figures in brackets denote the change from the previous review or maintenance period.
1) Computed as the sum of the revaluation accounts, other claims and liabilities of euro area residents, and capital and reserves.
2) Memo item that does not appear on the Eurosystem balance sheet and should therefore not be included in the calculation of total liabilities.

Assets

(averages; EUR billions)

	Current review period: 5 February-22 April 2025						Previous review period: 23 October 2024-4 February 2025	
	First and second maintenance periods		First maintenance period: 5 February-11 March 2025		Second maintenance period: 12 March-22 April 2025		Seventh and eighth maintenance periods	
Liquidity-providing autonomous factors	1,613	(+133)	1,560	(+32)	1,657	(+97)	1,480	(+93)
Net foreign assets	1,256	(+85)	1,219	(+21)	1,286	(+67)	1,170	(+71)
Net assets denominated in euro	357	(+48)	341	(+12)	371	(+30)	309	(+22)
Monetary policy instruments	4,185	(-162)	4,231	(-73)	4,146	(-84)	4,346	(-154)
Open market operations	4,185	(-162)	4,231	(-73)	4,146	(-84)	4,346	(-154)
Credit operations	26	(-14)	27	(-2)	24	(-2)	40	(-37)
- MROs	9	(-1)	8	(-2)	10	(+2)	10	(+5)
- Three-month LTROs	16	(+2)	18	(+1)	15	(-4)	14	(+5)
- TLTRO III	0	(-16)	0	(+0)	0	(+0)	16	(-46)
Outright portfolios[1)]	4,159	(-147)	4,204	(-71)	4,122	(-82)	4,306	(-118)
Marginal lending facility	0	(+0)	0	(+0)	0	(-0)	0	(+0)

Source: ECB.
Notes: All figures in the table are rounded to the nearest €1 billion. Figures in brackets denote the change from the previous review or maintenance period. MROs stands for main refinancing operations, LTROs for longer-term refinancing operations and TLTRO III for the third series of targeted longer-term refinancing operations.
1) With the discontinuation of net asset purchases, the individual breakdown of outright portfolios is no longer shown.

Other liquidity-based information

(averages; EUR billions)

	Current review period: 5 February-22 April 2025						Previous review period: 23 October 2024-4 February 2025	
	First and second maintenance periods		First maintenance period: 5 February-11 March 2025		Second maintenance period: 12 March-22 April 2025		Seventh and eighth maintenance periods	
Aggregate liquidity needs[1)]	1,354	(-69)	1,378	(-14)	1,334	(-44)	1,423	(-39)
Net autonomous factors[2)]	1,188	(-72)	1,211	(-17)	1,168	(-44)	1,260	(-40)
Excess liquidity[3)]	2,830	(-92)	2,852	(-59)	2,812	(-40)	2,923	(-116)

Source: ECB.
Notes: All figures in the table are rounded to the nearest €1 billion. Figures in brackets denote the change from the previous review or maintenance period.
1) Computed as the sum of net autonomous factors and minimum reserve requirements.
2) Computed as the difference between autonomous liquidity factors on the liabilities side and autonomous liquidity factors on the assets side. For the purposes of this table, items in the course of settlement are also added to net autonomous factors.
3) Computed as the sum of current accounts above minimum reserve requirements and the recourse to the deposit facility minus the recourse to the marginal lending facility.

Interest rate developments

(averages; percentages and percentage points)

	Current review period: 5 February-22 April 2025				Previous review period: 23 October 2024-4 February 2025			
	First maintenance period: 5 February-11 March 2025		Second maintenance period: 12 March-22 April 2025		Seventh maintenance period: 23 October-17 December 2024		Eighth maintenance period: 18 December 2024-4 February 2025	
MROs	2.90	(-0.25)	2.65	(-0.25)	3.40	(-0.25)	3.15	(-0.25)
Marginal lending facility	3.15	(-0.25)	2.90	(-0.25)	3.65	(-0.25)	3.40	(-0.25)
Deposit facility	2.75	(-0.25)	2.50	(-0.25)	3.25	(-0.25)	3.00	(-0.25)
€STR	2.67	(-0.25)	2.42	(-0.25)	3.16	(-0.25)	2.92	(-0.25)
RepoFunds Rate Euro	2.73	(-0.23)	2.49	(-0.25)	3.23	(-0.26)	2.97	(-0.26)

Sources: ECB, CME Group and Bloomberg.
Notes: Figures in brackets denote the change in percentage points from the previous review or maintenance period. MROs stands for main refinancing operations and €STR for euro short-term rate.

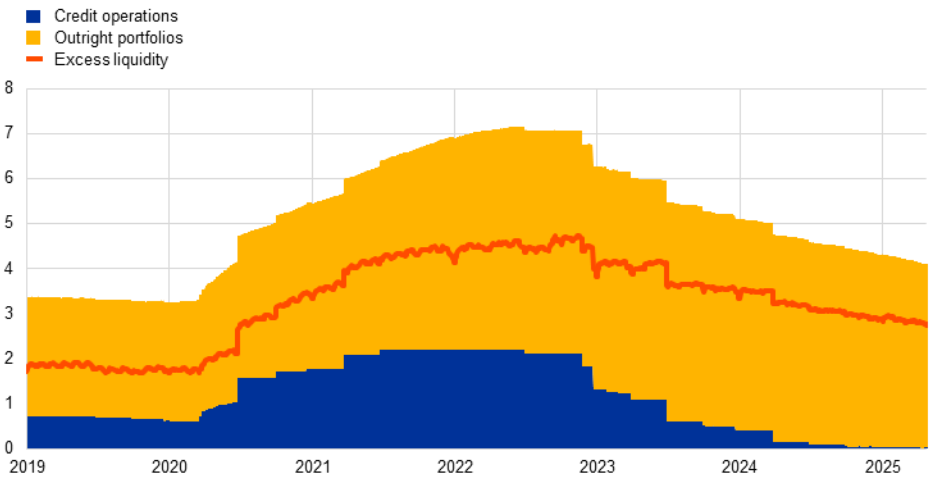
Liquidity provided through monetary policy instruments

The average amount of liquidity provided through monetary policy instruments decreased by €162 billion to €4,185 billion over the review period (Chart A). The decline in liquidity supply was driven primarily by a reduction in Eurosystem outright portfolios and, to a lesser extent, in credit operations.

Chart A

Changes in daily liquidity provided through open market operations and excess liquidity

(EUR trillions)



Source: ECB.
Note: The latest observations are for 22 April 2025.

The average amount of liquidity provided through outright portfolio holdings decreased by €147 billion to €4,159 billion over the review period. This decline

was due to the continued maturing of APP and PEPP holdings in the absence of any reinvestments.[1]

The average amount of liquidity provided through credit operations fell by €14 billion to €26 billion over the review period. This decrease was largely due to the reduction in outstanding TLTRO III amounts following the maturing of the last TLTRO III operation on 18 December 2024 (€29 billion). The average outstanding amount of main refinancing operations (MROs) fell slightly by €1 billion to €9 billion, while the outstanding amount of three-month longer-term refinancing operations (LTROs) rose slightly by €2 billion to €16 billion. Banks' relatively limited participation in these regular operations, despite the TLTRO repayments, reflects their comfortable liquidity position in aggregate and the availability of alternative funding sources at attractive market rates and maturities.

Excess liquidity

Average excess liquidity decreased by €92 billion over the review period to stand at €2,830 billion (Chart A). Excess liquidity is the sum of bank reserves held in excess of minimum reserve requirements and banks' recourse to the deposit facility net of their recourse to the marginal lending facility. It reflects the difference between the total liquidity provided to the banking system via monetary policy instruments and the liquidity needed by banks to cover their minimum reserves. Having peaked at €4,748 billion in November 2022, excess liquidity has since declined steadily.

Interest rate developments

During the review period the Governing Council twice decided to cut all three key ECB interest rates – including the deposit facility rate, through which it steers the monetary policy stance – by 25 basis points. This brought the rates on the deposit facility, MROs and marginal lending facility down to 2.25%, 2.40% and 2.65% respectively with effect from the day immediately after the end of the review period.

The evolution of the average euro short-term rate (€STR) over the review period reflected the ECB's rate cuts, while maintaining a negative spread relative to the deposit facility rate. On average, the €STR was 8.4 basis points below the deposit facility rate over the review period, remaining unchanged compared with the seventh and eighth maintenance periods of 2024. The pass-through of policy rate changes to unsecured money market rates was complete and immediate.

The pass-through of policy rate changes to repo rates was also smooth and immediate. The average euro area repo rate, as measured by the RepoFunds Rate

[1] Securities held in the outright portfolios are carried at amortised cost and adjusted at the end of each quarter, which has a marginal impact on the changes in the outright portfolios.

Euro index, remained closer to the deposit facility rate than to the €STR. On average, the repo rate was 1.3 basis points below the deposit facility rate over the review period, whereas it was 2.6 basis points below it in the seventh and eighth maintenance periods of 2024. The continued gradual narrowing of the spread between repo rates and the deposit facility rate reflects the increasing availability of collateral as a result of higher net issuance, the release of collateral pledged against maturing/repaid TLTROs and the decline in the Eurosystem APP and PEPP holdings. Higher demand from leveraged investors to finance long positions in bonds further contributed to the upward pressure on repo rates.

Articles

1 The transmission of monetary policy: from mortgage rates to consumption

Prepared by Pedro Baptista, Maarten Dossche, Andrew Hannon, Dorian Henricot, Omiros Kouvavas, Davide Malacrino and Larissa Zimmermann

1 Introduction

Monetary policy affects consumption via multiple channels, with different effects on households' decisions. By preserving price stability, monetary policy supports consumption in the medium run, as it protects the purchasing power of households. In the short run, however, tighter monetary policy typically dampens private consumption.[1] First, higher interest rates reduce current consumption, as they increase the attractiveness of savings via the "intertemporal substitution channel". Consumption decisions also respond to changes in policy rates as they affect the prices of financial and real assets and generate wealth effects (the balance sheet channel of monetary policy). In parallel, interest rate changes affect the real economy and the evolving labour market conditions, thereby changing income prospects, with consequences for households' consumption decisions. Monetary policy also affects household finances via its impact on cash flows from household debts and assets. Higher interest rates raise interest payments by indebted households, reducing the cash flow available for spending, while increasing the interest revenues on interest-bearing assets, raising the cash flow for asset holders. Given these two counteracting forces, the size and sign of the overall cash flow effects for any individual household depend on their net interest rate position.[2] This mechanism is referred to as the cash flow channel of monetary policy.

Following policy rate hikes, the cash flow channel of monetary policy may pose persistent headwinds to consumption. This article analyses the impact of monetary policy decisions via changes in debt servicing costs and particularly mortgage payments, while abstracting from other direct channels and general

1 See, for example, Peersman, G. and Smets, F., "The monetary transmission mechanism in the euro area: evidence from VAR analysis", in Angeloni, I., Kashyap, A.K. and Mojon, B. (eds.), *Monetary Policy Transmission in the Euro Area*, Cambridge University Press, Cambridge, 2003.

2 Auclert, A., "Monetary Policy and the Redistribution Channel", *American Economic Review*, Vol. 109, No 6, 2019, pp. 2333-67.

equilibrium effects.[3] This focus is dictated by the relevance of mortgages for euro area households, as one in four households has a mortgage, as well as by the heterogeneity of the euro area mortgage market across countries and income groups. To this end, we present new evidence using household-level information on the timing of changes in mortgage payments and consumption from the ECB's Consumer Expectations Survey (CES). In particular, we show that due to (i) the higher prevalence of fixed-rate mortgages (FRMs) compared with the past, and (ii) the smaller gap between interest rates on outstanding amounts and interest rates on new loans compared with the start of previous monetary policy tightening cycles, the impact on consumption through the mortgage channel is likely to be more protracted in the 2022-23 monetary policy tightening cycle. We aim to quantify this specific effect. Other factors may act in the opposite direction, such as positive developments in real incomes due to the recovery from the recent crises, and the possible reductions of high savings, which were to some extent driven by uncertainty or income misperceptions.[4] The rest of this article will abstract from these other channels and focus exclusively on quantifying the delayed tightening effects through the cash flow channel via mortgages.

2 Characterising the euro area mortgage market

Differences in the structure of mortgage contracts across countries shape the timing of the effects. During the 2022-23 tightening period, interest payments on adjustable-rate mortgages (ARMs) reacted quickly. However, for many households the increase in mortgage payments is still to come, as their temporarily fixed rates (e.g. for five or ten years) expire and are repriced at new market rates. The new rates are likely to be higher since many of these loans were contracted in a period of lower mortgage rates. In the euro area, about one-quarter of mortgages are pure ARMs, while a little over one-third have rates that are fixed for longer than ten years. The remaining mortgages are fixed for several years and are then set to be repriced (Chart 1). The distribution of these fixation periods means there will be a staggered series of mortgage rate repricings in the coming years, leading to higher interest rates. In total, about 10% of all loans currently have fixed interest rates that will be adjusted in the next three years, while 20% will be repriced by 2030.[5] These patterns differ across countries. Among the largest euro area economies, ARMs are traditionally more prevalent in Spain and, to a lesser extent, Italy, while at least some level of interest rate fixation is more common in Germany and France. In a nutshell,

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3 Di Maggio, M., Kermani, A., Keys, B.J., Piskorski, T., Ramcharan, R., Seru, A. and Yao, V., "Interest Rate Pass-Through: Mortgage Rates, Household Consumption, and Voluntary Deleveraging," *American Economic Review*, Vol. 107, No 11, 2017, pp. 3550-88; Floden, M., Kilstrom, M., Sigurdsson, J. and Vestman, R., "Household Debt and Monetary Policy: Revealing the Cash-Flow Channel", *Swedish House of Finance Research Paper*, No 16-8, 2017; Kaplan, G., Moll, B. and Violante, G.L., "Monetary Policy According to HANK", *American Economic Review*, Vol. 108, No 3, 2018, pp. 697-743; and Slacalek, J., Tristani, O. and Violante, G.L., "Household balance sheet channels of monetary policy: A back of the envelope calculation for the euro area", *Journal of Economic Dynamics and Control,* Vol. 115, 2020.

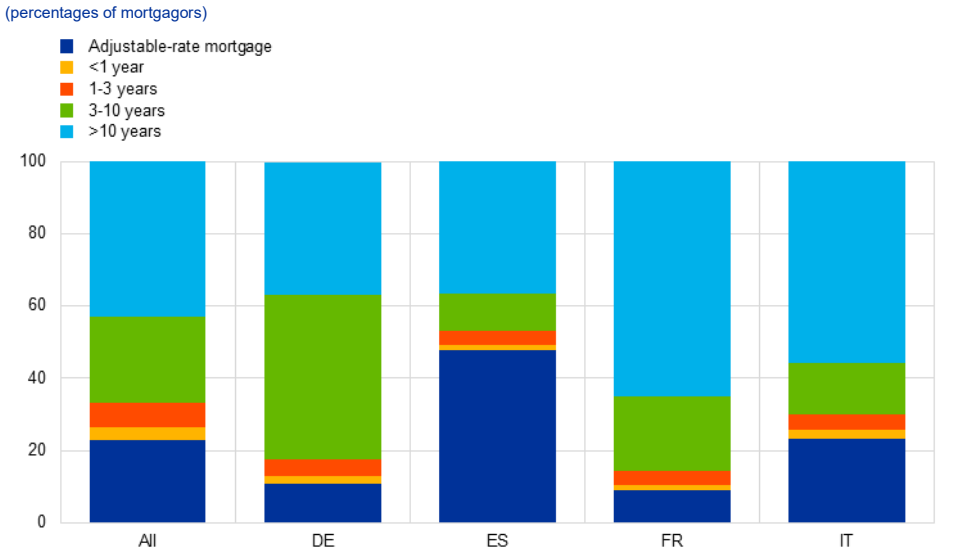
4 See, for example, the boxes entitled "What explains the high household saving rate in the euro area?", *Economic Bulletin*, Issue 8, ECB, 2024, and "Are real incomes increasing or not? Household perceptions and their role for consumption", *Economic Bulletin*, Issue 1, ECB, 2025.

5 All numbers reported are weighted by population weights and the size of the loan.

the prevailing loan structure implies that the effect of interest rate changes on mortgage payments is subject to considerable lag.

Chart 1

Remaining interest rate fixation period by country



Sources: ECB (CES) and ECB calculations.
Notes: The statistics are computed from the CES housing module administered in February 2025. "All" refers to all countries covered in the CES sample: Belgium, Germany, Ireland, Greece, Spain, France, Italy, Netherlands, Austria, Portugal and Finland. The shares are computed over respondents who have a mortgage outstanding and represent percentages of respondents rescaled by the annual survey population weights and individual loan outstanding balances. The latest data are for February 2025.

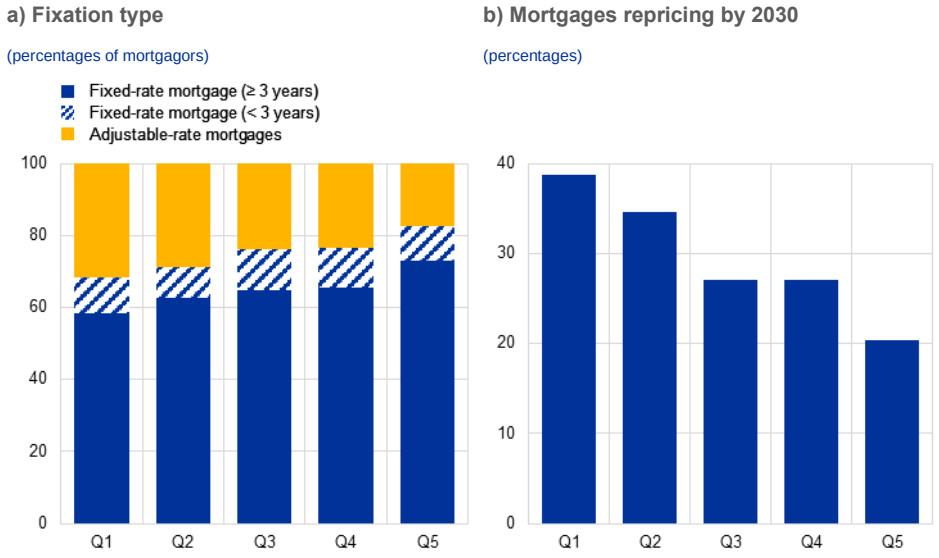
The timing of mortgage repricing also differs within countries, with shorter rate fixation periods more common for lower-income households. Lower-income households with a mortgage are more likely to have ARMs or FRMs with rate resets due in the next few years. Among the bottom 20% of the within-country income distribution, 32% of mortgages are ARMs, compared with 17% for the highest quintile (Chart 2, panel a). Additionally, among lower-income households, even mortgages set to reprice in more than three years have shorter average fixation than the same type of mortgages held by richer households. As a result, around 39% of all loans to lower-income households are set to reprice by 2030 compared with only around 20% for the highest income quintile (Chart 2, panel b). The share of mortgagors exposed to an increase in mortgage payments in the coming years is thus much higher among the poorest than the richest, as the distribution of mortgage types differs across incomes, even though the reduction in interest rates as from June 2024 will mitigate the impact. Financial constraints, information constraints and financial literacy may explain this. First, it is generally more expensive in the short term to choose an FRM when prevailing market rates are low. This leads poorer or more liquidity-constrained households to opt for contracts that are more attractive in the short term in periods of low interest rates, which are generally ARMs. Second, higher-income households have access to information and services that improve choices (e.g. access to loan brokers or other dedicated services). Finally, higher-income households tend to have higher levels of financial literacy.[6] This may explain

[6] See Lusardi, A. and Mitchell, O., "The Economic Importance of Financial Literacy: Theory and Evidence", *Journal of Economic Literature*, Vol. 52, 2014, pp. 5-44.

why they are more likely to choose mortgages that are fixed for longer periods (during a low interest rate regime), despite the higher up-front cost which partly reflects the cost of hedging against interest rate risk when that risk is costly.

Chart 2

Remaining interest rate fixation period and share of repricing mortgages by income quintile



Sources: ECB (CES) and ECB calculations.
Notes: The chart shows differences in mortgage fixation patterns across income groups, from Q1 (lowest income quintile) to Q5 (highest income quintile). Panel a) depicts the structure of fixation of mortgage loans for each income quintile – the quintiles are computed among all households in each country. The dashed blue section refers to fixed-rate loans that are set to be repriced within the next three years. The blue section corresponds to the share of FRMs with longer fixation horizons. Panel b) depicts the average share of loans repricing per year (percentage exposed to interest rate risk) across the projected years (2025-30) by income quintile. The latest data are for February 2025.

3 Tightening in the pipeline: simulating the evolution of average mortgage rates on outstanding balances

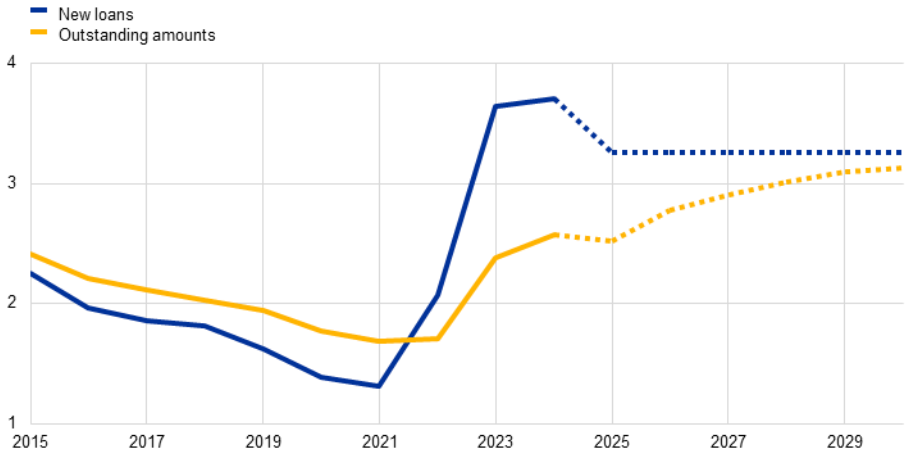
Since the ECB started cutting its policy rates, the average interest rate on the stock of mortgages has so far remained broadly flat despite the decline in rates on new loans. This is due to two distinct factors. First, the decline in market rates drove the rate on ARMs down, but mortgages with limited fixation periods are still repricing at higher rates than the ones at which they were issued. Second, loans that were issued at especially favourable lending conditions in the past are gradually being paid down, while new mortgages are issued at new conditions. In other words, the pass-through of the lending rate on new loans to the rate on the stock of loans will depend not only on lending rate developments, but also on loan dynamics and the joint distribution of residual maturities, residual fixation periods and average lending rates currently paid on the stock of loans. Given that mortgages have long maturities, this joint distribution will itself depend on the recent history of monetary policy cycles and lending dynamics. Standard time series models estimated over short samples are ill-suited to capture how these different factors play out.

Using detailed CES micro data, we developed a "micro-simulation" approach to project developments of household-level loan interest payments, which can then be aggregated. The micro-simulation approach allows us to simulate rates on the stock of mortgages consistent with the prevailing distribution of mortgages. This approach utilises the complete distribution of household-level loans, including outstanding amounts, interest rates paid, time until the next interest rate reset and maturity. We assume lending rates on new loans remain constant at their latest available level (dashed blue line in Chart 3, panel a). This allows us to abstract from further upward pressure on long-term interest rates that is currently priced in in forward curves. Next, we calculate the trajectory of the lending rate on each individual loan by adjusting the interest rate of existing loans with expiring fixation periods in the year they reprice (while doing so each year for ARMs) with the expected interest rate on new mortgages. Loans that are set to reach maturity by the end of any projection year are removed from the stock. Finally, we add new loans, randomly sampled from the survey, at the simulated rate for new loans, while assuming that lending growth also remains constant at its last observed level. We also calculate a risk premium by income quintile using mortgagors' income information, calibrate it to the country-level risk premia, and apply it to the country-specific simulations for both new loans and repricing mortgages. The interest rates of adjustable, fixed and new mortgages are then aggregated and weighted by a combination of population weights and outstanding balances.

Chart 3
Lending rate simulations

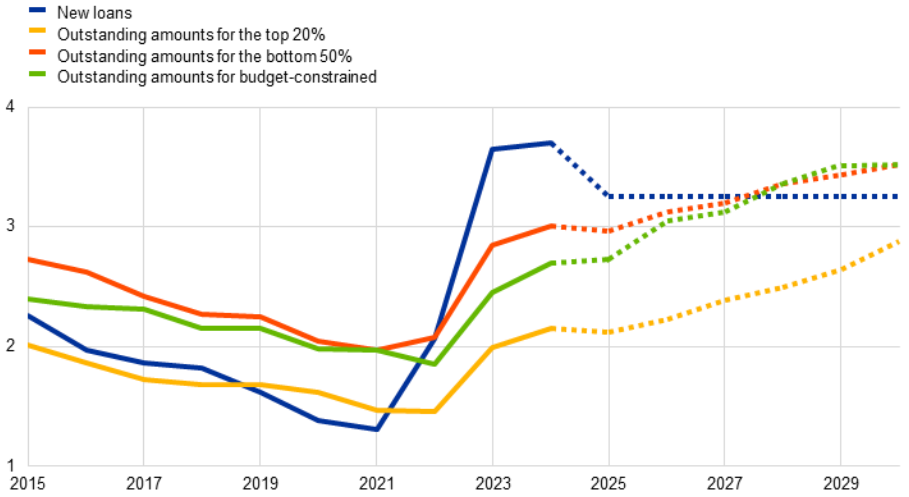
a) Aggregate

(percentages per annum)



b) By income group

(percentages per annum)



Sources: ECB (MIR, BSI, CES) and ECB calculations.
Notes: The chart depicts the interest rate paths for the rate on new loans (yearly average) and the outstanding amounts (end-of-year) of household mortgages. The micro-simulation (panel a: yellow line, panel b: yellow, red and green lines) takes into account the full set of available information at the individual level, and from 2025 to 2030 projects the rate on outstanding amounts using information on the remaining interest rate fixation period of mortgages at the individual level. For each projected year we calculate the interest rate based on the sampled stock of mortgages from February 2025, by adjusting the interest rate of the existing loans with expiring fixation periods in the year they expire, and the ARMs with the latest available country information for the rate on new mortgages. We calculate a risk premium by income quantile using household income information, apply it to the country-specific paths of the rate on new loans, and calibrate it to the macro country risk premia. To generate the backward-looking CES rate on outstanding amounts, we aggregate the reported interest rates on the stock of FRMs of all respondents from the year in which they were created. Budget-constrained households are defined as those with housing and food expenses above 75% of their total household income.
The latest data are for February 2025 for the CES mortgage stock and March 2025 for MIR and BSI.

Lending rates on the stock of loans are expected to continue increasing as long as they remain below the rates on new loans. The exercise shows that starting in mid-2025, lending rates on the stock of loans should increase (dashed yellow line in Chart 3, panel a) even when lending rates on new loans remain constant and the expected rise in long-term market rates is not incorporated. Intuitively, this should continue for as long as the rate on the stock of loans remains below the rate on new loans. Rates on outstanding amounts currently stand at

around 2.4%. They are expected to converge towards the rate on new loans at a steady-state level of around 3.3%. The fact that the rate on the stock of loans is projected to continue increasing, despite the decline of the rate on new loans since its peak, stands in contrast to previous easing cycles and speaks to three factors: (1) a hiking cycle that started after a long period of low rates during which rates on the stock of loans had converged to low levels, (2) a less complete pass-through of rate hikes due to the higher share of fixed-rate mortgages and the pace and magnitude of the tightening cycle, and (3) the fact that the current interest rate cycle is expected to leave interest rates on new loans at higher levels than before 2021. In Box 1 we model the hypothetical effects of the current easing cycle had it occurred against the background of the lending rate configuration prevailing at the onset of the previous easing cycle, in October 2008.

Box 1

The state dependence of monetary policy: differences in pass-through across easing cycles

Prepared by Pedro Baptista, Maarten Dossche, Andrew Hannon, Dorian Henricot, Omiros Kouvavas, Davide Malacrino and Larissa Zimmermann

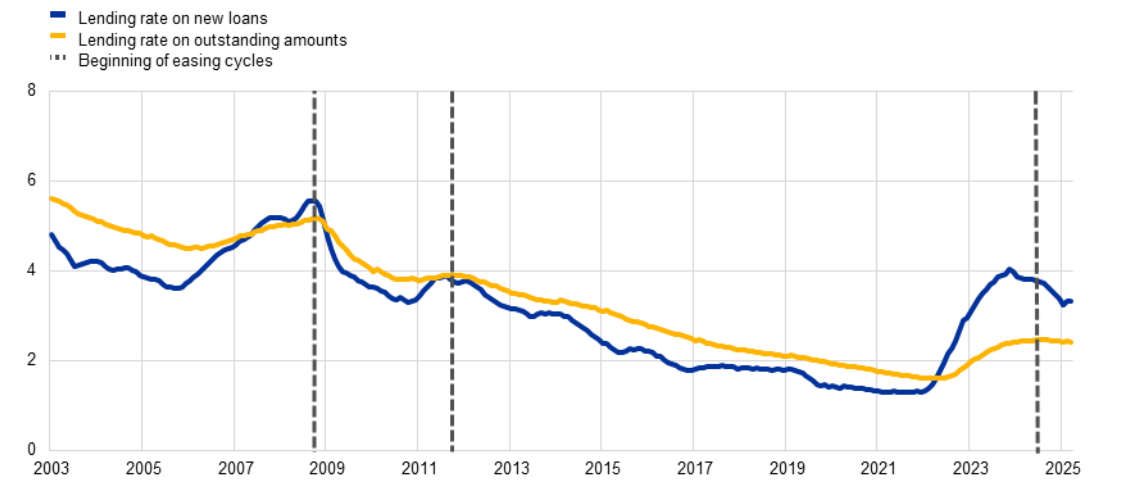
Unlike in previous easing cycles, lending rates on the stock of loans are expected to continue to rise despite the recent rate cuts. This is due to the fact that the pass-through of past policy rate changes to the stock of loans is still less complete than in the past. This can be seen in a simple summary statistic: the gap between the rate that households pay on their stock of loans and the one they would pay on any new loan.[7] This gap appeared historically elevated at the onset of the current easing cycle: it stood at 1.4 percentage points in May 2024, compared with 0.4 percentage points in October 2008 (Chart A). This is explained by the declining share of adjustable-rate mortgages (ARMs) and the specificities of the period around the latest tightening cycle, as detailed in the text of the article.

[7] This summary statistic is also put forward as relevant for the refinancing channel of monetary policy in Eichenbaum, M., Rebelo, S. and Wong, A., "State-dependent effects of monetary policy: The refinancing channel", *American Economic Review*, Vol. 112, No 3, 2022, pp. 721-761.

Chart A

Lending rate on new business and on outstanding amounts across easing cycles

(percentages per annum)



Sources: ECB (MIR) and ECB calculations.
Notes: Vertical lines are drawn in the month preceding the first rate cut of any easing cycle. The latest observation is for March 2025.

To assess how these effects dampen the impact of the rate cuts on mortgage payments and consumption, we run a counterfactual simulation of rates on outstanding amounts starting from the gap between rates on new business and outstanding amounts at the onset of the previous easing cycle (Chart B). To this end, we keep the same distribution of loans by residual maturities and fixation periods as in the latest Consumer Expectations Survey, but reset lending rates in each bucket to those that prevailed in October 2008: loans in the ARM bucket are set at the average lending rate on new business with short fixation in October 2008; fixed-rate loans are set at the rate on short or long-term fixation loans that prevailed when the loan was issued.[8] The same changes in lending rates on new loans and lending volumes as in the baseline simulation are then used to produce a counterfactual simulation of lending rates on outstanding amounts from October 2008, which is finally used to produce a counterfactual simulation from May 2024.

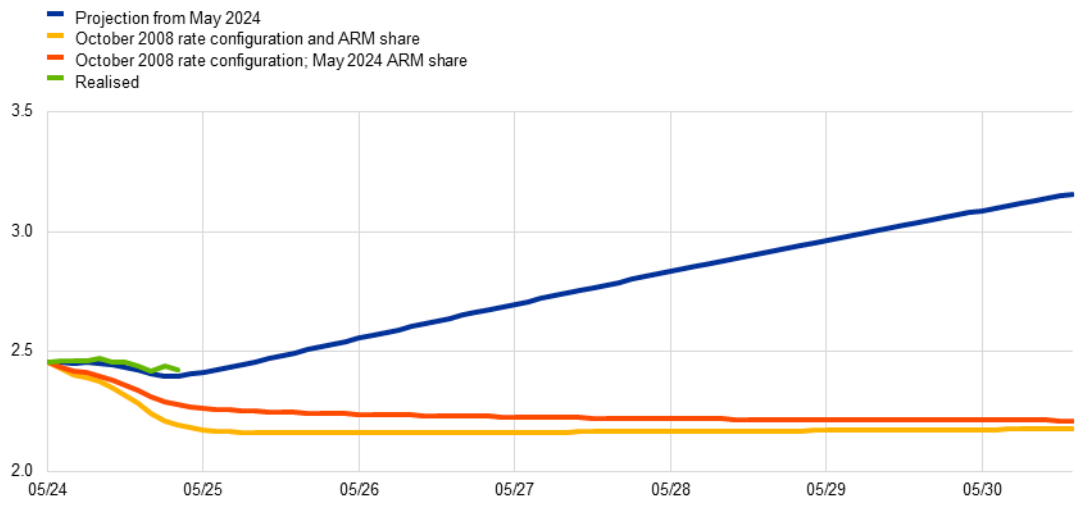
If the October 2008 rate configuration had prevailed in May 2024, the average rate would have declined faster up to mid-2025 and flattened thereafter, instead of resuming its increase (red line in Chart B). The lending rate on the stock of loans would have been around 0.6 percentage points lower as of the end of 2027, and as much as 1.1 percentage points lower by the end of 2030. Running the same counterfactual while also adjusting the share of ARM borrowers to the level seen in October 2008 (yellow line in Chart B) shows that the currently lower share of ARM borrowers explains less than 10% of the higher level of rates on outstanding amounts by the end of 2027. The fact that the rate on the stock of loans would have declined in the counterfactual simulation means that there would have been no further drag on consumption.

8 All rates on fixed-rate loans are then adjusted by the same amount to match the aggregate October 2008 rate on outstanding amounts.

Chart B

Counterfactual changes in rates on outstanding amounts

(percentages per annum)



Sources: ECB (MIR, BSI, CES) and ECB calculations.
Notes: The counterfactual simulation from September 2008 is constructed by keeping unchanged the distribution of loans by original maturity, residual maturity and rate type, and shifting the starting lending rates for each bucket backwards. Loans in the ARM bucket are set at the average lending rate on new business with short fixation contracted between August and September 2008; loans in the FRM bucket are set at the rate on short or long-term fixation loans that prevailed when the loan was issued. All FRM loans are adjusted by the same amount to match the aggregate rate on outstanding amounts that prevailed in September 2008. The amount of ARM loans is then rescaled to match the September 2008 aggregate for the counterfactual also accounting for the higher share of ARM in the past. Realised values and projections for lending rate changes and lending growth from May 2024 are then taken from the current Broad Macroeconomic Projection Exercise and used to create a forecast from September 2008 levels. The latest data are for February 2025 for the CES and March 2025 for MIR and BSI.

The average mortgage rate on outstanding amounts has risen more for poorer and more budget-constrained households. The tightening pushed up the average interest rate in 2024 to about 3% for households who are in the bottom half of the within-country income distribution, and to about 2.7% for those that are budget-constrained[9] (from already higher than average levels), against an average rate of 2.2% among households in the top quintile of the income distribution (Chart 3, panel b). This is directly linked to the distribution of mortgages by income group: poorer households tend to have lower fixation periods, which means that their interest payments adjust more rapidly. Looking ahead, lending rates are expected to continue increasing across income groups – except for a small decline in 2025 due to the downward repricing of ARMs. The increase is expected to be slightly stronger still among lower-income households in 2025-26 and then accelerate for higher-income households, owing to their higher share of longer fixation period mortgages that will reprice only gradually. Over the entire period of analysis, rates will still have increased slightly more for poorer households – as evident from the higher spread between both categories of mortgagors in 2030 against 2021. This can be linked to two factors. First, stronger outstanding pipeline pressures for high-income households could remain in 2030 due to their longer rate fixation periods. Second, the yield curve was particularly flat at the beginning of the tightening cycle, resulting in a small gap between ARM and FRM rates, which is expected to widen by the end of 2030.

9 Budget-constrained households are defined as those with housing and food expenses above 75% of their total household income.

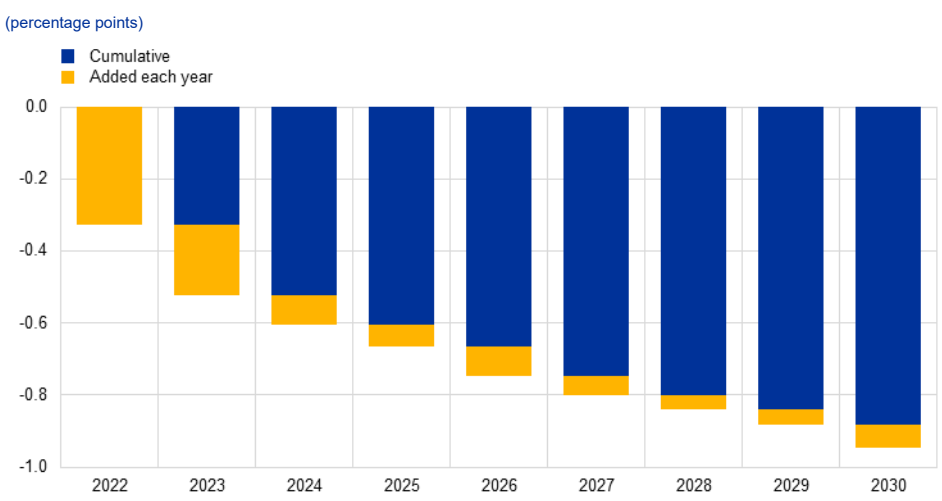
4 Transmission to households and total consumption

Pipeline pressures are expected to continue weighing on mortgagors' consumption via the cash flow channel in the coming years. Estimates based on consumption and income data in the CES suggest that the marginal propensity to consume (MPC) decreases by income quintile: ranging from 70% for the lowest income quintile to 36% for the highest.[10] We also account for the effects of income growth on consumption: we adjust income-specific MPCs over the projection period for the projected increases in real income. These MPCs are then multiplied by the changes in disposable income due to the adjustment of the household's mortgage payments based on the simulated mortgage rate changes, in the year in which the mortgage rate of the household is set to reset. In doing so, we assume that households are myopic, meaning that they do not smooth out the effects of expected interest rate increases (Box 2 discusses the effect of relaxing this assumption). The changes in consumption via the cash flow channel, simulated like this at the household level, are then aggregated over time, weighting each household by individual consumption shares. The results of this exercise, summarised in Chart 4, suggest that a large part of the adjustment in consumption through the cash flow channel had already happened during the 2022-24 period when the ECB was increasing its policy rates, which translated into an upward repricing of adjustable-rate loans. However, substantial further adjustment is expected in the next few years. The cumulative impact on aggregate consumption growth from this channel is estimated to reach around 1 percentage point between 2022 and 2030. Around two-thirds of these effects materialised by the end of 2024 but, importantly, another one-third is expected in the coming years. Box 2 shows that accounting for the fact that households anticipate higher interest rate payments and partially smooth consumption over time would not significantly change the picture.

[10] MPCs are estimated by combining the income elasticity of consumption with the mean average propensity to consume (APC) per income quintile. The income elasticity is estimated for the complete sample based on quarterly data on nominal consumption and annual data on household income. The APC is calculated by combining the consumption and income data and aggregating by income quintile. These estimates refer to transitory shocks and are somewhat higher than – but broadly in line with – Ampudia, M., Cooper, R., Le Blanc, J. and Zhu, G., "MPC Heterogeneity and the Dynamic Response of Consumption to Monetary Policy", *American Economic Journal: Macroeconomics*, Vol. 16, No 3, 2024, pp. 343-388. However, they are lower than MPCs of permanent shocks, which are closer to 1. For a comprehensive review of the literature on MPC, see also Kaplan, G. and Violante, G.L., "The marginal propensity to consume in heterogeneous agent models", *Annual Review of Economics*, Vol. 14, 2022, pp. 747-775.

Chart 4

Impact on aggregate consumption growth, from the start of tightening (no anticipation)



Sources: ECB (BSI, MIR, CES) and ECB calculations.
Notes: The chart illustrates the cumulative impact of increased mortgage payments on consumption under the assumption of no anticipation of consumption effects (myopia). For 2022 and 2023, changes in average consumption primarily reflect the influence of interest rate hikes on ARMs. Using the individual rate adjustments that originate in Chart 3, the new difference in year-on-year rates is multiplied by the depreciated outstanding balance (calculated by deducting principal payments over 12 months), and the resulting monthly payment change is subtracted from the previous year's projected consumption. This adjustment is scaled by income-specific MPCs and an MPC of 1 for hand-to-mouth households. The aggregate consumption for each year is calculated, and the year-on-year change in mean consumption is derived. The latest data are for February 2025 for the CES mortgage stock, April 2025 for CES consumption and for January 2025 for MIR and BSI.

Box 2

The role of anticipation assumptions for the timing of consumption effects

Prepared by Pedro Baptista, Maarten Dossche, Andrew Hannon, Dorian Henricot, Omiros Kouvavas, Davide Malacrino and Larissa Zimmermann

Households are aware of changes in interest rates, especially in periods of significant monetary tightening.[11] They generally also know the structure of their mortgage and when it is set to reprice. Hence, forward-looking households exposed to interest rate risk could adjust their spending behaviour in anticipation of future rate changes. In this box we present evidence that these anticipation effects are limited and show how the timing of the impact on consumption varies under different assumptions.[12]

Chart A shows the consumption paths of different types of households with a mortgage over the past three years. First, we observe that households with a mortgage whose interest rate was set to change in 2024 (yellow line) started reducing consumption in the last quarter of 2023, and mostly reduced it going into 2024 – in contrast to mortgagors whose rate is not due to reprice in the next three years (blue line), who kept gradually increasing their consumption with no inflection point around 2024. Second, we observe that mortgagors whose mortgage is set to reprice between 2025

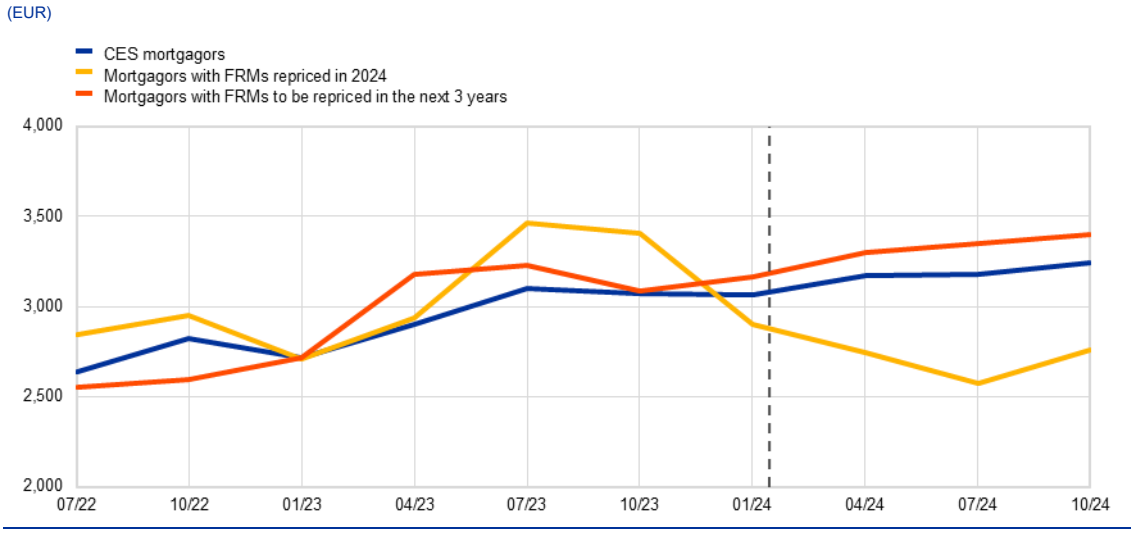
11 See, for example, Charalambakis, E., Kouvavas O. and Neves, P., "Rate hikes: How financial knowledge affects people's reactions", *The ECB Blog*, ECB, 15 August 2024.

12 This is consistent with the literature rejecting the permanent income hypothesis. See, for instance, Johnson, S.D., Parker, A.J. and Souleles, N.S., "Household Expenditure and the Income Tax Rebates of 2001", *American Economic Review,* Vol. 96, No 5, 2006, pp. 1589-1610.

and 2027 (red line) have not yet shown any sign of reducing consumption and have behaved in a way more similar to the mortgagors whose rate is not set to reprice.

Chart A

Nominal consumption by group of mortgagors around a repricing year



Sources: ECB (CES) and ECB calculations.
Notes: The chart depicts the backward consumption path of CES mortgagors, those with FRMs that were repriced in 2024, and those with FRMs set to be repriced in the next three years. Consumption in the CES is reported on a quarterly basis and respondents are asked about their expenditure on several items during the previous month. We aggregate these responses for each respondent and report two-quarter moving means.

In an effort to better evaluate the possible bounds of future effects on aggregate consumption, we construct two corner case scenarios – a no-anticipation scenario and a full anticipation scenario – as well as a more realistic one informed by the data: the partial anticipation scenario.

For the no-anticipation scenario, consumption effects are assumed to materialise only when mortgage payments increase (i.e. households are fully myopic or display no consumption-smoothing behaviour). The increased payments are then multiplied by income group-specific marginal propensities to consume (MPCs), which implies that only a percentage of the actual increase in costs is passed through to consumption. This is the scenario considered in the main text (Chart 4). We also assume a full pass-through for budget-constrained households.

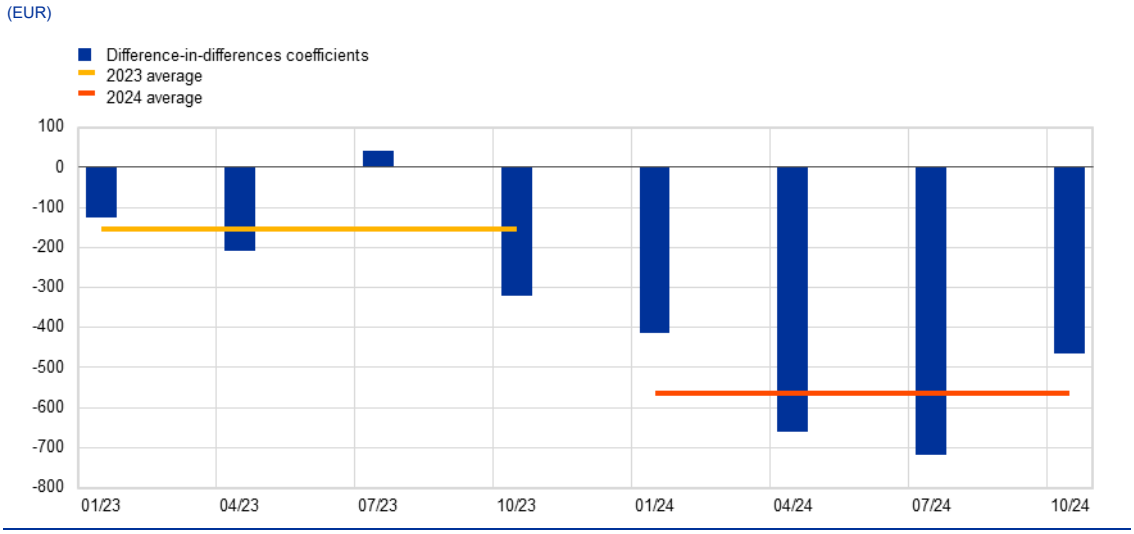
Under the permanent income hypothesis and households' preference for consumption smoothing, we can construct the other corner scenario, where households fully smooth out expected interest rate changes even if their lending rate is only due to change in the future. Assuming perfect foresight too, their interest rate expectation exactly matches that of the market. Only households that are budget-constrained to such a degree that they are unable to decrease consumption now are assumed to react only when their individual interest rate changes. For the rest, the accumulated consumption effects are broadly frontloaded to the periods when lending rates on new business adjusted (in 2022 and 2023), reflecting the timing of monetary tightening. The proportion of consumption adjustment in each of the two years is proportional to the size of interest rate increases that happened in each.

Finally, we also construct a more realistic scenario by estimating the timing and extent of anticipation effects. Leveraging our micro data, we compare the consumption of households with rates set to reprice in 2024 with the consumption of households whose rate is not set to reprice in the next three years. We identify few anticipation effects: the former only start reducing

consumption relative to the latter in October 2023, i.e. with a lead of one quarter. Using a difference-in-differences approach, we estimate that only around 27% of the overall adjustment implied by the change in rates occurs in the year prior to it, with the remaining 73% happening in the year of the interest rate change (Chart B).

Chart B

Estimated impact on consumption of a mortgage rate reset in 2024



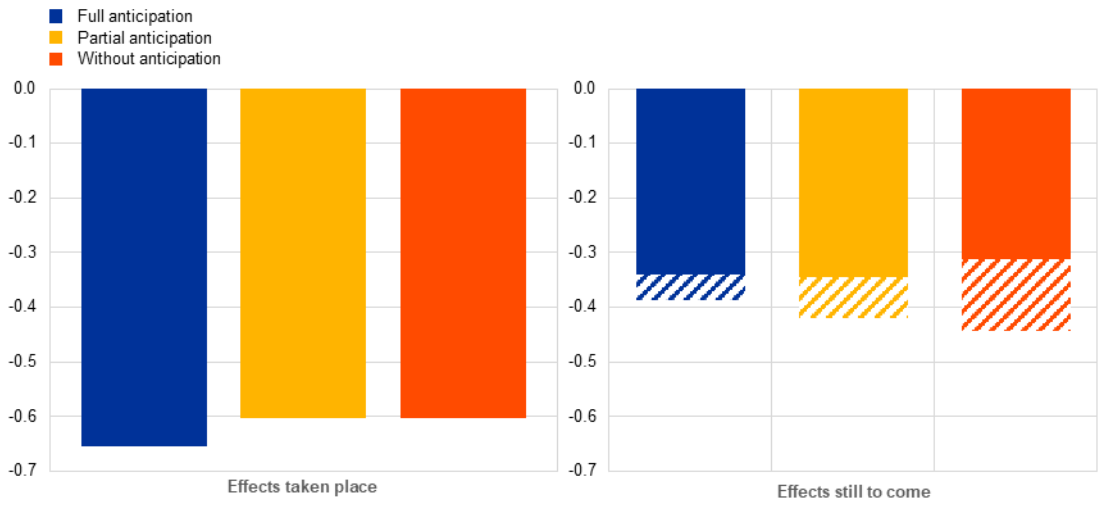
Sources: ECB (CES) and ECB calculations.
Notes: The chart depicts the coefficients from a difference-in-differences regression where we estimate the anticipation effect of increased mortgage payments of mortgagors with an FRM repriced in 2024. These results inform our partial anticipation scenario: by comparing the average effects of 2023 with those of 2024, we estimate the one-year-ahead anticipation effect to be approximately one-quarter of the total effect on consumption.
The latest observation is for October 2024.

Chart C illustrates the impact of increased mortgage payments on consumption under the three sets of assumptions. The solid bars reflect our main scenario holding rates on new loans constant at their latest level. The dashed bars show the pipeline effects if rates instead remain constant at their slightly higher end-2024 level. In the full anticipation scenario, the changes in consumption occurring in 2022-24 are around two-thirds of the total. However, about one-third of the total still takes place in 2025-30 due to the presence of (i) budget-constrained households that cannot adjust their consumption immediately, and (ii) new loans that, on average, start at higher interest rates than those that get fully repaid and drop out of the mortgage stock. These two factors imply that the pending consumption effects are still significant for the full anticipation scenario. In the more realistic partial anticipation scenario, 35% of the adjustment is yet to materialise by 2030.

Chart C

Impact on aggregate consumption growth under different anticipation assumptions

(cumulative percentage points)



Sources: ECB (BSI, MIR, CES) and ECB calculations.
Notes: The chart illustrates the cumulative impact of increased mortgage payments on consumption under three scenarios related to the anticipation of consumption effects: no anticipation (myopia), full anticipation (perfect foresight) and partial anticipation. The dashed bars show the conditional on December 2024 simulated results and the solid bars show the May 2025 update. For 2022 and 2023, changes in average consumption primarily reflect the influence of interest rate hikes on ARMs. Using the individual rate adjustments that originate in Chart 3, the new difference in year-on-year rates is multiplied by the depreciated outstanding balance (calculated by deducting principal payments over 12 months), and the resulting monthly payment change is subtracted from the previous year's projected consumption. This adjustment is scaled by income-specific MPCs and an MPC of 1 for hand-to-mouth households. The aggregate consumption for each year is calculated, and the year-on-year change in mean consumption is derived.
The latest observations are for February 2025 for the CES and March 2025 for MIR and BSI.

Household income heterogeneity amplifies the effect of rate hikes early in the cycle. Poorer households have a higher share of mortgages due to reprice in the short term, as well as higher MPCs. These households are thus expected to be affected by rate hikes earlier on, with a disproportionate impact on consumption compared with a situation where MPCs are identical across households. Looking ahead, although lower-income households are expected to see a slower increase in their mortgage payments, they may still cut spending more due to this higher sensitivity. At the same time, households in the lower income quantiles hold lower shares of the aggregate stock of loans and represent a smaller share of total consumption, which should mitigate the role of MPC heterogeneity for the aggregate. In a scenario where MPCs are the same for all households, we find that the overall drag on consumption between 2022 and 2030 would be around 15% smaller. The further drag from heterogeneous MPCs persists throughout the entire period because lending rates on the stock of loans are expected to increase more for poorer households over that period.

The drag on consumption that has yet to materialise following the latest tightening cycle is large compared with previous cycles. The easing cycle that started in June 2024 led to a brief stabilisation of the rates paid by households on their stock of mortgages, which are expected to further increase starting in mid-2025. In contrast, and for reasons outlined above, when previous easing cycles began, the rates paid on outstanding balances declined. As detailed in Box 1, the remaining drag on consumption would be nil in our main scenario if the easing cycle had started with the rate configuration of October 2008.

5 Conclusion

In this article we explore how monetary policy affects consumption through changes in mortgage rates. Our simulations using household-level data show that, due to the higher prevalence of fixed-rate mortgages than in the past and the different configurations of interest rates on newly granted loans compared with outstanding loans, the cash flow channel is still expected to exert significant tightening pressure. Other things being equal, this should further dampen consumption through rising mortgage payments, despite the ongoing easing cycle. Our analysis underscores the importance of heterogeneity in monetary policy transmission by highlighting differences in mortgage contracts across countries and income groups. Poorer households tend to have more adjustable-rate mortgages or fixed-rate mortgages with shorter fixation periods, which means they are affected earlier in the cycle. In the current cycle, they will have been the ones experiencing the highest rise in interest payments by the end of 2030, with disproportionate effects on consumption due to their higher marginal propensities to consume.

Overall, the impact of monetary policy on consumption via the mortgage component of the cash flow channel is estimated to be significant. The impact on aggregate consumption amounts to 1 percentage point between 2022 and 2030, with 35% of the effects yet to materialise. However, it is important to note that this analysis focuses on one specific channel of adjustment and does not aim to provide a complete assessment of ongoing consumption developments, which also include positive effects from the recovery of real incomes and consumer confidence, in a context of monetary policy easing.

2 Advancing the capital markets union in Europe: a roadmap for harmonising securities post-trading

Prepared by Benjamin Hanssens, David Sandín de Vega and Hannah Franziska Sowa

1 Introduction

Post-trading is a crucial part of how European capital markets operate. After a trade is made, several important steps follow. These steps involve moving the ownership of financial products, such as bonds, from the seller to the buyer and handling the assets used as security in financial transactions. For example, a bank wishing to borrow money from a central bank needs to provide some of its eligible assets as collateral, akin to a buyer using a house as collateral for a mortgage. Post-trading needs to ensure these processes happen smoothly and securely.[1] Safe and efficient post-trading is the foundation for well-functioning capital markets, supporting their attractiveness and lowering the costs of savings and investments.

A harmonised approach to post-trade processes is essential for an efficient capital market in Europe. The report by Mario Draghi on the future of European competitiveness identifies post-trade fragmentation in Europe as a major barrier to developing a large, integrated capital market.[2] To achieve European harmonisation in post-trade now and in the future, two aspects are pertinent. First, there must be harmonisation across existing national legal and operational practices.[3] Second, it is essential to establish a framework for the development of innovative solutions for a digital capital markets union.[4] The ECB sees an urgent need to integrate Europe's fragmented capital markets, not only in the area of post-trade but also in supervision and other areas.[5] This article focuses on the current post-trade environment.

To improve existing post-trade processes, the Eurosystem recommends having a single European rulebook. Improvements are particularly needed in three

1 Post-trading activities are the steps taken after a trade is executed to ensure its successful completion. These include: (i) clearing, which is the process of reconciling purchase and sales orders, ensuring that both parties have the necessary funds and securities to complete the trade; (ii) settlement, which involves the actual exchange of securities and payment between the buyer and seller, finalising the transfer of ownership; (iii) custody and asset servicing, which involves the safekeeping of securities, along with managing corporate actions such as dividends, interest payments and other events affecting the securities; and (iv) reporting, which involves documenting and communicating the details of the trade to the relevant parties and regulatory bodies to ensure transparency and compliance with regulations.

2 Draghi, M., The future of European competitiveness, European Commission, 9 September 2024.

3 The ECB Governing Council has emphasised the need to finalise the harmonisation of key post-trade processes that have not yet been integrated and are therefore inefficient from a European capital markets perspective – such as procedures for handling withholding tax and processing corporate actions – to foster a deeper and more integrated capital markets union. See "Statement by the ECB Governing Council on advancing the capital markets union", 7 March 2024.

4 Cipollone, P., "Towards a digital capital markets union", keynote speech at the Bundesbank Symposium on the Future of Payments, Frankfurt am Main, 7 October 2024.

5 Lagarde, C., Out of the Comfort Zone: Europe and the New World Order, speech at the 34th European Banking Congress, 22 November 2024.

post-trade areas: (i) securities settlement (transfer of securities), (ii) collateral management (processes for managing assets used as collateral in credit operations), and (iii) asset servicing (e.g. managing coupon or dividend payments and redemptions). To this end, the Eurosystem has worked with market participants to create standards for the rulebook which address the barriers for these areas.[6] The Eurosystem's Advisory Group on Market Infrastructures for Securities and Collateral (AMI-SeCo) has developed these standards and called for the adoption of the single rulebook.[7]

This article reviews the challenges of the existing post-trading ecosystem and provides a roadmap to overcome them. Section 2 provides an overview of the current fragmented European post-trade landscape. Section 3 looks at the role of the central bank in post-trade while Section 4 explores the barriers in securities settlement, collateral management and asset servicing, and the challenges to adopting and implementing European standards in these areas. It also explains the Eurosystem's efforts to overcome these barriers by actively promoting a single European post-trade rulebook to harmonise business processes, data definitions and data exchange. Lastly, Section 5 outlines a proposal for a roadmap to implement the single rulebook in these areas.

2 Europe does not yet have a single financial market

Current European post-trade ecosystem

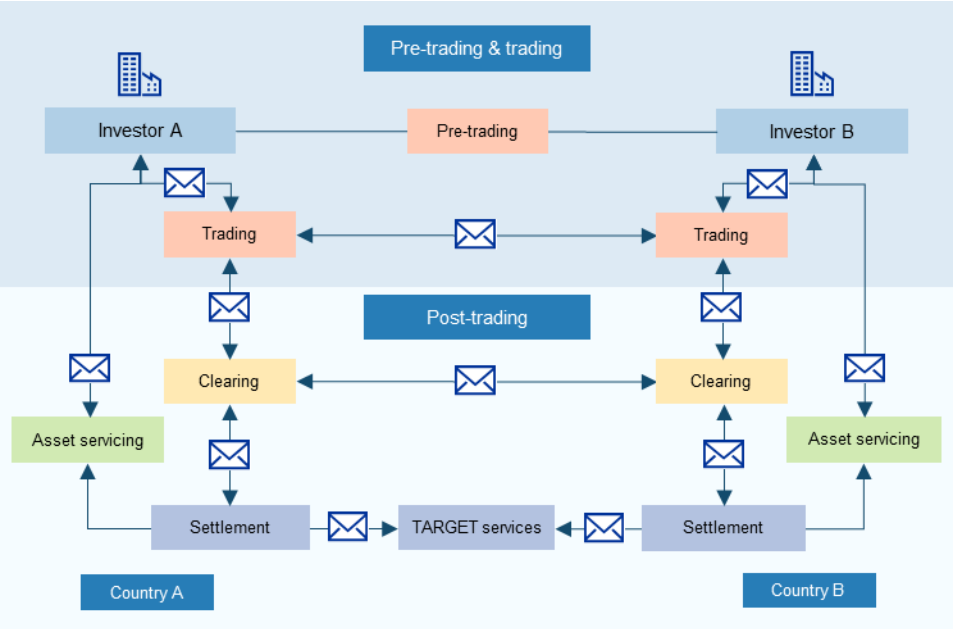
The European financial market relies on country-specific post-trade processes. Historically, markets in Europe operated independently from one another. For this reason, financial assets like bonds or shares are still mostly issued, held, traded and settled on a national basis. All the parties involved in handling these assets within a country communicate effectively throughout the process. However, when financial transactions occur between different countries, the exchange of information becomes complicated and inefficient. Entities have not yet transitioned to using unified approaches across the continent, and cross-border transactions often rely on less effective methods. Except for the TARGET services provided by the Eurosystem, most processes have not yet been fully integrated across Europe (Figure 1).

6 Standardisation is the process of implementing and developing technical standards based on the consensus of different parties. Common rules and processes bring efficiency gains, Faster processing and/or automation not only benefit the industry but contribute towards strengthening the financial system, reinforcing competition and increasing the availability and accessibility of investment opportunities, thus helping to broaden capital markets in Europe.

7 AMI-SeCo facilitates an active dialogue with market participants on issues related to the clearing and settlement of securities and to collateral management. It assists the Eurosystem in promoting safe and efficient financial market infrastructures.

Figure 1

Capital market value chain, organised along national boundaries



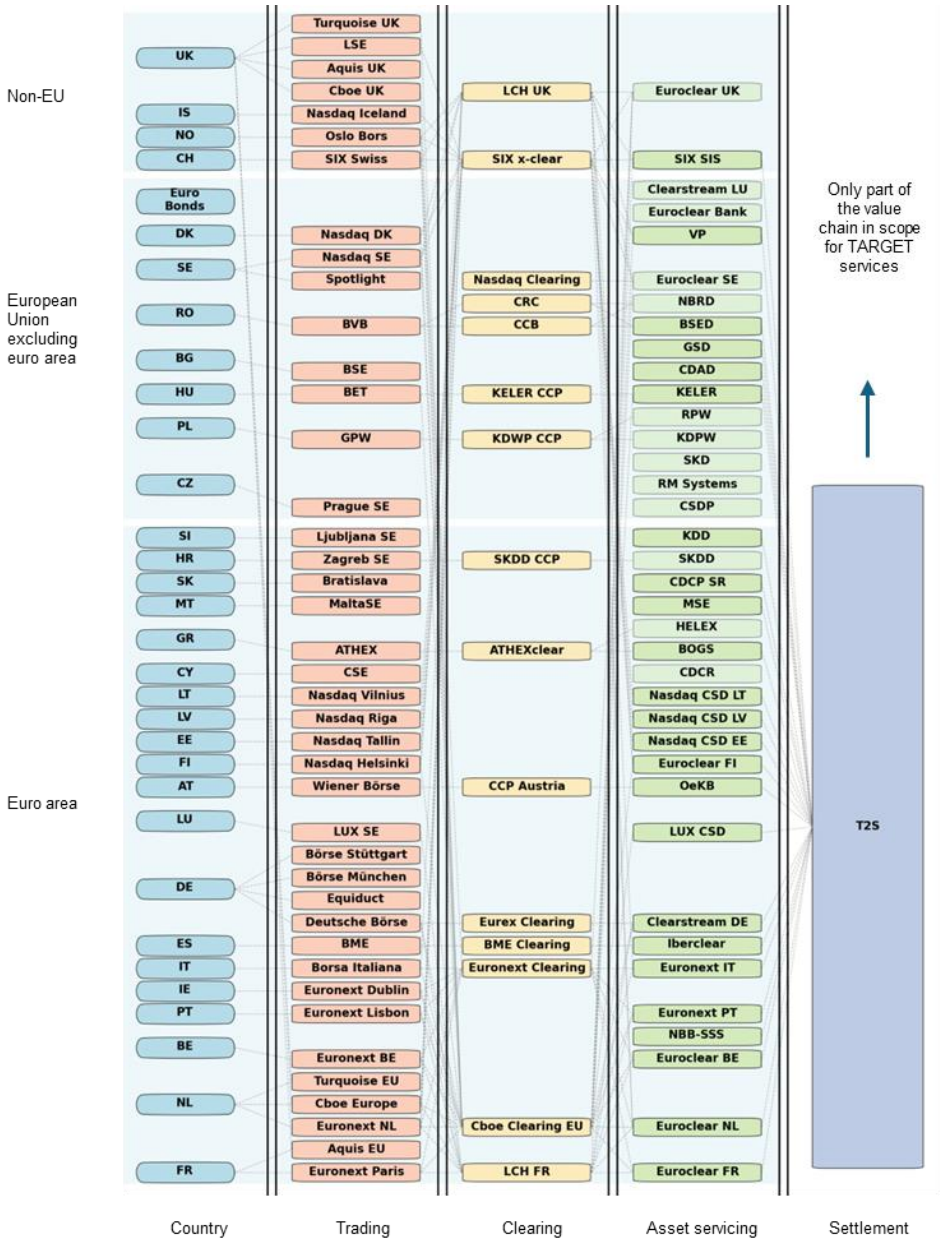
Note: The colours in the figure relate to the same functions. Pink refers to trading and pre-trading, yellow refers to clearing, blue refers to settlement and green refers to asset servicing.

Central securities depositories (CSDs) and custodians are major parties in the national markets. In the post-trading space, they are crucial in two areas: (i) settling securities transactions where the details of the transaction are recorded electronically, ensuring that buyers receive their assets and sellers get paid and (ii) offering collateral management and asset servicing. TARGET services provide a strong European foundation for these parties, offering a streamlined pathway for securities settlement, which is crucial for an integrated value chain in the post-trade sector. However, many securities transactions are settled outside TARGET services, through internalised settlement flows, e.g. within custodians or CSD groups, which weakens this pathway. This mainly reflects the fragmentation in areas such as asset servicing. Additionally, not all CSDs have joined TARGET services or have established links with other CSDs across Europe.[8]

The location of assets has a considerable impact on post-trading, leading to national clusters, otherwise referred to as home bias. Consider a French company that owns German shares and wants to use them as collateral for a loan in Italy. Owing to different rules and systems in each country, handling these shares across borders becomes complicated, making it difficult to use them efficiently in Italy. Country-specific features and asset servicing practices make it difficult for the securities to be used as collateral on a cross-border basis. This creates vertical silos, with the clustering extending to national chains of trading, clearing and settlement. As shown in Figure 2, most layers remain largely confined to national boundaries.

8 A link is an account opened by a CSD in the books of another CSD, in order to facilitate the transfer of securities from participants in these CSDs.

Figure 2
A simplified overview of the European securities infrastructure



Source: ECB.
Notes: The European Economic Area (EEA) consists of 90 trading venues along with 14 central counterparties and 34 CSDs. This number includes 27 CSDs from the private sector (for the complete list, please consult the CSD Register published by the European Securities and Markets Authority) and seven CSDs operated by a public body (a central bank in every case but one). The colours in the figure relate to the same functions.

Despite some entities merging into larger groups that cover the value chain, cross-border settlement remains limited. CSDs in many cases are now parts of larger, consolidated groups that encompass trading, clearing, asset servicing and settlement. The three main CSDs in terms of value and volume are in the Euroclear

Group, Euronext Group and Deutsche Börse Group (Chart 1, panel b).[9] However, securities are still predominantly held and settled within the local CSDs and barely move outside them (Chart 1, panel a). Even in CSDs belonging to the same group, there is a home bias with most settlement volumes occurring within each CSD of the group, with limited cross-border transactions. For 2023, close to 98% of transactions in value and more than 95% of volumes were settled between parties in the same individual CSD (i.e. both the delivering and receiving party belonged to the same CSD).[10]

Clusters confine capital within national boundaries. Clusters could limit cross-border investment and reduce the amount of capital available. The absence of harmonised standards and a harmonised operational framework prevents issuers from finding efficient alternative locations. Companies that issue financial assets, like shares or bonds, are often operating (or need to operate) within their own country's rules. Without a unified framework (a single European rulebook), they cannot easily choose to issue their assets in another country that might offer better conditions. This limits their ability to optimise their operations and potentially reduces their access to wider pools of capital. It also makes it harder for investors to take the most efficient decisions based on risk and return, as investors might not have access to the best opportunities or face higher costs when trying to invest across borders. Costs are related to several areas, such as quality of information (estimated at €1.6 to €8 billion per year globally), processing errors (€300 to €700 million per year), delays (€3.4 million) and ineffective processes.[11] While financial products like exchange-traded funds (ETFs) can help investors gain exposure to international markets, they do not completely solve the problem. ETFs still depend on the underlying markets being efficient and accessible.

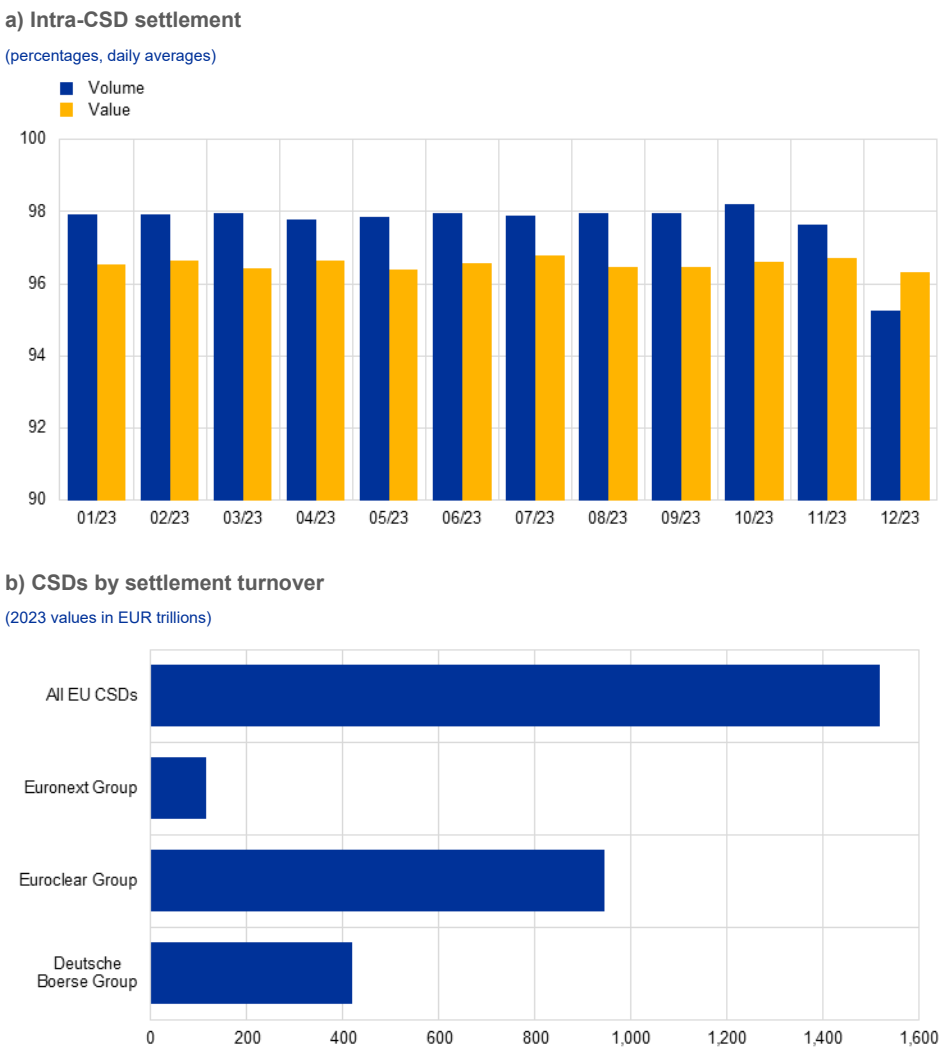
9 Settlement is concentrated in three groups of CSDs: Euroclear Group (Euroclear Bank, Euroclear Belgium, Euroclear Finland, Euroclear France, Euroclear Nederland and Euroclear Sweden), Deutsche Börse (Clearstream Banking SA, Clearstream Banking AG and LuxCSD) and Euronext Securities (Euronext Securities Copenhagen, Euronext Securities Milan, Euronext Securities Oslo and Euronext Securities Porto).

10 TARGET2-Securities Annual Report 2023, ECB. It is noted that cross-CSD settlements are not the sole avenue for cross-border investment. Custodian networks are also utilised to facilitate these transactions, highlighting the complexity of the services required.

11 Neuhaus, H. and Hanssens, B., "ISO 20022: A migration strategy in the securities market for corporate events and triparty collateral management", *Journal of Securities Operations & Custody*, Vol.16, No 3, 2024.

Chart 1

Intra-CSD settlement in T2S and value of settlement turnover by groups of CSDs in 2023



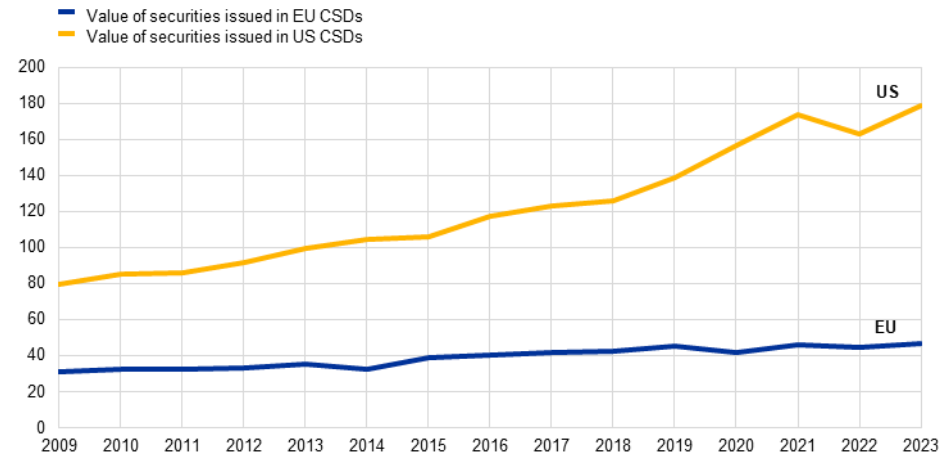
Sources: TARGET2-Securities Annual Report for 2023 and ECB staff calculations.

Expansion of the EU capital market has consistently lagged behind that of the United States due to fragmentation. Over the past 15 years, issuance activity in the United States has doubled, whereas in the EU it has grown by only one third, thereby widening the gap between these two markets (Chart 2 shows the stock of issued securities). The difference is particularly significant given that the EU's population surpasses that of the United States by over 100 million. In the United States, issuers benefit from a unified framework for issuance practices and corporate actions that allows them to reach all potential investors. By contrast, European issuers face a complex landscape of specific national practices and local requirements.

Chart 2

Issuances in the European Union vs the United States

(EUR trillions)



Source: ECB staff calculations (ECB statistics and BIS Red Book).

Two initiatives, namely the EU Issuance Service (EIS) and the Eurobond market, serve as examples of a more integrated approach. Since January 2024 the EIS offers a pan-European platform for the primary market issuance and initial distribution of EU debt instruments, treating the EU as a single domestic market.[12] This service which is used by the European Commission to issue EU debt securities provides a consistent approach to debt issuance and offers standardised asset servicing (as outlined in the single rulebook described below), facilitating access to a broad investor base within the EU. Although the EIS still has a limited scope and use, it serves as a strong example of a more harmonised and integrated European financial solution.[13] The Eurobond market is also a solution that is not linked to a national market; it has emerged as a workaround solution aiming to address and overcome various barriers that typically hinder seamless financial activities across national borders.[14]

3 The role of the central bank in post-trade

The Eurosystem plays a key role in the infrastructure of the financial markets. As operator, the Eurosystem provides common platforms and services. TARGET services offer a unified platform for the payment and settlement of securities transactions, thus ensuring safety, efficiency and integration with a single pool of euro liquidity in central bank money. As a catalyst, the Eurosystem promotes harmonisation and explores new technologies for central bank money settlement,

12 The EU issuance service consists of the settlement of the issuance and initial distribution of EU debt securities as well as their asset servicing in the form of corporate actions.

13 Advisory report on debt issuance and distribution in the European Union, European Central Bank, December 2021.

14 Eurobonds are defined as a security issued outside the issuer's home market and not subject to the domestic market regulations, domestic bond market conventions or domestic settlement practices of either the issuer or the country of issue. See Chan, D., Fontan, F., Rosati. S. and Russo, D., "The Securities Custody Industry", *Occasional Paper Series*, No 68, ECB, August 2007.

fostering innovation and preventing re-fragmentation. Lastly, as an overseer, the Eurosystem supports common oversight requirements to enhance resilience and efficiency in Europe's capital markets.

Table 1

The Eurosystem's role in post-trading

Operations (through TARGET Services)	**T2**	Large value payment system: real-time gross settlement (RTGS) system of payments in euro, which are processed and settled in central bank money, i.e. money held in an account with a central bank.
	T2S	Securities settlement platform: common platform operated by the Eurosystem on which securities and cash can be transferred between investors across Europe using harmonised rules and practices. Banks pay for securities on the platform using the account they have with their central bank, so the money used to settle transactions is central bank money.
	TIPS	Faster payments: market infrastructure service enabling payment service providers to offer fund transfers to their customers in real time and around the clock, every day of the year, irrespective of their local bank's opening hours.
	ECMS	Collateral management system: unified system for Eurosystem central banks to manage assets used as collateral in Eurosystem credit operations. The Eurosystem Collateral Management System will replace the existing euro area national central bank systems currently in use.
Harmonisation	**SCoRE and T2S standards**	The Single Collateral Management Rulebook for Europe (SCoRE) establishes the common rules for managing collateral in the areas of corporate actions, triparty collateral management and billing. Facilitates collateral management processes for market participants, investors and financial entities. The T2S standards aim to harmonise securities settlement across the European T2S markets.
Oversight		The mandate covers payment systems, electronic payment instruments, T2S, securities settlement systems, critical service providers and correspondent and custodian banks. Responsibilities are shared between the ECB and national central banks.

The Eurosystem facilitates standardisation through market coordination. Through initiatives such as AMI-SeCo, the Eurosystem is examining the root causes of technical barriers in Europe. To tackle these issues, harmonisation standards are being developed, comprising uniform rules and formats aimed at eliminating discrepancies in post-trading across Europe, thus improving the quality of data for processing securities transactions, including settlement and asset servicing. Harmonisation standards also define how new technologies could be integrated into existing settlement and collateral management processes. These standards are adopted by AMI-SeCo as part of creating a single European rulebook.

The Eurosystem fosters the resilience of capital markets. By offering the TARGET services as a strong and harmonised fundament in Europe, there is a common pathway (highway) for safe and efficient cross-border settlement and to preserve the region's autonomy. The Eurosystem ensures the safe settlement of transactions by using deposits/reserves held by financial institutions at the central bank, known as central bank money settlement. It provides tools for pooling liquidity, which enhances resilience during periods of market stress and improves risk management.

4 Improving the existing European post-trade ecosystem

A holistic approach, with a single set of rules, is necessary to reduce the impediments in securities settlement, collateral management and asset

servicing. Adopting a single European rulebook is essential to remove barriers in operational frameworks, with differing business processes and messaging, which, for example, restrict collateral mobility. While legal and regulatory barriers also affect post-trade arrangements, these are largely addressed by other initiatives, notably the European Commission's savings and investments union efforts (Box 1).

To eliminate operational impediments, the following measures are necessary:

1. Harmonisation to remove technical fragmentation: harmonisation of rules and practices is needed to improve the quality and consistency of data for cross-border transactions. Further harmonisation in several areas would lead to common operational frameworks that would reduce complexity and compliance burdens for market participants involved in cross-border activities.

2. Coordination: an agreement by the financial industry on a roadmap for switching to a single set of rules (rulebook) would allow specific national practices to be brought into line. It would establish a consistent data source and a set of processing requirements for interactions with asset owners across markets.

3. Incentivise: promote European solutions based on harmonisation, which support the interoperability of financial market structures and reduce incentives for internalised settlement. The Eurosystem's TARGET services play a key role as a European pathway, maintaining the stability of central bank money as a settlement asset and ensuring that new technologies are integrated safely and effectively in financial market infrastructures. The focus should be on creating a shared environment with settlement links among all CSDs in Europe, aimed at reducing transaction costs, enhancing market efficiency and fostering financial innovation.

These measures have to be aligned with innovative solutions for digital capital markets to avoid new fragmentation and contain risk. Wholesale (or large value) financial transactions are currently based on the settlement in central bank money via the Eurosystem TARGET services. Market participants are increasingly anticipating that tokenisation and use of distributed ledger technology (DLT) will revolutionise financial transactions by allowing assets to be issued or represented as digital tokens. The Eurosystem is currently broadening its initiatives to settle DLT-based transactions using central bank money.[15] By providing central bank money based on a harmonised rulebook (aligned with the current environment), the Eurosystem aims to mitigate the risks associated with using alternative settlement assets, which could reintroduce credit risk, market fragmentation and reliance on non-European solutions.[16]

[15] See Exploratory work on new technologies for wholesale central bank money settlement on the ECB's website.

[16] Cipollone, P., Harnessing the digital future of payments: Europe's path to sovereignty and innovation, speech at the France Payments Forum event "Digital euro and the future of payments in Europe", 15 May 2025.

Box 1

Post-trading activities: areas for harmonisation under the single European rulebook

Harmonisation and use of common standards in the following areas would be particularly beneficial.

- **Barriers in legal and regulatory frameworks**: eliminating specific national practices and frameworks, such as purely national shareholder and bondholder definitions, or restrictions on issuance.
- **Barriers in operational frameworks**
  - **Securities settlement**: further integrating market practices and architecture for securities issuance and settlement, as well as aligning standards and requirements across jurisdictions to accelerate settlement.
  - **Collateral management:** reducing heterogeneity in processes across European financial markets to increase the efficient use of collateral (collateral mobility).
  - **Asset servicing (corporate events)**: adopting a single set of rules for corporate events (as part of the single rulebook), which defines common data elements, business processes and messaging standards for Europe.

5 A roadmap to harmonise the existing post-trading landscape

The Eurosystem proposes a clear path forward for the European post-trading sector. Collective action and a migration strategy – roadmap – are needed to collectively implement the single rulebook, detailing the future landscape and the steps required to achieve it. This roadmap is needed for the financial community to coordinate the move to a single set of rules and stop the parallel use of different messaging formats. It should be advanced by the Eurosystem, CSDs, their participants and custodians through existing or, where needed, new national stakeholder groups.

The roadmap should focus on specific areas: initially addressing collateral management and asset servicing. The migration strategy has advanced in AMI-SeCo in respect of collateral management and asset servicing and will be presented for adoption by the financial community. Different waves for adoption allow for a smooth transitioning. From the Eurosystem perspective, a cohesive and ambitious strategy is pertinent, providing momentum, with a clear timeline for transitioning to a single message format, ISO 20022, with plans that include specific milestones to be achieved by 2028 and earlier, and with an aspirational deadline of no later than 2030. The strategy will be most effective if it defines clear dates for stopping the use of different messaging standards.

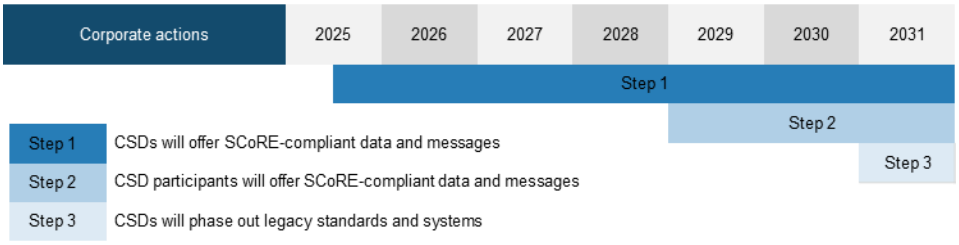
1. **June 2025: the Eurosystem, CSDs and counterparties are part of the first wave.** The Eurosystem Collateral Management System (ECMS) – a unified system for managing assets used as collateral in Eurosystem credit operations –

will go live in June 2025 and operate according to the core areas of the rulebook, thereby ensuring that the handling of securities eligible as collateral in monetary policy and related collateral operations is standardised through the adoption of rules and practices and the use of ISO 20022 messaging standards. Other parties could join gradually.

2. **End 2028: CSD participants will be able to join.** CSDs participants will be able to use harmonised interactions based on the common rulebook, which includes common data elements, business processes and workflows and ISO 20022 messaging standards. CSD participants also start offering the common messaging to their clients.

3. **End 2030: the remaining parties should have joined.** From that point onward, the implementation of the single rulebook and ISO 20022 messaging standards in these areas should be completed. Transactions will be streamlined, thus reducing costs and boosting the efficiency of Europe's financial markets.

Figure 3
Roadmap



Source: ECB.

6 Conclusion

Integration of post-trade activities at European level is important for developing deeper and broader capital markets serving European citizens and businesses. Harmonised solutions must be applied to enhance cross-border competition and foster efficiency. Building on the advancements of the TARGET services, attention is required for non-harmonised areas related to securities settlement, collateral management and asset servicing.

The single European post-trade rulebook should provide clarity on the future shape of market structures. The single rulebook will minimise uncertainty and stimulate innovation. It should provide clarity on standards for exchanging data to facilitate machine-readable and standardised end-to-end processing from issuers through to investors. Addressing discrepancies in data usage and exchange at their source is critical, as these discrepancies can be propagated throughout the entire transaction chain, underscoring the need for a single rulebook.

An agreed roadmap is essential for making the switch to the single rulebook. A coordinated approach across Europe should be adopted, with a timeline to phase out current national practices and establish a unified standard for processing securities.

Doing so will contribute to achieving truly European capital markets. The roadmap initially focuses on collateral management and asset servicing, with the aim of overcoming these longstanding pain points in the securities industry.

Statistics

Contents

Further information

Data published by the ECB can be accessed from the ECB Data Portal:	https://data.ecb.europa.eu/
Detailed tables are available in the ”Publications” section of the ECB Data Portal:	https://data.ecb.europa.eu/publications
Methodological definitions, general notes and technical notes to statistical tables can be found in the ”Methodology” section of the ECB Data Portal:	https://data.ecb.europa.eu/methodology
Explanations of terms and abbreviations can be found in the ECB’s statistics glossary:	https://www.ecb.europa.eu/home/glossary/html/glossa.en.html

Conventions used in the tables

-	data do not exist/data are not applicable
.	data are not yet available
...	nil or negligible
(p)	provisional
s.a.	seasonally adjusted
n.s.a.	non-seasonally adjusted

1 External environment

1.1 Main trading partners, GDP and CPI

	GDP [1] (period-on-period percentage changes)						CPI (annual percentage changes)						
							OECD countries						
	G20	United States	United Kingdom	Japan	China	Memo item: euro area	Total	excluding food and energy	United States	United Kingdom (HICP)	Japan	China	Memo item: euro area [2] (HICP)
	1	2	3	4	5	6	7	8	9	10	11	12	13
2022	3.4	2.5	4.8	0.9	3.0	3.5	9.5	6.8	8.0	9.1	2.5	2.0	8.4
2023	3.5	2.9	0.4	1.4	5.2	0.4	6.9	7.0	4.1	7.4	3.2	0.2	5.4
2024	3.2	2.9	1.1	0.2	5.0	0.9	5.2	5.7	2.9	2.5	2.7	0.2	2.4
2024 Q2	0.7	0.7	0.5	0.9	1.0	0.2	5.7	6.1	3.2	2.1	2.7	0.3	2.5
Q3	0.9	0.8	0.0	0.2	1.4	0.4	4.8	5.2	2.6	2.0	2.8	0.5	2.2
Q4	0.9	0.6	0.1	0.6	1.6	0.2	4.6	5.0	2.7	2.5	2.9	0.2	2.2
2025 Q1	.	-0.1	0.7	-0.2	1.2	0.3	.	.	2.7	2.8	3.8	-0.1	2.3
2024 Dec.	-	-	-	-	-	-	4.7	4.9	2.9	2.5	3.6	0.1	2.4
2025 Jan.	-	-	-	-	-	-	4.7	4.8	3.0	3.0	4.0	0.5	2.5
Feb.	-	-	-	-	-	-	4.5	4.7	2.8	2.8	3.7	-0.7	2.3
Mar.	-	-	-	-	-	-	4.2	4.5	2.4	2.6	3.6	-0.1	2.2
Apr.	-	-	-	-	-	-	4.2	4.6	2.3	3.5	3.6	-0.1	2.2
May [3]	-	-	-	-	-	-	.	.	.	.	.	.	1.9

Sources: Eurostat (col. 6, 13); BIS (col. 9, 10, 11, 12); OECD (col. 1, 2, 3, 4, 5, 7, 8).
1) Quarterly data seasonally adjusted; annual data unadjusted.
2) Data refer to the changing composition of the euro area.
3) Flash estimate.

1.2 Main trading partners, Purchasing Managers' Index and world trade

	Purchasing Managers' Surveys (diffusion indices; s.a.)									Merchandise imports [1]		
	Composite Purchasing Managers' Index						Global Purchasing Managers' Index [2]					
	Global [2]	United States	United Kingdom	Japan	China	Memo item: euro area	Manufacturing	Services	New export orders	Global	Advanced economies	Emerging market economies
	1	2	3	4	5	6	7	8	9	10	11	12
2022	-	-	-	-	-	-	-	-	-	3.0	4.6	1.6
2023	-	-	-	-	-	-	-	-	-	0.4	-3.7	4.4
2024	52.9	53.7	52.5	51.3	52.1	50.1	50.7	53.1	49.0	4.2	3.5	4.8
2024 Q2	53.2	53.5	53.1	51.5	53.2	51.6	52.1	53.3	50.1	1.2	1.9	0.5
Q3	52.9	54.3	53.1	52.5	50.9	50.3	49.8	53.4	48.4	1.5	1.7	1.2
Q4	53.0	54.8	50.9	50.1	51.8	49.3	49.9	53.3	48.4	1.0	0.9	1.0
2025 Q1	52.0	52.6	50.8	50.6	51.5	50.4	50.9	52.1	49.7	3.6	8.6	-1.0
2024 Dec.	53.2	55.4	50.4	50.5	51.4	49.6	49.2	53.8	48.2	1.0	0.9	1.0
2025 Jan.	52.0	52.7	50.6	51.1	51.1	50.2	50.7	52.2	49.4	1.9	4.1	0.0
Feb.	51.7	51.6	50.5	52.0	51.5	50.2	51.5	51.5	49.6	2.8	6.4	-0.4
Mar.	52.3	53.5	51.5	48.9	51.8	50.9	50.4	52.6	50.1	3.6	8.6	-1.0
Apr.	50.9	50.6	48.5	51.2	51.1	50.4	50.5	50.8	47.3	.	.	.
May	.	52.1	49.4	.	.	50.2	49.1	.	48.0	.	.	.

Sources: S&P Global Market Intelligence (col. 1-9); CPB Netherlands Bureau for Economic Policy Analysis and ECB calculations (col. 10-12)
1) Global and advanced economies exclude the euro area. Annual and quarterly data are period-on-period percentages; monthly data are 3-month-on-3-month percentages. All data are seasonally adjusted.
2) Excluding the euro area.

2 Economic activity

2.1 GDP and expenditure components

(quarterly data seasonally adjusted; annual data unadjusted)

	GDP											
	Total	Domestic demand								External balance [1]		
		Total	Private consumption	Government consumption	Gross fixed capital formation				Changes in inventories [2]	Total	Exports [1]	Imports [1]
					Total	Total construction	Total machinery	Intellectual property products				
	1	2	3	4	5	6	7	8	9	10	11	12
Current prices (EUR billions)												
2022	13,724.4	13,448.1	7,232.5	2,943.7	3,015.6	1,557.3	867.7	584.2	256.4	-276.2	7,403.4	7,127.1
2023	14,599.7	14,077.2	7,730.5	3,092.9	3,195.1	1,643.5	923.9	621.4	58.8	-522.5	7,382.0	6,859.5
2024	15,155.6	14,481.3	8,007.3	3,272.2	3,197.8	1,652.0	910.9	628.2	3.9	-674.3	7,513.9	6,839.6
2024 Q1	3,740.6	3,568.6	1,982.3	799.5	801.3	413.8	227.5	158.4	-14.4	-172.0	1,854.6	1,682.6
Q2	3,765.8	3,581.1	1,990.9	813.4	783.2	410.6	229.1	141.8	-6.4	-184.7	1,897.0	1,712.3
Q3	3,802.3	3,643.3	2,008.3	825.8	801.7	411.0	225.9	163.1	7.5	-159.0	1,875.7	1,716.7
Q4	3,844.9	3,687.8	2,026.4	833.6	812.8	416.8	229.4	164.9	14.9	-157.2	1,889.7	1,732.5
as percentage of GDP												
2024	100.0	95.6	52.8	21.6	21.1	10.9	6.0	4.1	0.0	-4.4	-	-
Chain-linked volumes (prices for the previous year)												
quarter-on-quarter percentage changes												
2024 Q2	0.2	-0.1	0.0	1.1	-2.5	-0.8	0.5	-11.3	-	-	1.5	1.1
Q3	0.4	1.4	0.6	0.9	1.8	-0.4	-2.2	14.8	-	-	-1.3	0.5
Q4	0.2	0.3	0.4	0.5	0.7	0.7	1.0	-0.1	-	-	0.0	0.1
2025 Q1	0.3	.	.	.	.	.	.	.	-	-	.	.
annual percentage changes												
2022	3.5	3.8	5.0	1.1	2.0	-0.1	3.5	5.1	-	-	7.4	8.4
2023	0.4	0.1	0.5	1.4	1.7	0.7	2.2	3.6	-	-	-0.8	-1.4
2024	0.9	0.5	1.1	2.7	-1.8	-1.4	-2.6	-1.8	-	-	1.1	0.3
2024 Q2	0.5	-0.6	0.6	2.9	-3.2	-2.0	-1.8	-8.7	-	-	1.9	-0.4
Q3	1.0	1.0	1.1	3.0	-1.5	-1.9	-4.4	3.8	-	-	1.6	1.7
Q4	1.2	1.3	1.5	2.7	-2.0	-0.6	-1.3	-6.3	-	-	1.3	1.5
2025 Q1	1.2	.	.	.	.	.	.	.	-	-	.	.
contributions to quarter-on-quarter percentage changes in GDP; percentage points												
2024 Q2	0.2	-0.1	0.0	0.2	-0.5	-0.1	0.0	-0.5	0.2	0.2	-	-
Q3	0.4	1.3	0.3	0.2	0.4	0.0	-0.1	0.6	0.5	-0.9	-	-
Q4	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	-0.2	0.0	-	-
2025 Q1	0.3	.	.	.	.	.	.	.	.	.	-	-
contributions to annual percentage changes in GDP; percentage points												
2022	3.5	3.8	2.6	0.3	0.4	0.0	0.2	0.2	0.5	-0.2	-	-
2023	0.4	0.1	0.3	0.3	0.4	0.1	0.1	0.2	-0.9	0.3	-	-
2024	0.9	0.4	0.6	0.6	-0.4	-0.2	-0.2	-0.1	-0.3	0.4	-	-
2024 Q2	0.5	-0.6	0.3	0.6	-0.7	-0.2	-0.1	-0.4	-0.8	1.1	-	-
Q3	1.0	1.0	0.6	0.6	-0.3	-0.2	-0.3	0.2	0.1	0.0	-	-
Q4	1.2	1.2	0.8	0.6	-0.4	-0.1	-0.1	-0.3	0.3	0.0	-	-
2025 Q1	1.2	.	.	.	.	.	.	.	.	.	-	-

Sources: Eurostat and ECB calculations.
1) Exports and imports cover goods and services and include cross-border intra-euro area trade.
2) Including acquisitions less disposals of valuables.

2 Economic activity

2.2 Value added by economic activity

(quarterly data seasonally adjusted; annual data unadjusted)

	Gross value added (basic prices)											Taxes less subsidies on products
	Total	Agriculture, forestry and fishing	Manufacturing energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services	
	1	2	3	4	5	6	7	8	9	10	11	12
Current prices (EUR billions)												
2022	12,339.8	217.9	2,422.4	646.3	2,342.4	633.1	544.6	1,340.7	1,490.5	2,324.6	377.3	1,384.6
2023	13,205.2	225.6	2,607.1	720.2	2,437.9	678.4	601.6	1,467.1	1,600.2	2,459.3	408.0	1,394.6
2024	13,641.1	229.5	2,535.8	738.7	2,528.8	720.4	632.7	1,538.2	1,680.8	2,607.3	428.8	1,514.5
2024 Q1	3,370.0	56.6	630.7	184.6	625.0	177.0	155.9	382.2	413.2	639.3	105.5	370.6
Q2	3,392.0	56.9	627.1	184.6	630.6	178.4	157.9	384.3	418.2	647.0	107.0	373.8
Q3	3,420.2	57.2	632.8	184.2	632.9	180.8	159.2	384.8	423.1	657.2	108.2	382.1
Q4	3,456.8	58.7	642.9	185.5	640.3	184.2	159.7	387.0	426.5	663.9	108.2	388.1
as percentage of value added												
2024	100.0	1.7	18.6	5.4	18.5	5.3	4.6	11.3	12.3	19.1	3.1	-
Chain-linked volumes (prices for the previous year)												
quarter-on-quarter percentage changes												
2024 Q1	0.1	0.9	-1.5	0.1	0.7	1.0	1.1	0.9	0.1	0.3	0.8	2.2
Q2	0.2	-1.6	-0.1	-1.0	0.2	0.4	0.1	0.3	0.7	0.3	0.4	0.2
Q3	0.3	-0.5	0.1	-0.6	0.0	1.2	0.1	0.1	0.4	0.7	1.1	1.9
Q4	0.2	0.5	-0.2	0.2	0.4	1.4	-1.0	0.4	0.0	0.5	-1.0	0.5
annual percentage changes												
2022	3.9	-0.9	0.5	0.0	8.1	5.6	-1.8	2.8	6.3	2.9	16.1	0.7
2023	0.7	0.3	-1.3	1.3	-0.1	4.6	-1.3	1.7	1.5	1.1	3.9	-1.9
2024	0.9	-0.6	-1.0	-1.6	0.8	3.9	0.5	1.9	1.9	1.6	1.2	0.8
2024 Q1	0.7	0.6	-1.4	-1.6	0.5	4.1	0.3	1.8	2.1	1.1	1.4	-1.4
Q2	0.7	-1.5	-1.3	-2.1	0.6	3.2	0.2	2.0	2.3	1.5	1.0	-0.9
Q3	1.0	-0.9	-0.2	-2.0	0.6	3.8	0.6	2.0	2.0	1.7	1.0	0.7
Q4	0.8	-0.7	-1.6	-1.3	1.3	4.1	0.3	1.7	1.2	1.8	1.3	4.9
contributions to quarter-on-quarter percentage changes in value added; percentage points												
2024 Q1	0.1	0.0	-0.3	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	-
Q2	0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	-
Q3	0.3	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	-
Q4	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	-
contributions to annual percentage changes in value added; percentage points												
2022	3.9	0.0	0.1	0.0	1.5	0.3	-0.1	0.3	0.8	0.6	0.5	-
2023	0.7	0.0	-0.2	0.1	0.0	0.2	-0.1	0.2	0.2	0.2	0.1	-
2024	0.9	0.0	-0.2	-0.1	0.1	0.2	0.0	0.2	0.2	0.3	0.0	-
2024 Q1	0.7	0.0	-0.3	-0.1	0.1	0.2	0.0	0.2	0.2	0.2	0.0	-
Q2	0.7	0.0	-0.3	-0.1	0.1	0.2	0.0	0.2	0.3	0.3	0.0	-
Q3	1.0	0.0	0.0	-0.1	0.1	0.2	0.0	0.2	0.2	0.3	0.0	-
Q4	0.8	0.0	-0.3	-0.1	0.2	0.2	0.0	0.2	0.1	0.3	0.0	-

Sources: Eurostat and ECB calculations.

2 Economic activity

2.3 Employment [1)]

(quarterly data seasonally adjusted; annual data unadjusted)

	Total	By employment status		By economic activity									
		Employees	Self-employed	Agriculture forestry and fishing	Manufacturing, energy and utilities	Construction	Trade, transport, accommodation and food services	Information and communication	Finance and insurance	Real estate	Professional, business and support services	Public administration, education, health and social work	Arts, entertainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12	13
Persons employed													
as a percentage of total persons employed													
2022	100.0	86.0	14.0	2.9	14.2	6.4	24.2	3.3	2.3	1.1	14.2	24.9	6.6
2023	100.0	86.1	13.9	2.8	14.1	6.4	24.4	3.4	2.3	1.1	14.2	24.8	6.6
2024	100.0	86.1	13.9	2.8	14.0	6.4	24.4	3.4	2.3	1.0	14.2	25.0	6.5
annual percentage changes													
2022	2.4	2.5	1.9	-0.7	1.2	3.7	3.3	6.1	0.1	3.3	3.8	1.5	1.3
2023	1.4	1.5	0.7	-2.1	0.9	1.3	2.0	3.6	0.5	1.8	1.7	1.3	1.4
2024	1.0	1.0	0.6	0.0	0.2	1.1	1.0	1.7	0.7	-0.8	0.5	1.7	0.5
2024 Q2	1.0	1.0	0.7	0.5	0.5	1.2	0.7	1.7	0.7	-1.3	0.6	1.9	0.7
Q3	1.0	1.0	0.8	0.2	0.3	0.8	1.0	1.4	0.8	-1.9	0.8	1.8	0.7
Q4	0.7	0.8	0.1	-1.0	0.0	0.8	1.1	1.3	0.8	-0.3	-0.1	1.6	0.0
2025 Q1	0.8	.	.	.	.	.	.	.	.	.	.	.	.
Hours worked													
as a percentage of total hours worked													
2022	100.0	81.7	18.3	3.8	14.7	7.4	25.1	3.6	2.4	1.1	14.1	22.0	5.9
2023	100.0	81.9	18.1	3.7	14.6	7.3	25.2	3.6	2.4	1.1	14.2	22.0	5.9
2024	100.0	82.0	18.0	3.6	14.5	7.3	25.2	3.7	2.4	1.1	14.2	22.2	5.9
annual percentage changes													
2022	3.6	3.6	3.3	-1.3	1.2	4.2	7.4	6.4	-0.7	5.3	4.4	0.8	4.8
2023	1.3	1.6	0.2	-2.2	0.6	0.9	1.8	3.4	0.1	1.4	1.7	1.5	1.8
2024	1.0	1.2	0.4	-0.5	0.3	1.1	1.0	2.0	0.5	-1.2	1.2	1.8	0.8
2024 Q1	0.8	0.8	0.5	-1.3	-0.4	1.1	1.0	2.2	0.1	-1.1	1.2	1.3	0.1
Q2	0.9	1.0	0.4	0.0	0.4	0.7	0.4	1.8	0.4	-2.1	1.0	1.8	1.0
Q3	0.6	0.8	-0.1	-0.7	-0.1	0.3	0.6	1.2	0.5	-2.4	0.9	1.3	0.5
Q4	1.0	1.3	0.0	-0.9	0.2	1.1	1.2	1.7	0.2	0.1	0.8	1.9	0.9
Hours worked per person employed													
annual percentage changes													
2022	1.1	1.1	1.4	-0.6	-0.1	0.6	4.0	0.3	-0.8	1.9	0.6	-0.7	3.5
2023	-0.1	0.0	-0.6	0.0	-0.3	-0.4	-0.2	-0.2	-0.4	-0.4	0.0	0.2	0.4
2024	0.1	0.2	-0.2	-0.6	0.1	0.0	0.0	0.3	-0.2	-0.5	0.6	0.0	0.3
2024 Q1	-0.4	-0.3	-0.4	-1.7	-0.6	-0.4	-0.4	-0.3	-0.6	-1.5	0.4	-0.3	-0.4
Q2	-0.1	-0.1	-0.3	-0.5	-0.1	-0.5	-0.2	0.0	-0.3	-0.9	0.4	-0.1	0.3
Q3	-0.4	-0.3	-0.9	-1.0	-0.4	-0.5	-0.4	-0.1	-0.2	-0.5	0.0	-0.5	-0.2
Q4	0.3	0.4	-0.1	0.1	0.3	0.3	0.1	0.4	-0.6	0.4	0.9	0.3	0.9

Sources: Eurostat and ECB calculations.
1) Data for employment are based on the ESA 2010.

2 Economic activity

2.4 Labour force, unemployment and job vacancies

(seasonally adjusted, unless otherwise indicated)

	Labour force, millions	Under-employment, % of labour force	Unemployment [1]												Job vacancy rate [3]
			Total		Long-term unemploy-ment, % of labour force [2]	By age				By gender					
						Adult		Youth		Male		Female			
			Millions	% of labour force		Millions	% of labour force	Millions	% of labour force	Millions	% of labour force	Millions	% of labour force		% of total posts
	1	2	3	4	5	6	7	8	9	10	11	12	13		14
% of total in 2020			100.0			80.1		19.9		51.3		48.7			
2022	167.966	3.1	11.400	6.8	2.7	9.148	6.0	2.252	14.6	5.734	6.4	5.666	7.2		3.2
2023	170.280	2.9	11.183	6.6	2.4	8.886	5.8	2.297	14.5	5.651	6.2	5.531	6.9		3.0
2024	171.876	2.8	10.938	6.4	2.1	8.610	5.5	2.328	14.6	5.605	6.1	5.334	6.6		2.6
2024 Q2	171.794	2.8	11.034	6.4	2.1	8.691	5.6	2.342	14.7	5.619	6.2	5.415	6.7		2.6
Q3	171.945	2.8	10.865	6.3	1.9	8.499	5.4	2.366	14.8	5.654	6.2	5.211	6.5		2.5
Q4	172.125	2.8	10.605	6.2	2.0	8.335	5.4	2.269	14.4	5.461	6.0	5.144	6.4		2.5
2025 Q1	.	.	.	.	.	.	.	.	.	.	.	.	.		2.4
2024 Nov.	-	-	10.619	6.2	-	8.323	5.3	2.297	14.5	5.463	6.0	5.156	6.4		-
Dec.	-	-	10.722	6.2	-	8.448	5.4	2.273	14.4	5.493	6.0	5.229	6.5		-
2025 Jan.	-	-	10.813	6.3	-	8.490	5.4	2.324	14.7	5.521	6.0	5.293	6.6		-
Feb.	-	-	10.798	6.3	-	8.458	5.4	2.340	14.7	5.486	6.0	5.312	6.6		-
Mar.	-	-	10.887	6.3	-	8.541	5.5	2.346	14.8	5.572	6.1	5.316	6.6		-
Apr.	-	-	10.680	6.2	-	8.408	5.4	2.272	14.4	5.452	6.0	5.228	6.5		-

Sources: Eurostat and ECB calculations.
1) Where annual and quarterly Labour Force Survey data have not yet been published, they are estimated as simple averages of the monthly data. There is a break in series from the first quarter of 2021 due to the implementation of the Integrated European Social Statistics Regulation. Owing to technical issues with the introduction of the new German system of integrated household surveys, including the Labour Force Survey, the figures for the euro area include data from Germany, starting in the first quarter of 2020, which are not direct estimates from Labour Force Survey microdata, but based on a larger sample including data from other integrated household surveys.
2) Not seasonally adjusted.
3) The job vacancy rate is equal to the number of job vacancies divided by the sum of the number of occupied posts and the number of job vacancies, expressed as a percentage. Data are non-seasonally adjusted and cover industry, construction and services (excluding households as employers and extra-territorial organisations and bodies).

2.5 Short-term business statistics

	Industrial production						Construc-tion production	Retail sales				Services produc-tion [1]	New passenger car regis-trations
	Total (excluding construction)		Main Industrial Groupings					Total	Food, beverages, tobacco	Non-food	Fuel		
	Total	Manu-facturing	Inter-mediate goods	Capital goods	Consumer goods	Energy							
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2021	100.0	88.7	32.4	33.2	22.5	11.9	100.0	100.0	38.1	54.4	7.5	100.0	100.0
annual percentage changes													
2022	1.8	2.5	-1.3	3.7	5.9	-3.4	2.1	1.1	-2.7	3.4	4.5	9.9	-4.3
2023	-1.6	-1.2	-6.1	3.2	-1.0	-5.0	1.9	-1.9	-2.6	-1.0	-1.7	2.3	14.6
2024	-3.0	-3.3	-3.9	-5.0	0.0	-0.3	-1.0	1.2	0.5	1.7	0.6	1.7	-0.1
2024 Q2	-4.0	-4.2	-5.4	-6.5	0.6	-0.4	-1.7	0.3	0.3	0.5	0.1	1.5	2.8
Q3	-1.8	-2.0	-3.7	-3.8	2.6	1.0	-2.2	2.1	0.8	2.9	2.3	1.0	-9.0
Q4	-1.6	-1.9	-2.4	-4.2	2.6	0.0	0.0	2.1	0.9	3.0	0.8	2.3	-1.9
2025 Q1	1.5	1.5	-1.4	-1.3	9.2	0.8	-0.5	1.8	1.1	2.4	1.0	.	-2.5
2024 Nov.	-2.0	-2.2	-2.2	-3.1	-0.6	-0.2	0.2	1.8	1.1	2.2	1.2	2.8	0.0
Dec.	-1.8	-2.1	-2.0	-7.3	6.1	0.7	0.3	2.2	0.7	3.5	0.1	2.0	-1.3
2025 Jan.	-0.4	-0.2	-1.3	-3.2	5.8	-1.6	-0.1	1.9	1.2	2.9	0.2	3.0	-3.6
Feb.	1.0	0.5	-2.7	-1.9	7.7	2.2	-0.6	1.9	1.5	2.1	2.0	1.7	1.2
Mar.	3.6	3.8	-0.2	1.0	13.8	2.2	-1.1	1.5	0.6	2.3	0.9	.	-4.9
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	4.9
month-on-month percentage changes (s.a.)													
2024 Nov.	0.3	0.4	0.5	0.3	-0.1	2.1	0.9	0.1	0.0	-0.1	1.2	0.4	3.9
Dec.	-0.6	-1.1	-1.2	-1.9	5.5	1.5	0.4	-0.1	-0.4	0.3	-0.4	-0.2	-1.8
2025 Jan.	0.8	1.0	1.0	0.0	-2.1	-1.1	0.3	0.0	0.5	0.0	0.2	0.4	-1.2
Feb.	1.1	1.1	0.6	0.8	1.7	0.6	-1.2	0.2	0.1	0.0	0.4	-0.1	3.4
Mar.	2.6	2.5	0.6	3.2	2.3	-0.5	0.1	-0.1	-0.1	-0.1	0.4	.	-1.7
Apr.	.	.	.	.	.	.	.	.	.	.	.	.	3.0

Sources: Eurostat, ECB calculations and European Automobile Manufacturers Association (col. 13).
1) Excluding trade and financial services.

2 Economic activity

2.6 Opinion surveys
(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balances, unless otherwise indicated)								Purchasing Managers' Surveys (diffusion indices)			
	Economic sentiment indicator (long-term average = 100)	Manufacturing industry		Consumer confidence indicator	Construction confidence indicator	Retail trade confidence indicator	Service industries		Purchasing Managers' Index (PMI) for manufacturing	Manufacturing output	Business activity for services	Composite output
		Industrial confidence indicator	Capacity utilisation (%)				Services confidence indicator	Capacity utilisation (%)				
	1	2	3	4	5	6	7	8	9	10	11	12
1999-20	99.7	-4.2	80.1	-11.0	-12.6	-6.7	6.4	.	-	-	-	-
2022	102.3	5.0	82.4	-21.9	5.2	-3.6	9.3	89.9	-	-	-	-
2023	96.2	-6.1	80.7	-17.4	-1.3	-4.2	6.7	90.4	-	-	-	-
2024	95.7	-11.0	78.4	-14.0	-4.5	-6.9	6.3	90.1	45.9	46.2	51.5	50.1
2024 Q3	96.1	-11.0	78.2	-13.0	-5.0	-8.6	6.1	90.2	45.5	45.4	52.1	50.3
Q4	95.2	-12.7	77.4	-13.4	-3.8	-5.7	5.7	90.4	45.4	45.1	50.9	49.3
2025 Q1	95.5	-11.4	77.3	-14.1	-3.4	-5.8	4.3	90.3	47.6	48.8	51.0	50.4
Q2	.	.	77.5	.	.	.	.	89.8	.	.	.	.
2024 Dec.	93.5	-14.3	.	-14.3	-3.8	-4.6	5.4	.	45.1	44.3	51.6	49.6
2025 Jan.	95.2	-12.4	77.3	-14.1	-2.9	-5.3	5.7	90.3	46.6	47.1	51.3	50.2
Feb.	96.2	-11.0	.	-13.7	-3.5	-5.2	5.0	.	47.6	48.9	50.6	50.2
Mar.	95.1	-10.6	.	-14.5	-3.7	-7.0	2.3	.	48.6	50.5	51.0	50.9
Apr.	93.8	-11.0	77.5	-16.6	-4.1	-8.9	1.6	89.8	49.0	51.5	50.1	50.4
May	94.8	-10.3	.	-15.2	-3.6	-7.0	1.5	.	49.4	51.5	49.7	50.2

Sources: European Commission (Directorate-General for Economic and Financial Affairs) (col. 1-8) and S&P Global Market Intelligence (col. 9-12).

2.7 Summary accounts for households and non-financial corporations
(current prices, unless otherwise indicated; not seasonally adjusted)

	Households							Non-financial corporations					
	Saving rate (gross)	Debt ratio	Real gross disposable income	Financial investment	Non-financial investment (gross)	Net worth [2]	Housing wealth	Profit rate [3]	Saving rate (gross)	Debt ratio [4]	Financial investment	Non-financial investment (gross)	Financing
	Percentage of gross disposable income (adjusted) [1]		Annual percentage changes					Percentage of gross value added		Percentage of GDP	Annual percentage changes		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2022	13.6	91.1	0.5	2.2	12.5	2.1	7.7	37.5	5.1	72.9	4.9	9.7	3.4
2023	14.3	85.0	1.2	1.9	3.5	3.8	1.6	35.7	5.1	68.7	1.6	2.2	0.8
2024	15.3	82.1	2.2	2.4	-1.8	4.6	3.4	33.3	3.0	67.2	1.8	-2.9	0.9
2024 Q1	14.6	83.8	2.5	1.9	-3.1	3.7	1.7	34.9	4.5	67.9	1.8	-6.0	0.9
Q2	15.0	83.3	1.7	2.2	-1.7	3.8	2.4	34.2	3.9	67.9	2.0	-8.5	1.0
Q3	15.2	82.6	2.2	2.3	-0.9	5.7	2.9	33.6	3.6	67.6	2.1	2.6	1.0
Q4	15.3	82.1	2.3	2.4	-1.5	4.6	3.4	33.3	3.0	67.2	1.8	1.0	0.9

Sources: ECB and Eurostat.
1) Based on four-quarter cumulated sums of saving, debt and gross disposable income (adjusted for the change in pension entitlements).
2) Financial assets (net of financial liabilities) and non-financial assets. Non-financial assets consist mainly of housing wealth (residential structures and land). They also include non-financial assets of unincorporated enterprises classified within the household sector.
3) The profit rate is gross entrepreneurial income (broadly equivalent to cash flow) divided by gross value added.
4) Defined as consolidated loans and debt securities liabilities.

2 Economic activity

2.8 Euro area balance of payments, current and capital accounts

(EUR billions; seasonally adjusted unless otherwise indicated; transactions)

	Current account											Capital account [1]	
	Total			Goods		Services		Primary income		Secondary income			
	Credit	Debit	Balance	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit
	1	2	3	4	5	6	7	8	9	10	11	12	13
2024 Q2	1,491.9	1,358.5	133.4	713.8	616.3	390.5	338.5	341.2	313.1	46.4	90.6	24.4	22.2
Q3	1,470.6	1,380.5	90.1	704.4	620.3	376.9	341.4	339.1	325.9	50.1	92.9	21.3	16.5
Q4	1,488.3	1,405.1	83.2	708.7	624.4	384.8	338.8	341.7	338.4	53.1	103.4	34.4	23.0
2025 Q1	1,540.9	1,409.1	131.8	766.3	646.0	398.5	359.4	329.5	320.7	46.5	83.0	30.2	26.0
2024 Oct.	488.4	463.0	25.4	231.0	204.8	125.4	110.3	114.8	114.9	17.1	32.9	7.5	4.7
Nov.	495.7	474.1	21.6	239.2	209.4	126.8	114.9	112.7	117.5	17.1	32.3	6.6	5.2
Dec.	504.3	468.0	36.2	238.5	210.2	132.6	113.6	114.3	106.0	18.9	38.2	20.3	13.1
2025 Jan.	506.6	466.4	40.3	248.4	206.7	132.1	120.2	111.1	110.8	15.1	28.6	12.4	11.8
Feb.	516.3	475.7	40.6	253.4	218.3	136.3	121.8	111.0	109.8	15.6	25.8	7.1	6.4
Mar.	517.9	467.0	50.9	264.6	221.0	130.1	117.4	107.5	100.0	15.7	28.5	10.8	7.8
12-month cumulated transactions													
2025 Mar.	5,991.7	5,553.2	438.5	2,893.2	2,507.1	1,550.7	1,378.1	1,351.7	1,298.1	196.1	369.9	110.3	87.7
12-month cumulated transactions as a percentage of GDP													
2025 Mar.	39.5	36.6	2.9	19.1	16.5	10.2	9.1	8.9	8.6	1.3	2.4	0.7	0.6

1) The capital account is not seasonally adjusted.

2.9 Euro area external trade in goods [1], values and volumes by product group [2]

(seasonally adjusted, unless otherwise indicated)

	Total (n.s.a.)		Exports (f.o.b.)					Imports (c.i.f.)					
			Total				Memo item:	Total				Memo items:	
	Exports	Imports	Total	Intermediate goods	Capital goods	Consumption goods	Manufacturing	Total	Intermediate goods	Capital goods	Consumption goods	Manufacturing	Oil
	1	2	3	4	5	6	7	8	9	10	11	12	13
Values (EUR billions; annual percentage changes for columns 1 and 2)													
2024 Q2	1.5	-4.4	715.7	337.6	137.2	223.9	592.3	671.9	384.1	109.7	163.1	480.9	78.9
Q3	2.2	0.3	711.0	338.9	137.0	219.0	590.2	675.3	380.3	112.5	165.3	490.9	75.0
Q4	1.2	2.1	716.6	336.6	139.4	224.3	594.7	683.4	381.0	111.5	171.3	493.5	70.1
2025 Q1	7.8	7.4	771.1	.	.	.	640.3	706.8	.	.	.	503.1	.
2024 Oct.	2.4	3.4	233.9	111.3	44.5	73.9	195.5	227.7	128.0	36.6	57.4	165.6	23.9
Nov.	-1.7	-0.5	241.3	113.1	47.7	74.8	199.6	229.2	128.2	37.8	57.0	165.2	23.2
Dec.	3.0	3.6	241.4	112.2	47.2	75.7	199.6	226.5	124.8	37.2	56.9	162.7	23.0
2025 Jan.	3.0	7.9	246.1	117.3	47.2	76.4	203.2	232.5	130.9	37.2	58.0	166.1	23.8
Feb.	6.4	5.5	258.7	128.1	47.2	76.8	214.9	236.0	133.6	38.2	58.9	167.9	22.8
Mar.	13.7	8.7	266.3	.	.	.	222.1	238.3	.	.	.	169.1	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2024 Q1	-3.6	-6.7	97.0	90.3	97.0	107.8	96.9	97.5	94.1	94.1	103.8	96.9	129.7
Q2	-1.2	-4.3	95.5	89.4	92.0	108.4	95.4	98.5	94.8	96.9	104.9	98.2	133.1
Q3	-0.6	-1.0	94.5	89.0	90.7	106.1	94.6	98.8	94.8	99.2	105.5	99.7	129.8
Q4	-2.4	1.4	93.9	87.4	90.3	107.2	94.1	99.8	95.1	96.4	109.4	99.9	133.0
2024 Sep.	-2.1	0.0	94.1	88.6	92.0	103.9	94.4	99.0	94.9	98.8	105.8	100.2	129.2
Oct.	-0.5	4.3	92.7	87.5	88.5	104.9	93.3	100.2	96.3	95.2	109.7	100.9	132.1
Nov.	-4.9	-0.9	95.2	88.2	92.7	108.0	95.4	100.3	96.0	97.3	108.4	99.7	134.6
Dec.	-1.8	0.4	93.7	86.3	89.7	108.6	93.8	98.9	93.1	96.6	110.0	99.1	132.3
2025 Jan.	-3.2	2.4	95.7	89.0	92.4	108.8	95.8	99.3	95.2	94.3	108.6	99.1	127.8
Feb.	-1.5	-1.0	98.0	93.7	92.1	107.1	98.3	100.7	96.2	97.9	109.2	100.4	133.8

Sources: ECB and Eurostat.
1) Differences between ECB's b.o.p. goods (Table 2.8) and Eurostat's trade in goods (Table 2.9) are mainly due to different definitions.
2) Product groups as classified in the Broad Economic Categories.

3 Prices and costs

3.1 Harmonised Index of Consumer Prices [1)]

(annual percentage changes, unless otherwise indicated)

	Total					Total (s.a.; percentage change vis-à-vis previous period) [2)]						Administered prices	
	Index: 2015 = 100	Total		Goods	Services	Total	Processed food	Unprocessed food	Non-energy industrial goods	Energy (n.s.a.)	Services	Total HICP excluding administered prices	Administered prices
		Total	Total excluding food and energy										
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2024	100.0	100.0	70.6	55.1	44.9	100.0	15.1	4.3	25.7	9.9	44.9	88.5	11.5
2022	116.8	8.4	3.9	11.9	3.5	-	-	-	-	-	-	8.5	7.8
2023	123.2	5.4	4.9	5.7	4.9	-	-	-	-	-	-	5.5	4.9
2024	126.1	2.4	2.8	1.1	4.0	-	-	-	-	-	-	2.3	3.3
2024 Q2	126.3	2.5	2.8	1.3	4.0	0.5	0.5	-0.4	0.0	-0.5	1.2	2.5	2.8
Q3	126.6	2.2	2.8	0.6	4.0	0.5	0.8	0.9	0.2	-1.4	1.0	1.9	4.0
Q4	126.9	2.2	2.7	0.8	3.9	0.5	0.8	1.7	0.1	-0.6	0.7	2.0	4.3
2025 Q1	127.3	2.3	2.6	1.2	3.7	0.8	0.4	0.5	0.2	2.9	0.8	2.2	3.7
2024 Dec.	127.1	2.4	2.7	1.2	4.0	0.2	0.2	-0.3	0.0	0.6	0.3	2.2	4.4
2025 Jan.	126.7	2.5	2.7	1.4	3.9	0.5	0.1	0.1	0.1	3.0	0.3	2.3	4.4
Feb.	127.3	2.3	2.6	1.2	3.7	0.2	0.2	0.4	0.1	-0.3	0.3	2.2	3.3
Mar.	128.0	2.2	2.4	1.1	3.5	0.0	0.1	0.8	0.0	-1.4	0.3	2.0	3.5
Apr.	128.8	2.2	2.7	0.7	4.0	0.1	0.0	0.7	0.0	-2.3	0.7	2.0	3.3
May [3)]	128.7	1.9	2.3	.	3.2	-0.1	0.6	-0.3	0.1	-1.2	-0.2	.	.

	Goods						Services					
	Food (including alcoholic beverages and tobacco)			Industrial goods			Housing		Transport	Communication	Recreation and personal care	Miscellaneous
	Total	Processed food	Unprocessed food	Total	Non-energy industrial goods	Energy	Total	Rents				
	14	15	16	17	18	19	20	21	22	23	24	25
% of total in 2024	19.5	15.1	4.3	35.6	25.7	9.9	9.6	5.6	7.4	2.2	16.4	9.3
2022	9.0	8.6	10.4	13.6	4.6	37.0	2.4	1.7	4.4	-0.2	6.1	2.1
2023	10.9	11.4	9.1	2.9	5.0	-2.0	3.6	2.7	5.2	0.2	6.9	4.0
2024	2.9	3.2	1.9	0.0	0.8	-2.2	3.3	2.9	4.2	-0.9	4.9	4.0
2024 Q2	2.6	2.9	1.4	0.6	0.7	0.0	3.3	2.8	3.7	-0.5	5.1	4.0
Q3	2.3	2.7	1.2	-0.3	0.5	-2.7	3.3	3.0	4.5	-0.9	4.8	4.0
Q4	2.7	2.8	2.3	-0.2	0.6	-2.2	3.3	3.0	5.0	-2.2	4.6	4.0
2025 Q1	2.6	2.6	2.9	0.5	0.6	0.4	3.3	2.9	3.9	-1.9	4.2	4.1
2024 Dec.	2.6	2.9	1.6	0.4	0.5	0.1	3.3	3.0	5.1	-2.4	4.7	4.0
2025 Jan.	2.3	2.6	1.4	0.9	0.5	1.9	3.3	2.9	4.4	-1.9	4.6	4.1
Feb.	2.7	2.6	3.0	0.4	0.6	0.2	3.3	2.9	3.9	-2.2	4.3	4.1
Mar.	2.9	2.6	4.2	0.2	0.6	-1.0	3.3	2.9	3.4	-1.7	3.8	4.2
Apr.	3.0	2.4	4.9	-0.6	0.6	-3.6	3.3	3.0	5.7	-1.9	4.4	4.0
May [3)]	3.3	2.9	4.4	.	0.6	-3.6	.	.	.	.	.	.

Sources: Eurostat and ECB calculations.
1) Data refer to the changing composition of the euro area.
2) In May 2016 the ECB started publishing enhanced seasonally adjusted HICP series for the euro area, following a review of the seasonal adjustment approach as described in Box 1, Economic Bulletin, Issue 3, ECB, 2016 (https://www.ecb.europa.eu/pub/pdf/ecbu/eb201603.en.pdf).
3) Flash estimate.

3 Prices and costs

3.2 Industry, construction and property prices

(annual percentage changes, unless otherwise indicated)

	Industrial producer prices excluding construction [1]										Construction [2]	Residential property prices	Experimental indicator of commercial property prices [3]
	Total (index: 2021 = 100)	Total		Industry excluding construction and energy						Energy			
		Total	Manufacturing	Total	Intermediate goods	Capital goods	Consumer goods						
							Total	Food, beverages and tobacco	Non-food				
	1	2	3	4	5	6	7	8	9	10	11	12	13
% of total in 2021	100.0	100.0	77.8	72.3	30.9	19.3	22.2	15.7	6.5	27.7			
2022	132.7	32.7	17.0	13.8	19.8	7.1	12.2	16.6	6.8	81.1	11.9	7.1	0.6
2023	130.0	-2.1	1.9	3.7	-0.2	4.8	8.3	8.4	5.6	-13.3	6.9	-1.2	-8.2
2024	124.6	-4.2	-0.6	-0.1	-2.4	1.6	1.6	0.3	1.2	-12.3	2.2	2.0	-5.9
2024 Q2	122.8	-4.4	-0.2	-0.4	-3.1	1.6	1.1	-0.4	1.1	-12.2	2.5	1.4	-7.2
Q3	124.4	-2.7	-0.6	0.4	-0.9	1.3	1.5	0.5	1.1	-8.9	1.8	2.7	-5.7
Q4	126.2	-1.5	-0.2	0.9	-0.3	1.4	2.0	1.4	1.2	-6.0	0.8	4.2	-2.3
2025 Q1	127.7	2.2	0.7	1.3	0.7	1.7	2.0	1.5	1.5	4.9	0.9	.	.
2024 Oct.	124.6	-3.3	-0.9	0.8	-0.5	1.3	2.1	1.3	1.3	-11.2	-	-	-
Nov.	126.7	-1.2	-0.1	0.9	-0.3	1.4	2.1	1.6	1.1	-5.0	-	-	-
Dec.	127.2	0.0	0.4	1.0	0.0	1.5	2.0	1.4	1.2	-1.7	-	-	-
2025 Jan.	128.2	1.7	1.0	1.3	0.5	1.7	2.1	1.3	1.6	3.3	-	-	-
Feb.	128.5	3.0	0.8	1.4	0.9	1.7	2.0	1.4	1.5	7.6	-	-	-
Mar.	126.4	1.9	0.3	1.3	0.8	1.8	2.0	1.6	1.4	3.8	-	-	-

Sources: Eurostat, ECB calculations, and ECB calculations based on MSCI data and national sources (col. 13).
1) Domestic sales only.
2) Output prices for residential buildings.
3) Experimental data based on non-harmonised sources (see https://www.ecb.europa.eu/stats/ecb_statistics/governance_and_quality_framework/html/experimental-data.en.html for further details).

3.3 Commodity prices and GDP deflators

(annual percentage changes, unless otherwise indicated)

	GDP deflators								Oil prices (EUR per barrel)	Non-energy commodity prices (EUR)					
	Total (s.a.; index: 2020 = 100)	Total	Domestic demand				Exports [1]	Imports [1]		Import-weighted [2]			Use-weighted [2]		
			Total	Private consumption	Government consumption	Gross fixed capital formation				Total	Food	Non-food	Total	Food	Non-food
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
% of total										100.0	45.5	54.6	100.0	50.4	49.6
2022	107.3	5.1	7.0	6.7	4.5	8.2	12.8	17.4	95.0	18.3	28.8	9.6	19.3	27.7	10.9
2023	113.7	6.0	4.6	6.4	3.6	4.2	0.6	-2.3	76.4	-12.8	-11.6	-14.0	-13.7	-12.5	-15.0
2024	117.1	2.9	2.4	2.5	3.0	1.9	0.7	-0.6	77.8	9.4	13.6	5.1	9.2	12.2	5.5
2024 Q2	116.6	2.9	2.7	2.7	3.2	1.8	0.8	-0.1	85.0	13.0	16.5	9.4	11.4	13.1	9.4
Q3	117.3	2.7	2.2	2.1	2.9	1.9	1.3	0.1	.	10.0	11.6	8.2	10.9	12.4	9.1
Q4	118.3	2.5	2.0	1.9	2.4	2.0	1.6	0.5	.	17.7	23.5	11.8	17.8	22.0	12.8
2025 Q1	.	.	.	.	.	.	.	.	.	19.8	27.8	11.3	19.1	24.6	12.2
2024 Nov.	-	-	-	-	-	-	-	-	.	17.6	23.2	12.0	17.9	21.8	13.2
Dec.	-	-	-	-	-	-	-	-	.	22.0	32.7	11.2	22.6	31.3	12.3
2025 Jan.	-	-	-	-	-	-	-	-	.	23.8	36.6	10.7	24.1	34.6	11.6
Feb.	-	-	-	-	-	-	-	-	.	23.1	32.7	12.9	21.4	27.5	13.6
Mar.	-	-	-	-	-	-	-	-	.	12.8	15.1	10.4	12.1	12.7	11.4
Apr.	-	-	-	-	-	-	-	-	.	-3.6	-1.8	-5.7	-3.2	-1.6	-5.3

Sources: Eurostat, ECB calculations and Bloomberg (col. 9).
1) Deflators for exports and imports refer to goods and services and include cross-border trade within the euro area.
2) Import-weighted: weighted according to 2009-11 average import structure; use-weighted: weighted according to 2009-11 average domestic demand structure.

3 Prices and costs

3.4 Price-related opinion surveys
(seasonally adjusted)

	European Commission Business and Consumer Surveys (percentage balance)					Purchasing Managers' Surveys (diffusion indices)			
	Selling price expectations (for next three months)				Consumer price trends over past 12 months	Input prices		Prices charged	
	Manu-facturing	Retail trade	Services	Construction		Manu-facturing	Services	Manu-facturing	Services
	1	2	3	4	5	6	7	8	9
1999-20	4.7	5.8	4.0	-3.3	29.0	-	-	-	-
2022	48.5	53.1	27.4	42.1	71.6	-	-	-	-
2023	9.1	28.8	19.6	14.8	74.5	-	-	-	-
2024	6.0	14.5	15.2	4.5	55.1	49.0	59.7	48.8	54.2
2024 Q2	5.9	14.1	14.9	4.3	56.7	49.9	60.5	48.6	54.6
Q3	6.8	13.6	13.8	2.8	50.4	52.0	57.9	50.1	53.0
Q4	7.4	13.9	14.8	4.9	48.8	49.1	58.0	48.2	53.3
2025 Q1	10.3	16.7	14.8	4.7	50.3	52.2	60.1	50.0	54.1
2024 Dec.	7.8	14.3	15.5	6.6	50.3	50.0	59.6	48.6	53.9
2025 Jan.	10.0	17.3	16.7	6.8	51.6	52.0	60.8	50.0	53.9
Feb.	9.9	16.5	14.0	4.1	49.8	52.2	60.8	49.8	54.7
Mar.	11.0	16.5	13.6	3.0	49.5	52.4	58.7	50.4	53.6
Apr.	10.6	17.0	14.5	4.6	48.7	48.9	58.2	51.3	52.9
May	7.9	14.9	14.2	3.0	50.2	47.8	58.3	49.2	52.6

Sources: European Commission (Directorate-General for Economic and Financial Affairs) and S&P Global Market Intelligence.

3.5 Labour cost indices
(annual percentage changes, unless otherwise indicated)

	Total (index: 2020=100)	Total	By component		For selected economic activities		Memo item: Indicator of negotiated wages [1]
			Wages and salaries	Employers' social contributions	Business economy	Mainly non-business economy	
	1	2	3	4	5	6	7
% of total in 2020	100.0	100.0	75.3	24.7	69.0	31.0	
2022	105.7	4.5	3.7	7.0	5.1	3.4	2.9
2023	110.7	4.7	4.6	4.9	5.0	4.1	4.4
2024	115.8	4.6	4.6	4.5	4.6	4.6	4.5
2024 Q2	119.8	5.1	4.9	5.6	5.0	5.3	3.6
Q3	112.1	4.5	4.3	5.1	4.7	4.2	5.4
Q4	122.8	3.7	4.1	2.6	3.9	3.3	4.1
2025 Q1	111.9	3.2	3.3	3.0	3.8	1.9	2.4

Sources: Eurostat and ECB calculations.
1) Experimental data based on non-harmonised sources (see https://www.ecb.europa.eu/stats/ecb_statistics/governance_and_quality_framework/html/experimental-data.en.html for further details).

3 Prices and costs

3.6 Unit labour costs, compensation per labour input and labour productivity

(annual percentage changes, unless otherwise indicated; quarterly data seasonally adjusted; annual data unadjusted)

	Total (index: 2020 =100)	Total	By economic activity									
			Agriculture, forestry andfishing	Manu-facturing, energy and utilities	Con-struction	Trade, transport, accom-modation and food services	Information and commu-nication	Finance and insurance	Real estate	Professional, business and support services	Public ad-ministration, education, health and social work	Arts, enter-tainment and other services
	1	2	3	4	5	6	7	8	9	10	11	12
Unit labor costs												
2022	103.0	3.4	4.2	4.6	8.1	1.4	2.9	5.1	5.7	3.3	2.1	-5.7
2023	109.6	6.4	3.8	7.7	4.9	7.9	4.0	7.4	4.0	6.4	5.0	2.5
2024	114.7	4.7	5.0	5.7	6.7	4.6	2.0	5.2	0.9	3.4	4.9	4.1
2024 Q1	113.2	5.5	4.2	6.5	7.1	5.0	2.4	5.6	2.7	3.9	5.8	5.2
Q2	114.1	5.2	6.1	6.6	6.9	4.9	2.5	6.3	0.2	3.1	5.4	4.6
Q3	114.9	4.5	5.5	4.6	7.2	4.9	1.7	5.2	-0.5	3.5	4.8	3.7
Q4	115.9	3.7	4.6	5.7	6.1	3.8	1.8	4.0	1.3	3.2	3.8	2.9
Compensation per employee												
2022	109.0	4.5	4.0	3.9	4.2	6.1	2.5	3.1	5.2	5.7	3.4	8.1
2023	114.8	5.3	6.4	5.4	4.8	5.7	5.0	5.4	3.8	6.3	4.8	5.0
2024	120.0	4.5	4.4	4.4	3.9	4.4	4.2	4.9	3.6	4.8	4.8	4.8
2024 Q1	118.4	4.8	4.3	4.8	3.7	4.1	3.9	5.2	4.0	5.2	5.3	6.1
Q2	119.5	4.8	4.0	4.7	3.5	4.9	4.0	5.9	3.5	4.8	5.0	5.0
Q3	120.6	4.5	4.4	4.1	4.2	4.5	4.1	5.0	3.4	4.7	4.8	4.1
Q4	121.8	4.1	4.9	4.0	3.9	4.0	4.6	3.5	3.4	4.6	4.1	4.3
Labour productivity per person employed												
2022	105.8	1.1	-0.2	-0.7	-3.6	4.6	-0.4	-1.9	-0.5	2.4	1.4	14.7
2023	104.8	-1.0	2.5	-2.1	0.0	-2.1	1.0	-1.8	-0.1	-0.2	-0.2	2.4
2024	104.6	-0.1	-0.6	-1.2	-2.6	-0.2	2.1	-0.3	2.6	1.4	-0.2	0.7
2024 Q2	104.6	-0.4	-2.0	-1.8	-3.2	0.0	1.5	-0.4	3.3	1.7	-0.4	0.4
Q3	104.8	0.0	-1.1	-0.5	-2.8	-0.3	2.4	-0.1	3.9	1.2	-0.1	0.3
Q4	105.0	0.4	0.3	-1.6	-2.1	0.2	2.8	-0.5	2.0	1.3	0.2	1.3
2025 Q1	105.0	0.4	.	.	.	.	.	.	.	.	.	.
Compensation per hour worked												
2022	103.6	3.4	5.4	4.0	4.0	2.0	2.5	3.8	3.8	4.6	4.2	5.0
2023	109.1	5.3	6.0	5.7	5.1	5.7	5.1	5.8	4.6	6.0	4.6	4.3
2024	113.8	4.4	3.9	4.3	4.0	4.2	3.8	4.9	3.5	4.0	4.8	4.6
2024 Q1	112.1	5.1	5.8	5.4	4.2	4.5	4.3	5.6	4.5	4.8	5.6	6.7
Q2	113.0	4.8	3.4	4.7	4.2	5.1	3.8	6.0	4.0	4.2	5.1	4.7
Q3	114.1	4.7	3.6	4.6	4.5	4.7	4.2	5.1	2.7	4.5	5.3	4.2
Q4	114.7	3.7	3.3	3.7	3.7	3.5	4.1	3.7	3.6	3.6	3.7	3.7
Hourly labour productivity												
2022	100.1	0.0	0.4	-0.6	-4.1	0.6	-0.7	-1.1	-2.4	1.8	2.1	10.8
2023	99.2	-0.9	2.5	-1.9	0.4	-1.9	1.2	-1.4	0.2	-0.2	-0.4	2.0
2024	99.0	-0.2	0.0	-1.3	-2.6	-0.2	1.8	-0.1	3.1	0.7	-0.2	0.4
2024 Q1	98.8	-0.3	1.8	-1.0	-2.7	-0.5	1.9	0.2	2.9	0.9	-0.2	1.3
Q2	98.8	-0.3	-1.6	-1.7	-2.8	0.2	1.4	-0.1	4.2	1.3	-0.3	0.1
Q3	99.1	0.4	-0.1	-0.1	-2.3	0.0	2.6	0.1	4.4	1.1	0.5	0.5
Q4	98.8	0.1	0.2	-1.9	-2.3	0.1	2.4	0.1	1.6	0.4	-0.1	0.4

Sources: Eurostat and ECB calculations.

4 Financial market developments

4.1 Money market interest rates
(percentages per annum, period averages)

	Euro area [1]					United States	Japan
	Euro short-term rate (€STR)	1-month deposits (EURIBOR)	3-month deposits (EURIBOR)	6-month deposits (EURIBOR)	12-month deposity (EURIBOR)	Secured overnight financing rate (SOFR)	Tokyo overnight average rate (TONAR)
	1	2	3	4	5	6	7
2022	-0.01	0.09	0.35	0.68	1.10	1.63	-0.03
2023	3.21	3.25	3.43	3.69	3.86	5.00	-0.04
2024	3.64	3.56	3.57	3.48	3.27	5.15	0.12
2024 Dec.	3.06	2.89	2.82	2.63	2.44	4.53	0.23
2025 Jan.	2.92	2.80	2.70	2.61	2.52	4.32	0.29
Feb.	2.69	2.61	2.52	2.46	2.41	4.34	0.48
Mar.	2.50	2.40	2.44	2.39	2.40	4.33	0.48
Apr.	2.34	2.24	2.25	2.20	2.14	4.35	0.48
May	2.17	2.10	2.09	2.12	2.08	4.31	0.48

Source: LSEG and ECB calculations.
1) Data refer to the changing composition of the euro area.

4.2 Yield curves
(End of period; rates in percentages per annum; spreads in percentage points)

	Spot rates					Spreads			Instantaneous forward rates			
	Euro area [1] [2]					Euro area [1] [2]	United States	United Kingdom	Euro area [1] [2]			
	3 months	1 year	2 years	5 years	10 years	10 years - 1 year	10 years - 1 year	10 years - 1 year	1 year	2 years	5 years	10 years
	1	2	3	4	5	6	7	8	9	10	11	12
2022	1.71	2.46	2.57	2.45	2.56	0.09	-0.84	-0.24	2.85	2.48	2.47	2.76
2023	3.78	3.05	2.44	1.88	2.08	-0.96	-0.92	-1.20	2.25	1.54	1.76	2.64
2024	2.58	2.18	2.01	2.13	2.45	0.27	0.41	-0.06	1.86	1.89	2.50	2.91
2024 Dec.	2.58	2.18	2.01	2.13	2.45	0.27	0.41	-0.06	1.86	1.89	2.50	2.91
2025 Jan.	2.45	2.17	2.06	2.21	2.53	0.37	0.38	0.11	1.94	2.00	2.59	3.01
Feb.	2.24	2.06	1.97	2.11	2.47	0.41	0.11	0.53	1.90	1.91	2.50	3.03
Mar.	2.18	2.03	1.99	2.27	2.78	0.75	0.18	0.61	1.92	2.03	2.88	3.52
Apr.	1.88	1.74	1.70	1.99	2.56	0.82	0.35	0.81	1.63	1.74	2.65	3.40
May	1.86	1.78	1.78	2.08	2.61	0.83	0.34	0.78	1.73	1.87	2.70	3.42

Source: ECB calculations.
1) Data refer to the changing composition of the euro area.
2) ECB calculations based on underlying data provided by Euro MTS Ltd and ratings provided by Fitch Ratings.

4.3 Stock market indices
(index levels in points; period averages)

	Dow Jones EURO STOXX Indices												United States	Japan
	Benchmark		Main industry indices											
	Broad index	50	Basic materials	Consumer services	Consumer goods	Oil and gas	Financials	Industrials	Technology	Utilities	Telecoms	Health care	Standard & Poor's 500	Nikkei 225
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2022	414.6	3,757.0	937.3	253.4	171.3	110.0	160.6	731.7	748.4	353.4	283.2	825.8	4,098.5	27,257.8
2023	452.0	4,272.0	968.5	292.7	169.2	119.2	186.7	809.8	861.5	367.8	283.1	803.6	4,285.6	30,716.6
2024	502.8	4,870.4	992.6	299.1	161.1	123.9	231.6	951.6	1,069.3	378.7	301.6	792.1	5,430.7	38,395.3
2024 Dec.	507.4	4,918.3	932.6	283.1	151.7	118.8	245.5	996.6	1,065.8	381.4	331.4	816.9	6,012.2	39,297.0
2025 Jan.	523.1	5,098.1	939.9	292.0	149.6	123.8	258.2	1,024.4	1,103.1	380.9	334.7	859.5	5,979.5	39,298.0
Feb.	553.7	5,420.0	1,008.0	305.6	155.4	128.1	282.1	1,084.2	1,154.8	387.0	364.1	901.7	6,038.7	38,735.3
Mar.	559.1	5,417.7	1,028.5	283.6	160.4	127.6	306.0	1,133.6	1,078.3	407.9	372.4	885.3	5,684.0	37,311.8
Apr.	520.6	4,994.0	938.6	256.5	158.1	118.1	290.6	1,028.5	972.3	428.7	363.4	799.9	5,369.5	34,343.0
May	562.6	5,358.5	991.5	270.2	165.8	126.5	317.9	1,146.4	1,088.5	446.5	374.1	824.3	5,810.9	37,490.5

Source: LSEG.

4 Financial market developments

4.4 MFI interest rates on loans to and deposits from households (new business) [1), 2)]

(percentages per annum, period average, unless otherwise indicated)

	Deposits				Revolving loans and overdrafts	Extended credit card credit	Loans for consumption			Loans to sole proprietors and unincorporated partnerships	Loans for house purchase					
			With an agreed maturity of:				By initial period of rate fixation		APRC [3)]		By initial period of rate fixation				APRC [3)]	Composite cost-of-borrowing indicator
	Overnight	Redeemable at notice of up to 3 months	Up tp 2 years	Over 2 years			Floating rate and up to 1 year	Over 1 year			Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2024 May	0.39	1.76	3.10	2.81	8.21	17.04	7.65	7.94	8.68	5.26	4.81	3.96	3.62	3.42	4.04	3.81
June	0.38	1.77	3.03	2.84	8.18	17.01	7.41	7.71	8.45	5.15	4.80	3.95	3.63	3.39	4.03	3.78
July	0.38	1.77	3.01	2.77	8.15	17.00	7.55	7.79	8.49	5.03	4.75	3.93	3.64	3.38	4.00	3.75
Aug.	0.38	1.77	2.97	2.69	8.16	16.99	7.85	7.82	8.60	5.03	4.69	3.87	3.62	3.37	3.99	3.73
Sep.	0.37	1.77	3.00	2.73	8.23	17.04	7.55	7.76	8.53	4.89	4.58	3.79	3.55	3.28	3.89	3.64
Oct.	0.36	1.77	2.73	2.63	8.06	16.89	7.24	7.71	8.46	4.65	4.37	3.69	3.47	3.22	3.79	3.55
Nov.	0.35	1.76	2.61	2.52	7.96	16.84	6.52	7.69	8.41	4.58	4.27	3.62	3.43	3.16	3.72	3.47
Dec.	0.35	1.76	2.45	2.51	7.91	16.84	6.77	7.48	8.26	4.36	4.15	3.57	3.36	3.09	3.65	3.39
2025 Jan.	0.34	1.75	2.33	2.42	7.80	16.77	7.16	7.69	8.50	4.40	4.06	3.49	2.88	2.97	3.34	3.25
Feb.	0.32	1.55	2.20	2.37	7.75	16.69	6.79	7.66	8.38	4.45	4.00	3.53	3.37	3.09	3.61	3.33
Mar.	0.31	1.52	2.10	2.26	7.73	16.63	6.96	7.57	8.28	4.35	3.92	3.51	3.36	3.10	3.58	3.32
Apr.	0.29	1.50	1.97	2.33	7.53	16.58	6.94	7.57	8.29	4.29	3.84	3.48	3.32	3.03	3.52	3.27

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) Including non-profit institutions serving households.
3) Annual percentage rate of charge (APRC).

4.5 MFI interest rates on loans to and deposits from non-financial corporations (new business) [1), 2)]

(Percentages per annum; period average, unless otherwise indicated)

	Deposits			Revolving loans and overdrafts	Other loans by size and initial period of rate fixation									Composite cost-of-borrowing indicator
		With an agreed maturity of:			Up to EUR 0.25 million			over EUR 0.25 and up to 1 million			over EUR 1 million			
	Overnight	Up tp 2 years	Over 2 years		Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	Floating rate and up to 3 months	Over 3 months and up to 1 year	Over 1 year	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2024 May	0.91	3.65	3.61	5.33	5.37	5.77	5.68	5.40	5.09	4.29	4.99	4.96	4.19	5.12
June	0.87	3.54	3.54	5.25	5.33	5.69	5.67	5.24	4.99	4.22	5.02	5.05	4.14	5.08
July	0.87	3.48	3.28	5.21	5.13	5.44	5.50	5.27	4.93	4.17	5.08	4.99	4.12	5.07
Aug.	0.89	3.42	3.12	5.18	5.14	5.40	5.47	5.17	4.85	4.11	5.03	4.78	4.06	5.01
Sep.	0.88	3.28	2.97	5.12	5.03	5.29	5.49	5.02	4.64	4.04	4.73	4.47	3.85	4.79
Oct.	0.82	3.06	2.96	4.89	4.82	5.10	5.29	4.80	4.39	3.92	4.64	4.29	3.85	4.67
Nov.	0.81	2.92	2.65	4.80	4.80	4.99	5.29	4.62	4.26	3.85	4.42	4.20	3.70	4.52
Dec.	0.77	2.80	2.80	4.64	4.63	4.79	5.08	4.47	4.13	3.76	4.31	4.06	3.62	4.36
2025 Jan.	0.76	2.67	2.58	4.48	4.35	4.60	4.82	4.33	4.02	3.75	4.19	3.87	3.65	4.25
Feb.	0.72	2.50	2.73	4.33	4.37	4.54	4.79	4.22	3.81	3.69	3.98	3.75	3.58	4.11
Mar.	0.67	2.33	2.54	4.21	4.02	4.54	4.81	3.98	3.77	3.68	3.67	3.78	3.65	3.93
Apr.	0.60	2.15	2.66	4.03	3.90	4.23	4.78	3.86	3.59	3.70	3.54	3.51	3.66	3.79

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector.

4 Financial market developments

4.6 Debt securities issued by euro area residents, by sector of the issuer and original maturity

(EUR billions; transactions during the month and end-of-period outstanding amounts; market values)

	Outstanding amounts							Gross issues [1]						
	Total	MFIs	Non-MFI corporations			General government		Total	MFIs	Non-MFI corporations			General government	
			Financial corporations other than MFIs		Non-financial corporations	Total	of which central government			Financial corporations other than MFIs		Non-financial corporations	Total	of which central government
			Total	FVCs						Total	FVCs			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Short-term														
2022	1,386.6	483.4	141.1	51.0	95.1	667.0	621.7	480.2	179.8	115.8	48.3	50.6	133.9	97.1
2023	1,570.6	619.8	162.4	65.1	86.6	701.8	659.1	502.5	211.8	114.1	39.4	49.1	127.5	103.8
2024	1,565.9	564.9	188.4	69.9	71.0	741.6	674.7	470.6	179.7	117.0	44.4	39.3	134.7	108.2
2024 Nov.	1,573.3	576.2	192.1	68.5	80.1	725.0	665.7	490.9	187.1	132.1	48.1	31.7	139.9	125.8
Dec.	1,565.9	564.9	188.4	69.9	71.0	741.6	674.7	447.4	170.9	127.8	51.2	28.9	119.8	91.5
2025 Jan.	1,548.9	582.1	181.7	67.9	79.4	705.6	636.1	596.1	266.2	145.2	54.4	41.7	143.1	116.6
Feb.	1,542.6	577.7	187.4	68.3	83.6	693.9	628.8	524.9	231.5	138.5	54.3	36.9	118.0	97.0
Mar.	1,551.4	587.5	184.9	68.7	78.7	700.3	632.1	526.8	221.4	133.4	53.9	36.7	135.3	110.0
Apr.	1,531.0	552.8	188.1	64.7	88.3	701.9	629.9	553.4	226.2	142.7	53.2	51.5	133.0	109.8
Long-term														
2022	17,698.4	3,896.2	3,107.6	1,321.1	1,421.7	9,272.9	8,560.9	292.1	76.5	68.0	28.1	17.1	130.4	121.0
2023	19,331.5	4,438.7	3,249.8	1,316.9	1,536.9	10,106.1	9,366.2	320.4	92.9	67.7	25.6	21.4	138.4	129.9
2024	20,479.1	4,768.3	3,553.5	1,354.4	1,642.6	10,514.7	9,743.0	349.2	89.3	86.9	24.5	26.8	146.1	135.5
2024 Nov.	20,682.4	4,793.1	3,533.9	1,344.5	1,656.1	10,699.3	9,918.6	317.1	67.7	94.7	32.4	27.5	127.1	120.4
Dec.	20,479.1	4,768.3	3,553.5	1,354.4	1,642.6	10,514.7	9,743.0	253.4	69.0	96.7	31.4	16.9	70.9	64.9
2025 Jan.	20,690.8	4,834.8	3,561.8	1,345.0	1,655.4	10,638.7	9,856.3	487.8	163.5	79.9	20.8	30.0	214.4	190.7
Feb.	20,899.5	4,864.4	3,596.8	1,348.2	1,663.8	10,774.5	9,981.2	394.0	96.9	81.2	20.8	23.0	192.8	177.0
Mar.	20,658.5	4,811.2	3,595.8	1,361.4	1,642.7	10,608.8	9,823.8	398.2	94.8	103.8	39.3	30.1	169.6	153.3
Apr.	20,820.0	4,778.3	3,589.4	1,359.3	1,640.9	10,811.5	10,022.1	345.2	55.4	98.7	27.4	24.5	166.7	159.3

Source: ECB.
1) In order to facilitate comparison, annual data are averages of the relevant monthly data.

4.7 Annual growth rates and outstanding amounts of debt securities and listed shares

(EUR billions and percentage changes; market values)

	Debt securities							Listed shares			
	Total	MFIs	Non-MFI corporations			General government		Total	MFIs	Financial corporations other than MFIs	Non-financial corporations
			Financial corporations other than MFIs		Non-financial corporations	Total	of which central government				
			Total	FVCs							
	1	2	3	4	5	6	7	8	9	10	11
Outstanding amount											
2022	19,085.0	4,379.6	3,248.7	1,372.1	1,516.7	9,939.9	9,182.6	8,698.7	524.9	1,287.4	6,885.7
2023	20,902.0	5,058.5	3,412.1	1,382.1	1,623.5	10,807.9	10,025.4	9,673.2	619.8	1,415.2	7,637.7
2024	22,044.9	5,333.2	3,741.9	1,424.2	1,713.5	11,256.3	10,417.6	10,167.7	750.4	1,589.8	7,827.0
2024 Nov.	22,255.8	5,369.2	3,726.0	1,413.0	1,736.2	11,424.4	10,584.3	10,171.8	721.1	1,586.4	7,863.9
Dec.	22,044.9	5,333.2	3,741.9	1,424.2	1,713.5	11,256.3	10,417.6	10,167.7	750.4	1,589.8	7,827.0
2025 Jan.	22,239.7	5,416.9	3,743.6	1,412.9	1,734.8	11,344.4	10,492.5	10,853.2	829.3	1,683.5	8,339.9
Feb.	22,442.2	5,442.1	3,784.1	1,416.5	1,747.5	11,468.4	10,610.0	11,115.1	933.6	1,744.5	8,436.5
Mar.	22,209.9	5,398.7	3,780.7	1,430.1	1,721.4	11,309.1	10,455.9	10,626.4	936.4	1,721.2	7,968.4
Apr.	22,351.0	5,331.0	3,777.4	1,423.9	1,729.2	11,513.3	10,652.0	10,527.5	930.2	1,714.3	7,882.6
Growth rate [1]											
2024 Sep.	4.6	6.0	4.4	-1.2	3.6	4.2	4.0	-0.2	-2.2	-0.6	0.1
Oct.	4.7	5.5	4.0	-1.3	3.7	4.7	4.6	0.2	-2.3	-0.6	0.6
Nov.	4.5	4.3	5.3	0.6	3.4	4.5	4.5	0.2	-2.0	-0.7	0.6
Dec.	4.3	3.7	6.0	1.1	2.8	4.3	4.1	0.1	-2.6	-0.6	0.5
2025 Jan.	4.3	3.3	4.5	-0.4	3.3	4.8	4.7	0.1	-2.4	-0.6	0.5
Feb.	4.1	2.8	4.8	0.3	3.2	4.7	4.6	0.1	-2.1	-0.6	0.4
Mar.	3.8	1.9	5.9	1.5	3.0	4.2	4.1	0.0	-1.9	-0.7	0.3
Apr.	3.8	1.1	6.8	1.9	2.2	4.4	4.4	-0.2	-1.9	-0.3	0.0

Source: ECB.
1) For details on the calculation of growth rates, see the Technical Notes.

4 Financial market developments

4.8 Effective exchange rates [1)]

(period averages; index: 1999 Q1=100)

	EER-18						EER-41	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2022	95.3	90.8	93.3	84.4	64.8	83.3	116.1	90.9
2023	98.1	94.0	97.8	88.9	67.5	87.2	121.8	94.7
2024	98.4	94.4	97.9	89.6	68.1	88.4	124.1	95.0
2024 Q2	98.7	94.6	98.2	89.7	68.6	88.7	124.1	95.1
Q3	99.0	95.0	98.5	90.0	68.0	88.9	125.1	95.5
Q4	97.6	93.6	97.0	89.1	66.9	87.8	123.6	94.2
2025 Q1	97.1	93.3	96.4	.	.	.	122.9	93.5
2024 Dec.	96.9	93.0	96.4	-	-	-	122.7	93.5
2025 Jan.	96.7	92.9	95.8	-	-	-	122.3	93.1
Feb.	96.3	92.6	95.5	-	-	-	121.8	92.7
Mar.	98.3	94.4	97.9	-	-	-	124.5	94.7
Apr.	100.5	96.5	100.5	-	-	-	127.7	96.9
May	100.1	96.1	100.4	-	-	-	127.0	96.3
Percentage change versus previous month								
2025 May	-0.4	-0.4	-0.1	-	-	-	-0.5	-0.6
Percentage change versus previous year								
2025 May	1.3	1.4	2.1	-	-	-	2.1	1.1

Source: ECB.
1) For a definition of the trading partner groups and other information see the General Notes to the Statistics Bulletin.

4.9 Bilateral exchange rates

(period averages; units of national currency per euro)

	Chinese renminbi	Czech koruna	Danish krone	Hungarian forint	Japanese yen	Polish zloty	Pound sterling	Romanian leu	Swedish krona	Swiss franc	US Dollar
	1	2	3	4	5	6	7	8	9	10	11
2022	7.079	24.566	7.440	391.286	138.027	4.686	0.853	4.9313	10.630	1.005	1.053
2023	7.660	24.004	7.451	381.853	151.990	4.542	0.870	4.9467	11.479	0.972	1.081
2024	7.787	25.120	7.459	395.304	163.852	4.306	0.847	4.9746	11.433	0.953	1.082
2024 Q2	7.797	24.959	7.460	391.332	167.773	4.300	0.853	4.9750	11.504	0.974	1.077
Q3	7.870	25.195	7.461	394.101	163.952	4.283	0.845	4.9746	11.451	0.952	1.098
Q4	7.675	25.248	7.459	407.465	162.549	4.307	0.832	4.9754	11.494	0.936	1.068
2025 Q1	7.655	25.082	7.460	405.023	160.453	4.201	0.836	4.9763	11.235	0.946	1.052
2024 Dec.	7.630	25.136	7.459	411.986	161.083	4.270	0.828	4.9749	11.504	0.934	1.048
2025 Jan.	7.556	25.163	7.461	411.725	161.921	4.247	0.839	4.9752	11.480	0.941	1.035
Feb.	7.576	25.075	7.459	403.001	158.104	4.171	0.831	4.9770	11.245	0.941	1.041
Mar.	7.835	25.001	7.460	399.805	161.167	4.182	0.837	4.9768	10.968	0.955	1.081
Apr.	8.185	25.039	7.465	406.437	161.671	4.265	0.854	4.9775	10.974	0.937	1.121
May	8.135	24.923	7.460	403.939	163.144	4.254	0.843	5.0714	10.881	0.936	1.128
Percentage change versus previous month											
2025 May	-0.6	-0.5	-0.1	-0.6	0.9	-0.3	-1.2	1.9	-0.8	-0.1	0.6
Percentage change versus previous year											
2025 May	4.0	0.4	0.0	4.3	-3.2	-0.6	-1.4	1.9	-6.3	-4.8	4.3

Source: ECB.

4 Financial market developments

4.10 Euro area balance of payments, financial account

(EUR billions, unless otherwise indicated; outstanding amounts at end of period; transactions during period)

	Total [1]			Direct investment		Portfolio investment		Net financial derivatives	Other investment		Reserve assets	Memo: Gross external debt
	Assets	Liabilities	Net	Assets	Liabilities	Assets	Liabilities		Assets	Liabilities		
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts (international investment position)												
2024 Q1	33,779.6	33,098.8	680.8	12,402.7	9,938.6	13,176.7	15,307.8	-19.9	7,005.0	7,852.3	1,215.1	16,680.2
Q2	34,353.6	33,249.9	1,103.7	12,418.9	9,849.1	13,599.4	15,603.0	-12.8	7,080.5	7,797.9	1,267.7	16,629.3
Q3	34,680.1	33,430.0	1,250.1	12,222.3	9,681.6	13,913.4	15,953.4	-22.3	7,247.6	7,795.1	1,319.1	16,698.1
Q4	35,826.3	34,169.3	1,656.9	12,620.2	9,956.9	14,652.6	16,504.8	-20.3	7,179.7	7,707.7	1,394.2	16,699.0
Outstanding amounts as percentage of GDP												
2024 Q4	236.4	225.5	10.9	83.3	65.7	96.7	108.9	-0.1	47.4	50.9	9.2	110.2
Transactions												
2024 Q2	184.8	54.0	130.8	-26.1	-124.3	175.6	276.7	16.7	14.8	-98.3	3.7	-
Q3	451.4	301.3	150.0	21.1	-9.0	177.2	231.5	-4.6	261.7	78.9	-4.0	-
Q4	22.2	-72.4	94.7	66.1	48.8	207.5	148.8	18.9	-274.0	-270.1	3.7	-
2025 Q1	549.7	475.2	74.5	49.1	-16.6	137.3	125.2	1.9	362.4	366.6	-1.0	-
2024 Oct.	47.2	24.3	22.9	18.6	-16.6	67.4	40.1	16.9	-55.4	0.9	-0.3	-
Nov.	163.5	129.0	34.6	13.0	-12.8	73.2	65.1	-3.4	79.4	76.7	1.3	-
Dec.	-188.5	-225.7	37.2	34.5	78.3	66.9	43.6	5.5	-298.1	-347.6	2.7	-
2025 Jan.	304.4	305.7	-1.3	22.1	-9.3	79.5	62.2	6.2	198.1	252.8	-1.5	-
Feb.	211.8	171.9	39.8	9.4	10.2	42.6	44.2	-0.3	158.8	117.5	1.3	-
Mar.	33.5	-2.5	36.0	17.6	-17.4	15.2	18.7	-4.0	5.6	-3.8	-0.8	-
12-month cumulated transactions												
2025 Mar.	1,208.1	758.1	450.0	110.2	-101.1	697.6	782.1	32.9	364.9	77.1	2.5	-
12-month cumulated transactions as percentage of GDP												
2025 Mar.	8.0	5.0	3.0	0.7	-0.7	4.6	5.2	0.2	2.4	0.5	0.0	-

Source: ECB.
1) Net financial derivatives are included in total assets.

5 Financing conditions and credit developments

5.1 Monetary aggregates [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	M3											
	M2							M3-M2				Total
	M1			M2-M1			Total					
	Currency in circulation	Overnight deposits	Total	Deposits with an agreed maturity of up to 2 years	Deposits redeemable at notice of up to 3 months	Total		Repos	Money market fund shares	Debt securities with a maturity of up to 2 years	Total	
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2022	1,538.9	9,758.1	11,297.0	1,366.9	2,565.3	3,932.2	15,229.2	123.0	646.6	49.4	819.0	16,048.2
2023	1,536.2	8,809.4	10,345.6	2,294.1	2,460.4	4,754.6	15,100.2	184.9	740.0	70.5	995.3	16,095.5
2024	1,556.9	9,021.6	10,578.5	2,528.1	2,469.1	4,997.2	15,575.6	255.8	886.5	28.4	1,170.7	16,746.3
2024 Q2	1,533.9	8,796.3	10,330.3	2,536.0	2,422.7	4,958.7	15,288.9	211.2	814.9	60.3	1,086.3	16,375.2
Q3	1,541.7	8,842.5	10,384.2	2,590.7	2,424.8	5,015.5	15,399.8	238.1	858.4	47.6	1,144.1	16,543.9
Q4	1,556.9	9,021.6	10,578.5	2,528.1	2,469.1	4,997.2	15,575.6	255.8	886.5	28.4	1,170.7	16,746.3
2025 Q1 [(p)]	1,564.3	9,120.0	10,684.3	2,483.0	2,491.0	4,974.1	15,658.3	238.6	909.5	45.6	1,193.6	16,852.0
2024 Nov.	1,550.9	8,996.8	10,547.7	2,560.0	2,433.8	4,993.8	15,541.4	245.6	867.7	37.9	1,151.2	16,692.6
Dec.	1,556.9	9,021.6	10,578.5	2,528.1	2,469.1	4,997.2	15,575.6	255.8	886.5	28.4	1,170.7	16,746.3
2025 Jan.	1,555.8	9,040.9	10,596.8	2,511.9	2,472.0	4,983.9	15,580.7	267.7	889.0	46.2	1,202.9	16,783.6
Feb.	1,559.5	9,098.7	10,658.2	2,491.1	2,475.0	4,966.1	15,624.3	267.8	920.2	35.1	1,223.0	16,847.3
Mar.	1,564.3	9,120.0	10,684.3	2,483.0	2,491.0	4,974.1	15,658.3	238.6	909.5	45.6	1,193.6	16,852.0
Apr. [(p)]	1,559.6	9,196.4	10,755.9	2,446.9	2,494.1	4,941.0	15,696.9	256.6	906.7	41.2	1,204.5	16,901.4
Transactions												
2022	69.9	-57.3	12.6	425.5	55.6	481.1	493.7	3.6	2.5	76.7	82.8	576.5
2023	-4.1	-969.2	-973.3	920.6	-99.5	821.2	-152.1	40.3	93.8	23.5	157.6	5.5
2024	21.3	167.8	189.1	200.9	9.0	210.0	399.1	76.3	136.0	-37.2	175.2	574.3
2024 Q2	7.7	55.5	63.2	71.5	-4.8	66.8	130.0	16.9	25.8	-13.3	29.4	159.3
Q3	7.8	24.5	32.3	59.4	2.1	61.5	93.8	28.2	39.6	-11.7	56.1	149.9
Q4	15.2	162.8	178.0	-74.1	44.0	-30.1	147.9	20.3	24.8	-20.7	24.4	172.3
2025 Q1 [(p)]	7.4	116.7	124.1	-39.7	15.0	-24.7	99.4	-15.8	19.8	11.5	15.5	114.9
2024 Nov.	5.3	97.6	102.9	-1.6	6.0	4.4	107.3	-5.4	8.9	-13.2	-9.7	97.6
Dec.	6.0	20.8	26.8	-34.0	35.3	1.2	28.0	15.0	17.5	-8.3	24.2	52.2
2025 Jan.	-1.1	20.2	19.1	-16.0	1.9	-14.0	5.1	11.7	1.4	12.5	25.6	30.7
Feb.	3.7	57.7	61.4	-21.0	3.5	-17.5	43.9	0.1	30.1	-13.1	17.1	61.0
Mar.	4.8	38.8	43.6	-2.7	9.5	6.8	50.4	-27.6	-11.7	12.1	-27.2	23.2
Apr. [(p)]	-4.8	89.6	84.9	-29.7	3.3	-26.4	58.5	19.7	-3.6	-4.9	11.2	69.7
Growth rates												
2022	4.8	-0.6	0.1	45.9	2.2	14.0	3.4	2.9	0.4	459.5	11.1	3.7
2023	-0.3	-9.9	-8.6	67.0	-3.9	20.9	-1.0	32.7	14.5	44.7	19.3	0.0
2024	1.4	1.9	1.8	8.8	0.4	4.4	2.6	41.7	18.3	-57.5	17.7	3.6
2024 Q2	-0.1	-4.0	-3.4	34.8	-3.6	12.7	1.2	62.8	17.0	-28.9	18.9	2.3
Q3	0.5	-1.6	-1.3	22.9	-1.7	9.6	2.0	61.6	19.3	-34.0	21.8	3.2
Q4	1.4	1.9	1.8	8.8	0.4	4.4	2.6	41.7	18.3	-57.5	17.7	3.6
2025 Q1 [(p)]	2.5	4.1	3.9	0.7	2.3	1.5	3.1	25.4	13.9	-47.1	11.9	3.7
2024 Nov.	1.1	1.5	1.5	13.3	-0.6	6.1	2.9	39.3	18.7	-49.0	17.8	3.8
Dec.	1.4	1.9	1.8	8.8	0.4	4.4	2.6	41.7	18.3	-57.5	17.7	3.6
2025 Jan.	1.5	2.9	2.7	5.7	1.1	3.3	2.9	47.6	16.0	-50.0	16.6	3.7
Feb.	1.7	3.7	3.4	2.2	1.7	2.0	3.0	49.8	18.4	-60.9	18.2	3.9
Mar.	2.5	4.1	3.9	0.7	2.3	1.5	3.1	25.4	13.9	-47.1	11.9	3.7
Apr. [(p)]	1.8	5.3	4.7	-1.3	2.5	0.6	3.4	27.9	12.3	-52.7	10.8	3.9

Sources: ECB.
1) Data refer to the changing composition of the euro area.

5 Financing conditions and credit developments

5.2 Deposits in M3 [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Non-financial corporations [2)]					Households [3)]					Financial corporations other than MFIs and ICPFs [2)]	Insurance corporations and pension funds	Other general government [4)]
	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos	Total	Overnight	With an agreed maturity of up to 2 years	Redeemable at notice of up to 3 months	Repos			
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2022	3,361.5	2,721.2	499.5	134.7	6.2	8,374.2	5,542.6	437.9	2,392.9	0.9	1,282.8	231.5	563.3
2023	3,334.1	2,419.5	771.8	131.3	11.6	8,421.5	5,110.8	1,015.9	2,293.3	1.4	1,223.9	227.0	542.3
2024	3,437.4	2,500.8	791.8	133.7	11.1	8,756.3	5,199.1	1,254.2	2,301.5	1.5	1,300.5	232.1	548.2
2024 Q2	3,381.9	2,410.2	833.8	127.1	10.8	8,529.1	5,062.8	1,203.4	2,261.6	1.3	1,299.7	221.8	533.8
Q3	3,364.9	2,404.7	823.6	125.6	11.0	8,618.7	5,091.3	1,260.2	2,266.2	1.0	1,331.7	230.1	550.8
Q4	3,437.4	2,500.8	791.8	133.7	11.1	8,756.3	5,199.1	1,254.2	2,301.5	1.5	1,300.5	232.1	548.2
2025 Q1 [(p)]	3,413.5	2,475.5	787.4	140.2	10.6	8,788.9	5,256.0	1,216.1	2,315.7	1.1	1,361.9	229.0	539.3
2024 Nov.	3,408.7	2,453.7	812.0	129.8	13.2	8,699.3	5,165.8	1,261.5	2,271.2	0.8	1,335.2	229.4	563.5
Dec.	3,437.4	2,500.8	791.8	133.7	11.1	8,756.3	5,199.1	1,254.2	2,301.5	1.5	1,300.5	232.1	548.2
2025 Jan.	3,430.8	2,472.9	809.0	136.0	12.8	8,752.1	5,203.1	1,245.7	2,301.9	1.3	1,330.9	230.0	548.8
Feb.	3,440.0	2,479.8	811.0	136.4	12.8	8,771.8	5,235.5	1,230.2	2,304.9	1.2	1,348.0	232.7	540.1
Mar.	3,413.5	2,475.5	787.4	140.2	10.6	8,788.9	5,256.0	1,216.1	2,315.7	1.1	1,361.9	229.0	539.3
Apr. [(p)]	3,431.0	2,483.3	794.8	141.4	11.5	8,803.8	5,288.1	1,196.1	2,318.7	0.9	1,379.1	242.5	537.5
Transactions													
2022	122.9	-89.2	207.7	5.9	-1.5	295.8	166.8	74.9	54.0	0.1	-10.2	6.2	12.5
2023	-31.6	-306.8	271.1	-1.4	5.6	18.9	-459.8	572.6	-94.5	0.6	-64.2	-3.0	-27.8
2024	94.1	75.9	15.2	2.9	0.2	297.7	55.7	233.8	8.2	0.1	55.1	4.0	3.2
2024 Q2	42.0	28.9	13.6	-0.3	-0.2	72.6	5.6	70.0	-3.3	0.2	34.0	-1.5	-8.0
Q3	-11.0	-1.7	-8.1	-1.7	0.4	60.5	-1.9	57.9	4.7	-0.3	38.9	9.3	16.5
Q4	61.0	88.9	-35.5	8.1	-0.5	133.1	106.7	-9.3	35.2	0.5	-38.4	0.7	-3.4
2025 Q1 [(p)]	-17.1	-20.6	-2.4	6.2	-0.2	33.6	63.9	-37.4	7.5	-0.4	71.1	-2.2	-9.3
2024 Nov.	26.3	29.0	-5.2	2.3	0.3	38.6	43.7	-8.7	3.8	-0.2	8.8	8.3	14.5
Dec.	25.3	45.0	-21.3	3.9	-2.3	57.0	33.4	-7.4	30.3	0.8	-32.3	2.4	-15.3
2025 Jan.	-6.6	-27.8	17.2	2.3	1.7	-5.2	4.1	-8.5	-0.6	-0.2	31.0	-2.1	0.7
Feb.	9.2	6.9	2.0	0.3	0.0	19.9	32.1	-15.6	3.6	-0.2	17.6	2.8	-9.2
Mar.	-19.6	0.3	-21.6	3.6	-1.9	18.8	27.7	-13.3	4.5	-0.1	22.5	-2.9	-0.8
Apr. [(p)]	24.5	12.2	9.7	1.3	1.3	17.9	33.9	-18.8	3.0	-0.2	28.0	14.3	-1.8
Growth rates													
2022	3.8	-3.2	70.3	4.6	-17.5	3.7	3.1	20.6	2.3	19.9	-0.5	2.8	2.3
2023	-0.9	-11.2	54.2	-1.1	90.8	0.2	-8.3	129.3	-4.0	67.7	-4.9	-1.3	-4.9
2024	2.8	3.1	2.0	2.2	2.0	3.5	1.1	23.0	0.4	6.1	4.5	1.8	0.6
2024 Q2	1.8	-3.3	21.4	-3.0	-8.9	2.0	-4.8	71.5	-3.6	48.4	6.8	-2.1	-5.5
Q3	1.6	-1.0	11.5	-4.2	-15.0	2.8	-2.7	47.9	-1.4	21.7	6.9	10.0	-1.6
Q4	2.8	3.1	2.0	2.2	2.0	3.5	1.1	23.0	0.4	6.1	4.5	1.8	0.6
2025 Q1 [(p)]	2.2	4.0	-3.9	9.7	-2.8	3.5	3.4	7.2	1.9	5.4	8.3	2.9	-0.8
2024 Nov.	2.3	1.8	4.5	-1.0	-4.1	3.5	0.2	30.1	-0.4	-3.1	7.8	1.6	4.6
Dec.	2.8	3.1	2.0	2.2	2.0	3.5	1.1	23.0	0.4	6.1	4.5	1.8	0.6
2025 Jan.	2.8	3.5	0.3	6.2	12.1	3.3	1.7	16.5	0.8	19.1	8.2	3.0	3.0
Feb.	3.0	4.1	-0.6	6.6	3.9	3.4	2.7	10.8	1.5	15.7	9.4	4.3	-0.7
Mar.	2.2	4.0	-3.9	9.7	-2.8	3.5	3.4	7.2	1.9	5.4	8.3	2.9	-0.8
Apr. [(p)]	2.6	4.4	-3.8	11.2	7.0	3.4	4.0	3.2	2.2	-9.2	10.1	15.5	1.0

Sources: ECB.
1) Data refer to the changing composition of the euro area.
2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).
3) Including non-profit institutions serving households.
4) Refers to the general government sector excluding central government.

5 Financing conditions and credit developments

5.3 Credit to euro area residents [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Credit to general government			Credit to other euro area residents								
	Total	Loans	Debt securities	Total	Loans						Debt securities	Equity and non-money market fund investment fund shares
					Total		To non-financial corporations [3)]	To households [4)]	To financial coprorations other than MFIs and ICPFs [3)]	To insurance corporations and pension funds		
					Total	Adjusted loans [2)]						
	1	2	3	4	5	6	7	8	9	10	11	12
Outstanding amounts												
2022	6,352.0	1,001.3	5,325.7	15,389.8	12,987.5	13,174.9	5,126.5	6,631.8	1,082.5	146.7	1,565.9	836.4
2023	6,305.3	990.6	5,289.3	15,492.9	13,033.8	13,253.1	5,123.2	6,648.1	1,124.5	138.0	1,560.7	898.4
2024	6,258.9	988.5	5,244.4	15,780.1	13,246.6	13,501.9	5,182.6	6,677.2	1,246.7	140.0	1,579.9	953.7
2024 Q2	6,195.6	978.6	5,191.2	15,572.4	13,101.2	13,339.7	5,130.7	6,644.8	1,194.9	130.9	1,553.8	917.3
Q3	6,255.2	975.4	5,254.1	15,633.3	13,143.6	13,377.8	5,139.8	6,661.3	1,209.6	132.8	1,561.0	928.7
Q4	6,258.9	988.5	5,244.4	15,780.1	13,246.6	13,501.9	5,182.6	6,677.2	1,246.7	140.0	1,579.9	953.7
2025 Q1	6,268.3	995.5	5,246.9	15,875.2	13,338.1	13,594.9	5,204.0	6,720.8	1,276.5	136.8	1,560.8	976.3
2024 Nov.	6,276.4	990.4	5,260.2	15,694.0	13,179.3	13,419.7	5,149.5	6,673.8	1,221.5	134.5	1,576.0	938.7
Dec.	6,258.9	988.5	5,244.4	15,780.1	13,246.6	13,501.9	5,182.6	6,677.2	1,246.7	140.0	1,579.9	953.7
2025 Jan.	6,305.2	996.4	5,282.8	15,834.0	13,280.9	13,526.7	5,192.4	6,696.6	1,255.1	136.8	1,577.8	975.3
Feb.	6,299.6	1,001.5	5,272.2	15,890.8	13,334.9	13,572.7	5,202.4	6,711.1	1,285.6	135.7	1,574.3	981.6
Mar.	6,268.3	995.5	5,246.9	15,875.2	13,338.1	13,594.9	5,204.0	6,720.8	1,276.5	136.8	1,560.8	976.3
Apr.	6,307.3	994.8	5,286.5	15,882.6	13,362.8	13,623.2	5,208.0	6,740.5	1,278.2	136.0	1,562.0	957.8
Transactions												
2022	173.8	8.5	163.8	636.4	623.8	680.5	269.0	241.8	126.3	-13.3	18.6	-5.9
2023	-161.1	-17.4	-144.0	53.8	24.5	72.3	-5.7	7.7	30.7	-8.2	-16.0	45.4
2024	-63.3	-1.4	-62.4	287.5	228.9	271.2	77.0	44.8	105.4	1.8	10.6	47.9
2024 Q2	-2.8	2.4	-5.4	18.2	37.6	47.7	16.3	5.2	22.5	-6.5	-15.1	-4.3
Q3	-4.4	-3.2	-1.2	68.2	59.7	53.5	18.7	20.0	19.0	2.1	3.7	4.8
Q4	5.7	11.0	-5.4	139.5	100.5	125.4	44.2	22.3	27.1	6.9	13.5	25.4
2025 Q1	32.0	6.6	25.4	115.7	113.8	114.4	35.0	48.3	33.8	-3.3	-17.9	19.7
2024 Nov.	-6.5	4.8	-11.3	12.4	6.3	-3.1	3.4	14.0	-9.9	-1.2	-1.5	7.6
Dec.	5.4	-2.4	7.7	89.7	72.1	87.4	34.5	8.5	23.7	5.4	3.5	14.1
2025 Jan.	50.1	7.9	42.2	49.8	39.7	29.9	13.8	21.2	7.9	-3.2	-2.8	12.9
Feb.	-14.4	5.1	-19.5	59.1	56.0	48.8	13.1	15.4	29.2	-1.6	-5.4	8.5
Mar.	-3.7	-6.4	2.7	6.8	18.1	35.7	8.2	11.8	-3.4	1.5	-9.7	-1.7
Apr.	11.6	-1.1	12.6	19.4	35.3	37.2	12.1	16.8	6.9	-0.5	2.1	-18.0
Growth rates												
2022	2.7	0.9	3.0	4.3	5.0	5.4	5.5	3.8	13.4	-7.9	1.2	-0.6
2023	-2.5	-1.7	-2.7	0.3	0.2	0.5	-0.1	0.1	2.8	-5.5	-1.0	5.3
2024	-1.0	-0.1	-1.2	1.9	1.8	2.0	1.5	0.7	9.4	1.3	0.7	5.3
2024 Q2	-1.4	-0.4	-1.6	0.8	0.9	1.1	0.3	0.3	8.4	-8.5	-1.8	4.6
Q3	-1.2	-0.9	-1.2	1.2	1.3	1.6	0.8	0.6	8.5	-3.7	-1.5	4.2
Q4	-1.0	-0.1	-1.2	1.9	1.8	2.0	1.5	0.7	9.4	1.3	0.7	5.3
2025 Q1	0.5	1.7	0.3	2.2	2.4	2.6	2.2	1.4	8.8	-0.7	-1.0	4.9
2024 Nov.	-0.7	0.6	-1.0	1.3	1.2	1.5	1.0	0.5	6.3	0.0	0.2	5.6
Dec.	-1.0	-0.1	-1.2	1.9	1.8	2.0	1.5	0.7	9.4	1.3	0.7	5.3
2025 Jan.	0.3	1.2	0.2	2.1	2.2	2.3	2.0	1.2	9.5	1.7	-0.9	5.9
Feb.	0.4	1.9	0.1	2.3	2.4	2.4	2.2	1.4	9.8	-0.6	-1.1	6.3
Mar.	0.5	1.7	0.3	2.2	2.4	2.6	2.2	1.4	8.8	-0.7	-1.0	4.9
Apr.	0.5	1.9	0.2	2.3	2.6	2.7	2.5	1.7	7.9	-0.2	-0.1	3.5

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) Adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs.
3) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).
4) Including non-profit institutions serving households.

5 Financing conditions and credit developments

5.4 MFI loans to euro area non-financial corporations and households [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	Non-financial corporations [2)]					Households [3)]				
	Total		Up to 1 year	Over 1 and up to 5 years	Over 5 years	Total		Loans for consumption	Loans for house purchase	Other loans
	Total	Adjusted loans [4)]				Total	Adjusted loans [4)]			
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2022	5,126.5	5,126.4	960.0	1,076.9	3,089.6	6,631.8	6,832.5	715.1	5,214.2	702.6
2023	5,123.2	5,138.3	907.2	1,090.3	3,125.8	6,648.1	6,866.2	731.3	5,228.8	688.0
2024	5,182.6	5,203.5	922.4	1,098.1	3,162.1	6,677.2	6,928.7	745.0	5,255.2	676.9
2024 Q2	5,130.7	5,148.1	902.5	1,088.0	3,140.2	6,644.8	6,880.6	737.5	5,227.1	680.1
Q3	5,139.8	5,161.9	912.5	1,089.7	3,137.7	6,661.3	6,899.1	742.3	5,245.1	674.0
Q4	5,182.6	5,203.5	922.4	1,098.1	3,162.1	6,677.2	6,928.7	745.0	5,255.2	676.9
2025 Q1	5,204.0	5,227.6	922.9	1,114.7	3,166.4	6,720.8	6,973.1	750.8	5,293.1	676.9
2024 Nov.	5,149.5	5,165.8	919.2	1,087.1	3,143.2	6,673.8	6,918.6	741.3	5,250.4	682.1
Dec.	5,182.6	5,203.5	922.4	1,098.1	3,162.1	6,677.2	6,928.7	745.0	5,255.2	676.9
2025 Jan.	5,192.4	5,205.7	925.1	1,101.1	3,166.2	6,696.6	6,941.9	747.3	5,272.5	676.8
Feb.	5,202.4	5,213.8	926.1	1,104.5	3,171.9	6,711.1	6,956.1	747.3	5,286.0	677.8
Mar.	5,204.0	5,227.6	922.9	1,114.7	3,166.4	6,720.8	6,973.1	750.8	5,293.1	676.9
Apr.	5,208.0	5,230.7	930.3	1,108.5	3,169.2	6,740.5	6,991.2	753.6	5,311.4	675.5
Transactions										
2022	269.0	308.3	78.0	77.3	113.7	241.8	250.0	23.2	217.7	0.9
2023	-5.7	24.2	-44.0	10.3	27.9	7.7	26.5	18.9	10.1	-21.3
2024	77.0	88.1	21.9	14.2	40.9	44.8	77.0	26.6	28.3	-10.1
2024 Q2	16.3	19.0	17.1	-0.6	-0.2	5.2	10.9	0.4	5.9	-1.1
Q3	18.7	22.7	13.6	4.5	0.6	20.0	20.7	7.1	17.9	-5.1
Q4	44.2	45.5	7.8	10.9	25.6	22.3	36.3	10.7	10.6	1.1
2025 Q1	35.0	35.8	2.3	21.6	11.1	48.3	50.4	8.9	39.2	0.2
2024 Nov.	3.4	1.0	-2.7	-1.0	7.1	14.0	12.2	1.9	9.1	3.0
Dec.	34.5	39.3	4.0	12.7	17.8	8.5	14.8	5.4	4.6	-1.6
2025 Jan.	13.8	5.7	2.6	4.7	6.5	21.2	15.3	2.8	17.7	0.7
Feb.	13.1	11.0	1.3	5.0	6.8	15.4	15.9	2.0	13.6	-0.3
Mar.	8.2	19.2	-1.5	11.9	-2.2	11.8	19.2	4.1	7.9	-0.2
Apr.	12.1	9.9	7.4	-2.5	7.2	16.8	15.4	2.8	14.6	-0.5
Growth rates										
2022	5.5	6.4	8.8	7.7	3.8	3.8	3.8	3.3	4.4	0.1
2023	-0.1	0.5	-4.6	1.0	0.9	0.1	0.4	2.6	0.2	-3.0
2024	1.5	1.7	2.4	1.3	1.3	0.7	1.1	3.7	0.5	-1.5
2024 Q2	0.3	0.7	-0.8	0.0	0.7	0.3	0.3	2.7	0.4	-2.5
Q3	0.8	1.3	1.9	0.7	0.4	0.6	0.6	2.7	0.6	-2.2
Q4	1.5	1.7	2.4	1.3	1.3	0.7	1.1	3.7	0.5	-1.5
2025 Q1	2.2	2.4	4.6	3.4	1.2	1.4	1.7	3.7	1.4	-0.7
2024 Nov.	1.0	1.2	2.4	0.4	0.7	0.5	0.9	3.2	0.4	-1.5
Dec.	1.5	1.7	2.4	1.3	1.3	0.7	1.1	3.7	0.5	-1.5
2025 Jan.	2.0	2.0	4.3	1.6	1.4	1.2	1.3	3.9	1.1	-1.1
Feb.	2.2	2.1	4.6	2.2	1.5	1.4	1.5	3.8	1.3	-0.9
Mar.	2.2	2.4	4.6	3.4	1.2	1.4	1.7	3.7	1.4	-0.7
Apr.	2.5	2.6	5.8	3.3	1.3	1.7	1.9	4.0	1.6	-0.5

Source: ECB.
1) Data refer to the changing composition of the euro area.
2) In accordance with the ESA 2010, in December 2014 holding companies of non-financial groups were reclassified from the non-financial corporations sector to the financial corporations sector. These entities are included in MFI balance sheet statistics with financial corporations other than MFIs and insurance corporations and pension funds (ICPFs).
3) Including non-profit institutions serving households.
4) Adjusted for loan sales and securitisation (resulting in derecognition from the MFI statistical balance sheet) as well as for positions arising from notional cash pooling services provided by MFIs.

5 Financing conditions and credit developments

5.5 Counterparts to M3 other than credit to euro area residents [1)]

(EUR billions and annual growth rates; seasonally adjusted; outstanding amounts and growth rates at end of period; transactions during period)

	MFI liabilities						MFI assets			
	Central government holdings [2)]	Longer-term financial liabilities vis-à-vis other euro area residents					Net external assets	Other		
		Total	Deposits with an agreed maturity of over 2 years	Deposits redeemable at notice of over 3 months	Debt securities with a maturity of over 2 years	Capital and reserves		Total	Repos with central counter-parties [3)]	Reverse repos to central counter-parties [3)]
	1	2	3	4	5	6	7	8	9	10
Outstanding amounts										
2022	639.4	6,731.2	1,783.0	45.7	2,109.0	2,793.4	1,332.5	344.5	137.2	147.2
2023	447.4	7,327.2	1,827.5	90.2	2,413.8	2,995.6	1,858.1	213.8	152.1	152.6
2024	377.9	7,837.7	1,844.0	116.5	2,588.3	3,288.9	2,693.3	229.5	140.4	135.9
2024 Q2	410.5	7,526.1	1,828.2	109.9	2,526.1	3,061.9	2,243.8	300.1	182.6	176.5
Q3	402.8	7,679.4	1,833.1	114.3	2,541.1	3,190.9	2,490.4	247.2	184.9	188.5
Q4	377.9	7,837.7	1,844.0	116.5	2,588.3	3,288.9	2,693.3	229.5	140.4	135.9
2025 Q1 [(p)]	366.8	7,939.1	1,834.3	121.1	2,573.6	3,410.1	2,811.4	203.0	182.9	161.3
2024 Nov.	424.2	7,805.9	1,839.8	115.9	2,575.6	3,274.6	2,642.5	309.9	176.8	164.0
Dec.	377.9	7,837.7	1,844.0	116.5	2,588.3	3,288.9	2,693.3	229.5	140.4	135.9
2025 Jan.	404.5	7,928.1	1,839.5	117.4	2,593.1	3,378.1	2,765.6	211.4	163.2	146.6
Feb.	425.3	7,953.6	1,842.6	118.5	2,599.8	3,392.8	2,826.9	208.9	196.1	159.7
Mar.	366.8	7,939.1	1,834.3	121.1	2,573.6	3,410.1	2,811.4	203.0	182.9	161.3
Apr. [(p)]	447.0	7,909.7	1,830.0	123.4	2,536.5	3,419.7	2,870.2	198.1	194.7	173.4
Transactions										
2022	-93.4	51.9	-88.8	-4.6	13.2	132.2	-68.9	-206.2	10.4	18.0
2023	-198.2	323.8	25.2	40.0	227.1	31.5	456.1	-217.7	17.1	9.0
2024	-69.1	288.7	16.4	26.2	164.1	81.9	570.8	-1.0	-11.7	-16.7
2024 Q2	15.7	42.7	-0.8	6.0	31.8	5.7	149.6	52.8	4.6	2.3
Q3	-7.7	63.0	7.5	4.4	38.3	12.9	173.0	-31.5	2.4	12.0
Q4	-25.4	72.7	5.6	2.2	5.6	59.3	110.5	-36.1	-44.5	-52.6
2025 Q1 [(p)]	-10.7	27.9	-6.5	5.7	10.7	18.0	8.5	-24.1	42.4	25.3
2024 Nov.	-21.5	6.5	5.5	0.2	-0.5	1.4	12.2	64.6	7.2	-8.2
Dec.	-46.5	54.3	3.1	0.6	0.8	49.7	55.3	-90.2	-36.3	-28.1
2025 Jan.	26.5	25.0	-4.4	1.8	6.7	20.9	-6.7	-10.9	22.8	10.6
Feb.	21.1	4.2	3.4	1.1	5.4	-5.6	35.6	6.1	32.9	13.2
Mar.	-58.3	-1.4	-5.5	2.8	-1.3	2.7	-20.4	-19.2	-13.3	1.6
Apr. [(p)]	80.3	-17.2	-0.9	2.4	-5.5	-13.2	91.4	10.4	11.8	12.2
Growth rates										
2022	-12.7	0.8	-4.8	-13.0	0.5	4.6	-	-	7.8	12.7
2023	-30.8	4.7	1.4	80.3	10.7	1.1	-	-	12.4	6.0
2024	-15.5	3.9	0.9	29.1	6.8	2.6	-	-	-7.7	-10.9
2024 Q2	-16.1	4.4	0.7	78.5	9.8	0.9	-	-	9.6	4.3
Q3	-11.2	3.8	0.0	54.7	9.2	0.5	-	-	20.5	15.4
Q4	-15.5	3.9	0.9	29.1	6.8	2.6	-	-	-7.7	-10.9
2025 Q1 [(p)]	-7.1	2.7	0.3	17.6	3.5	3.0	-	-	2.7	-7.4
2024 Nov.	0.2	3.4	0.7	37.4	7.6	0.9	-	-	5.7	1.2
Dec.	-15.5	3.9	0.9	29.1	6.8	2.6	-	-	-7.7	-10.9
2025 Jan.	-10.0	3.3	0.6	23.5	5.5	2.4	-	-	0.0	-8.2
Feb.	-1.0	3.1	0.7	19.0	5.0	2.5	-	-	18.5	-7.9
Mar.	-7.1	2.7	0.3	17.6	3.5	3.0	-	-	2.7	-7.4
Apr. [(p)]	1.8	2.3	0.4	16.8	2.3	2.9	-	-	19.0	-2.3

Sources: ECB.
1) Data refer to the changing composition of the euro area.
2) Comprises central government holdings of deposits with the MFI sector and of securities issued by the MFI sector.
3) Not adjusted for seasonal effects.

6 Fiscal developments

6.1 Deficit/surplus

(as a percentage of GDP; flows during one-year period)

	Deficit (-)/surplus (+)					Memo item:
	Total	Central government	State government	Local government	Social security funds	Primary deficit (-)/ surplus (+)
	1	2	3	4	5	6
2021	-5.1	-5.1	0.0	0.0	0.0	-3.7
2022	-3.5	-3.7	0.0	0.0	0.3	-1.8
2023	-3.5	-3.5	-0.2	-0.2	0.4	-1.8
2024	-3.1	-2.7	-0.3	-0.2	0.1	-1.2
2024 Q1	-3.5	.	.	.	.	-1.7
Q2	-3.5	.	.	.	.	-1.6
Q3	-3.3	.	.	.	.	-1.4
Q4	-3.1	.	.	.	.	-1.2

Sources: ECB for annual data; Eurostat for quarterly data.

6.2 Revenue and expenditure

(as a percentage of GDP; flows during one-year period)

	Revenue						Expenditure						
	Total	Current revenue				Capital revenue	Total	Current expenditure					Capital expenditure
		Total	Direct taxes	Indirect taxes	Net social contributions			Total	Compensation of employees	Intermediate consumption	Interest	Social benefits	
	1	2	3	4	5	6	7	8	9	10	11	12	13
2021	46.9	46.2	13.0	13.2	15.0	0.8	52.0	46.9	10.3	6.0	1.4	23.7	5.1
2022	46.5	45.8	13.3	12.9	14.6	0.8	50.0	44.8	9.8	5.9	1.7	22.4	5.2
2023	46.0	45.1	13.2	12.4	14.5	0.8	49.5	44.2	9.8	5.9	1.7	22.3	5.3
2024	46.5	45.7	13.4	12.4	14.8	0.8	49.6	44.6	10.0	6.0	1.9	22.9	5.0
2024 Q1	46.0	45.2	13.2	12.3	14.6	0.8	49.5	44.2	9.8	5.9	1.8	22.4	5.3
Q2	46.2	45.5	13.3	12.4	14.7	0.8	49.7	44.4	9.9	5.9	1.8	22.6	5.3
Q3	46.4	45.6	13.4	12.4	14.7	0.8	49.7	44.6	10.0	6.0	1.9	22.8	5.1
Q4	46.5	45.8	13.4	12.4	14.8	0.8	49.6	44.6	10.0	6.0	1.9	22.9	5.0

Sources: ECB for annual data; Eurostat for quarterly data.

6.3 Government debt-to-GDP ratio

(as a percentage of GDP; outstanding amounts at end of period)

	Total	Financial instrument			Holder			Original maturity		Residual maturity			Currency	
		Currency and deposits	Loans	Debt securities	Resident creditors		Non-resident creditors	Up to 1 year	Over 1 year	Up to 1 year	Over 1 and up to 5 years	Over 5 years	Euro or participating currencies	Other currencies
					Total	MFIs								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2021	93.9	2.9	13.9	77.1	54.4	40.9	39.4	9.8	84.1	17.3	29.8	46.8	92.5	1.4
2022	89.5	2.6	13.2	73.7	52.5	39.6	37.0	8.7	80.9	16.0	28.4	45.2	88.6	0.9
2023	87.3	2.4	12.2	72.7	49.3	35.9	38.1	7.8	79.5	15.0	28.1	44.3	86.5	0.8
2024	87.4	2.2	11.8	73.5	46.9	33.9	40.6	7.7	79.7	14.5	28.4	44.5	86.7	0.8
2024 Q1	87.8	2.3	12.0	73.6	.	.	.	.	.	.	.	.	.	.
Q2	88.1	2.2	11.8	74.0	.	.	.	.	.	.	.	.	.	.
Q3	88.1	2.2	11.8	74.1	.	.	.	.	.	.	.	.	.	.
Q4	87.5	2.2	11.8	73.5	.	.	.	.	.	.	.	.	.	.

Sources: ECB for annual data; Eurostat for quarterly data.

6 Fiscal developments

6.4 Annual change in the government debt-to-GDP ratio and underlying factors [1)]

(as a percentage of GDP; flows during one-year period)

	Change in debt-to-GDP ratio [2)]	Primary deficit (+)/ surplus (-)	Deficit-debt adjustment								Interest-growth differential	Memo item: Borrowing requirement
			Total	Transactions in main financial assets					Revaluation effects and other changes in volume	Other		
				Total	Currency and deposits	Loans	Debt securities	Equity and investment fund shares				
	1	2	3	4	5	6	7	8	9	10	11	12
2021	-2.7	3.7	-0.1	0.6	0.4	0.1	0.0	0.1	-0.1	-0.6	-6.2	5.1
2022	-4.3	1.8	-0.2	-0.2	-0.7	0.3	0.1	0.1	0.6	-0.6	-5.9	2.7
2023	-2.2	1.8	-0.3	-0.4	-0.5	-0.2	0.1	0.1	0.6	-0.5	-3.7	2.6
2024	0.1	1.2	0.2	0.0	-0.3	0.0	0.2	0.1	0.3	0.0	-1.3	3.1
2024 Q1	-1.5	1.7	-0.5	-0.6	-0.7	-0.1	0.1	0.1	0.4	-0.3	-2.7	2.6
Q2	-0.7	1.6	-0.3	-0.5	-0.5	-0.1	0.1	0.1	0.4	-0.2	-2.0	2.8
Q3	-0.2	1.4	0.0	-0.2	-0.3	-0.1	0.1	0.0	0.3	-0.1	-1.6	2.9
Q4	0.1	1.2	0.2	0.0	-0.3	0.0	0.2	0.1	0.3	0.0	-1.3	3.1

Sources: ECB for annual data; Eurostat for quarterly data.
1) Intergovernmental lending in the context of the financial crisis is consolidated except in quarterly data on the deficit-debt adjustment.
2) Calculated as the difference between the government debt-to-GDP ratios at the end of the reference period and a year earlier.

6.5 Government debt securities [1)]

(debt service as a percentage of GDP; flows during debt service period; average nominal yields in percentages per annum)

	Debt service due within 1 year [2)]					Average residual maturity in years [3)]	Average nominal yields [4)]						
	Total	Principal		Interest			Outstanding amounts					Transactions	
		Total	Maturities of up to 3 months	Total	Maturities of up to 3 months		Total	Floating rate	Zero coupon	Fixed rate		Issuance	Redemption
										Total	Maturities of up to 1 year		
	1	2	3	4	5	6	7	8	9	10	11	12	13
2022	12.9	11.7	4.1	1.2	0.3	8.0	1.6	1.2	0.4	1.9	2.0	1.1	0.5
2023	12.9	11.6	4.1	1.4	0.3	8.1	2.0	1.2	1.9	2.0	1.6	3.6	1.9
2024	12.5	11.0	4.1	1.4	0.4	8.2	2.1	1.3	1.9	2.2	1.9	3.5	2.9
2024 Q2	12.6	11.2	3.5	1.4	0.4	8.3	2.1	1.3	2.1	2.1	1.6	3.8	2.8
Q3	12.5	11.1	3.8	1.4	0.4	8.2	2.1	1.3	2.3	2.1	1.6	3.7	2.9
Q4	12.5	11.0	4.1	1.4	0.4	8.2	2.1	1.3	1.9	2.2	1.9	3.5	2.9
2025 Q1	12.4	11.0	3.8	1.5	0.4	8.3	2.1	1.3	1.8	2.2	1.9	3.3	2.9
2024 Nov.	12.6	11.2	3.6	1.4	0.4	8.2	2.1	1.3	2.0	2.1	1.8	3.6	2.9
Dec.	12.5	11.0	4.1	1.4	0.4	8.2	2.1	1.3	1.9	2.2	1.9	3.5	2.9
2025 Jan.	12.5	11.0	4.0	1.5	0.4	8.2	2.1	1.3	1.9	2.2	1.9	3.5	2.9
Feb.	12.6	11.2	4.1	1.4	0.4	8.3	2.1	1.3	1.9	2.2	1.9	3.4	2.9
Mar.	12.4	11.0	3.8	1.5	0.4	8.3	2.1	1.3	1.8	2.2	1.9	3.3	2.9
Apr.	13.1	11.6	3.8	1.5	0.4	8.3	2.1	1.3	1.9	2.2	1.9	3.3	2.9

Source: ECB.
1) At face value and not consolidated within the general government sector.
2) Excludes future payments on debt securities not yet outstanding and early redemptions.
3) Residual maturity at the end of the period.
4) Outstanding amounts at the end of the period; transactions as 12-month average.

6 Fiscal developments

6.6 Fiscal developments in euro area countries

(as a percentage of GDP; flows during one-year period and outstanding amounts at end of period)

	Belgium	Germany	Estonia	Ireland	Greece	Spain	France	Croatia	Italy	Cyprus
	1	2	3	4	5	6	7	8	9	10
	Government deficit (-)/surplus (+)									
2021	-5.4	-3.2	-2.6	-1.4	-7.1	-6.7	-6.6	-2.6	-8.9	-1.6
2022	-3.6	-2.1	-1.1	1.7	-2.5	-4.6	-4.7	0.1	-8.1	2.7
2023	-4.1	-2.5	-3.1	1.5	-1.4	-3.5	-5.4	-0.8	-7.2	1.7
2024	-4.5	-2.8	-1.5	4.3	1.3	-3.2	-5.8	-2.4	-3.4	4.3
2024 Q1	-4.0	-2.7	-3.1	1.3	-0.7	-3.6	-5.4	-0.8	-6.6	3.3
Q2	-4.1	-2.8	-3.6	1.7	0.1	-3.2	-5.4	-1.8	-6.3	4.0
Q3	-4.4	-2.8	-3.0	4.6	0.8	-3.0	-5.6	-2.1	-5.3	4.0
Q4	-4.5	-2.8	-1.5	4.3	1.3	-3.2	-5.8	-2.4	-3.4	4.3
	Government debt									
2021	108.5	68.1	18.4	52.6	197.3	115.7	112.8	78.2	145.8	96.5
2022	102.7	65.0	19.1	43.1	177.0	109.5	111.4	68.5	138.3	81.1
2023	103.2	62.9	20.2	43.3	163.9	105.1	109.8	61.8	134.6	73.6
2024	104.7	62.5	23.6	40.9	153.6	101.8	113.0	57.6	135.3	65.0
2024 Q1	106.6	62.6	24.1	42.5	161.8	106.3	110.7	62.0	134.9	72.5
Q2	106.6	62.0	23.8	42.8	160.1	105.3	112.3	60.0	136.7	70.2
Q3	105.7	62.4	24.0	42.3	158.3	104.4	113.7	59.6	136.2	69.2
Q4	104.7	62.5	23.6	40.9	153.6	101.8	113.1	57.7	135.3	65.0

	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovenia	Slovakia	Finland
	11	12	13	14	15	16	17	18	19	20
	Government deficit (-)/surplus (+)									
2021	-7.2	-1.2	1.0	-7.0	-2.2	-5.7	-2.8	-4.6	-5.1	-2.7
2022	-4.9	-0.7	0.2	-5.2	0.0	-3.4	-0.3	-3.0	-1.7	-0.2
2023	-2.4	-0.7	-0.8	-4.7	-0.4	-2.6	1.2	-2.6	-5.2	-3.0
2024	-1.8	-1.3	1.0	-3.7	-0.9	-4.7	0.7	-0.9	-5.3	-4.4
2024 Q1	-2.5	-0.6	0.0	-3.9	-0.4	-2.8	0.8	-1.9	-4.8	-3.4
Q2	-4.7	-0.9	0.5	-3.5	-0.4	-3.3	1.0	-1.9	-4.9	-3.8
Q3	-2.7	-1.4	0.3	-3.0	-0.3	-3.8	0.7	-1.7	-4.9	-4.4
Q4	-1.8	-1.3	1.0	-3.7	-0.9	-4.7	0.7	-0.9	-5.3	-4.4
	Government debt									
2021	45.9	43.3	24.2	49.8	50.5	82.4	123.9	74.8	60.2	73.2
2022	44.4	38.1	24.9	49.5	48.4	78.4	111.2	72.7	57.7	74.0
2023	44.6	37.3	25.0	47.9	45.2	78.5	97.7	68.4	55.6	77.5
2024	46.8	38.2	26.3	47.4	43.3	81.8	94.9	67.0	59.3	82.1
2024 Q1	45.9	39.1	26.4	47.5	44.0	80.9	99.1	70.0	60.6	78.4
Q2	45.9	37.4	26.1	46.5	43.3	82.9	100.3	69.4	60.4	80.4
Q3	47.2	38.4	25.8	45.9	42.2	83.2	97.1	66.7	60.3	82.0
Q4	46.8	38.2	26.3	47.4	43.3	81.8	94.9	67.0	59.7	82.1

Source: Eurostat.

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For specific terminology please refer to the ECB glossary (available in English only).

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