EUROPEAN CENTRAL BANK

EUROSYSTEM

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Economic, financial and monetary developments

Summary

At its meeting on 17 October 2024, 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 incoming information on inflation showed that the disinflationary process is well on track. The inflation outlook was also affected by recent downside surprises in indicators of economic activity. Meanwhile, financing conditions remained restrictive.

Inflation is expected to rise in the coming months, before declining to target in the course of next year. Domestic inflation remains high, as wages are still rising at an elevated pace. At the same time, labour cost pressures are set to continue easing gradually, with profits partially buffering their impact on inflation.

The Governing Council is determined to ensure that inflation returns to its 2% medium-term target in a timely manner. It will keep policy rates sufficiently restrictive for as long as necessary to achieve this aim. The Governing Council will continue to follow a data-dependent and meeting-by-meeting approach to determining the appropriate level and duration of restriction. In particular, its 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 incoming information suggests that economic activity has been somewhat weaker than expected. While industrial production has been particularly volatile over the summer months, surveys indicate that manufacturing has continued to contract. For services, surveys show an uptick in August, likely supported by a strong summer tourism season, but the latest data point to more sluggish growth. Businesses are expanding their investment only slowly, while housing investment is continuing to fall. Exports have weakened, especially for goods.

Although incomes rose in the second quarter, households consumed less, contrary to expectations.[1] The saving rate stood at 15.7% in the second quarter, well above the pre-pandemic average of 12.9%. At the same time, recent survey evidence points to a gradual recovery in household spending.

The labour market remains resilient. The unemployment rate stayed at its historical low of 6.4% in August. However, surveys point to slowing employment growth and a further moderation in the demand for labour.

The Governing Council expects the economy to strengthen over time, as rising real incomes allow households to consume more. The gradually fading effects of restrictive monetary policy should support consumption and investment. Exports should contribute to the recovery as global demand rises.

Fiscal and structural policies should be aimed at making the economy more productive, competitive and resilient. That would help to raise potential growth and reduce price pressures in the medium term. To this end, it is crucial to swiftly follow up, with concrete and ambitious structural policies, on Mario Draghi's proposals for enhancing European competitiveness and Enrico Letta's proposals for empowering the Single Market. Implementing the EU's revised economic governance framework fully, transparently and without delay will help governments bring down budget deficits and debt ratios on a sustained basis. Governments should now make a strong start in this direction in their medium-term plans for fiscal and structural policies.

Inflation

Annual inflation fell further to 1.7% in September, its lowest level since April 2021. Energy prices dropped sharply, at an annual rate of -6.1%. Food price inflation went up slightly, to 2.4%. Goods inflation remained subdued, at 0.4%, while services inflation edged down to 3.9%.

Most measures of underlying inflation either declined or were unchanged. Domestic inflation is still elevated, as wage pressures in the euro area remain strong. Negotiated wage growth will remain high and volatile for the rest of the year, given the significant role of one-off payments and the staggered nature of wage adjustments.

Inflation is expected to rise in the coming months, partly because previous sharp falls in energy prices will drop out of the annual rates. Inflation should then decline to target in the course of next year. The disinflation process should be supported by easing labour cost pressures and the past monetary policy tightening gradually feeding through to consumer prices. Most measures of longer-term inflation expectations stand at around 2%.

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[1] The cut-off date for data included in this issue of the Economic Bulletin was 16 October 2024, except for HICP data, which had a cut-off date of 17 October. According to Eurostat's updated estimate of euro area national accounts, which was released on 18 October, private consumption growth for the second quarter of 2024 was revised upwards and is now positive (0.1%).

Risk assessment

The risks to economic growth remain tilted to the downside. Lower confidence could prevent consumption and investment from recovering as fast as expected. This could be amplified by sources of geopolitical risk, such as Russia's unjustified war against Ukraine and the tragic conflict in the Middle East, which could also disrupt energy supplies and global trade. Lower demand for euro area exports due, for instance, to a weaker world economy or an escalation in trade tensions between major economies would further weigh on euro area growth. Growth could also be lower if the lagged effects of monetary policy tightening turn out stronger than expected. Growth could be higher if the world economy grows more strongly than expected or if easier financing conditions and declining inflation lead to a faster rebound in consumption and investment.

Inflation could turn out higher than anticipated if wages or profits increase by more than expected. Upside risks to inflation also stem from the heightened geopolitical tensions, which could push energy prices and freight costs higher in the near term and disrupt global trade. Moreover, extreme weather events, and the unfolding climate crisis more broadly, could drive up food prices. By contrast, inflation may surprise on the downside if low confidence and concerns about geopolitical events prevent consumption and investment from recovering as fast as expected, monetary policy dampens demand more than expected, or the economic environment in the rest of the world worsens unexpectedly.

Financial and monetary conditions

Shorter-term market interest rates have declined since the Governing Council meeting on 12 September, owing mainly to weaker news on the euro area economy and the further fall in inflation. While financing conditions remain restrictive, the average interest rates on new loans to firms and on new mortgages decreased slightly in August, to 5.0% and 3.7% respectively.

Credit standards for business loans were unchanged in the third quarter, as reported in the October 2024 bank lending survey, after more than two years of progressive tightening. Moreover, demand for loans by firms rose for the first time in two years. Overall lending to firms continues to be subdued, growing at an annual rate of 0.8% in August.

Credit standards for mortgages eased for the third quarter in a row, owing especially to greater competition among banks. Lower interest rates and better housing market prospects led to a strong increase in the demand for mortgages. In line with this, mortgage lending picked up slightly, growing at an annual rate of 0.6%.

Monetary policy decisions

The interest rates on the deposit facility, the main refinancing operations and the marginal lending facility were lowered to 3.25%, 3.40% and 3.65% respectively, with effect from 23 October 2024.

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

The Eurosystem no longer reinvests all of the principal payments from maturing securities purchased under the pandemic emergency purchase programme (PEPP), reducing the PEPP portfolio by €7.5 billion per month on average. The Governing Council intends to discontinue reinvestments under the PEPP at the end of 2024.

The Governing Council will continue applying flexibility in reinvesting redemptions coming due in the PEPP portfolio, with a view to countering risks to the monetary policy transmission mechanism related to the pandemic.

As banks are repaying the amounts borrowed under the targeted longer-term refinancing operations, the Governing Council will regularly assess how targeted lending operations and their ongoing repayment are contributing to its monetary policy stance.

Conclusion

At its meeting on 17 October 2024, 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 returns to its 2% medium-term target in a timely manner. It will keep policy rates sufficiently restrictive for as long as necessary to achieve this aim. The Governing Council will continue to follow a data-dependent and meeting-by-meeting approach to determining the appropriate level and duration of restriction. In particular, 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.

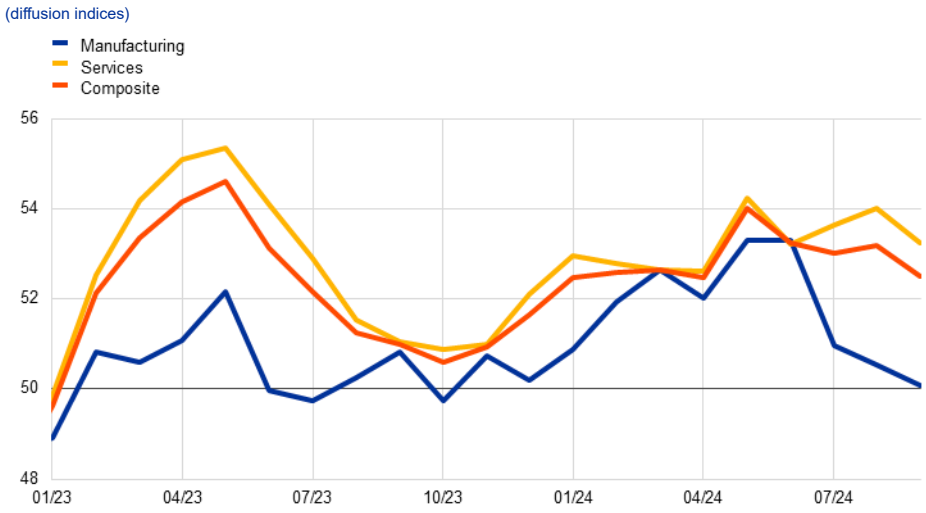
In any case, the Governing Council stands ready to adjust all of its instruments within its mandate to ensure that inflation returns to its medium-term target and to preserve the smooth functioning of monetary policy transmission.

1 External environment

Global economic activity has remained steady, albeit uneven across sectors. Survey data point to differing levels of activity across the services and manufacturing sectors. Manufacturing saw lower demand as a result of the frontloading of orders earlier in the year. This slowdown in manufacturing demand has also weighed on goods trading, which in turn contributed to a further normalisation of shipping costs. Inflation continues to moderate, yet pressures on services prices remain.

Global economic activity has remained steady, albeit uneven across sectors. The global (excluding the euro area) composite output Purchasing Managers' Index (PMI) remained in expansionary territory in September 2024 at 52.5, down from 53.2 in August (Chart 1). However, the differences across sectors increased markedly, with the services component continuing to indicate expansion in the third quarter, despite a slight decline, and the manufacturing index weakening further to 50.5 in the third quarter, well below its second-quarter average of 52.9. The decline in the PMI indicator for manufacturing output was broad-based across regions, but was particularly evident in China and the United States. Survey data are consistent with hard data, which show that global industrial production contracted by 0.2% month on month in July, reflecting declines in industrial production in advanced economies and in durable goods at the global level. The weakness in the global manufacturing cycle appears to have been driven by the reversal of a build-up of inventories in the first half of 2024. Overall, ECB nowcasting models point to steady quarter-on-quarter growth of around 0.9% in the third quarter.

Chart 1
Global output PMI



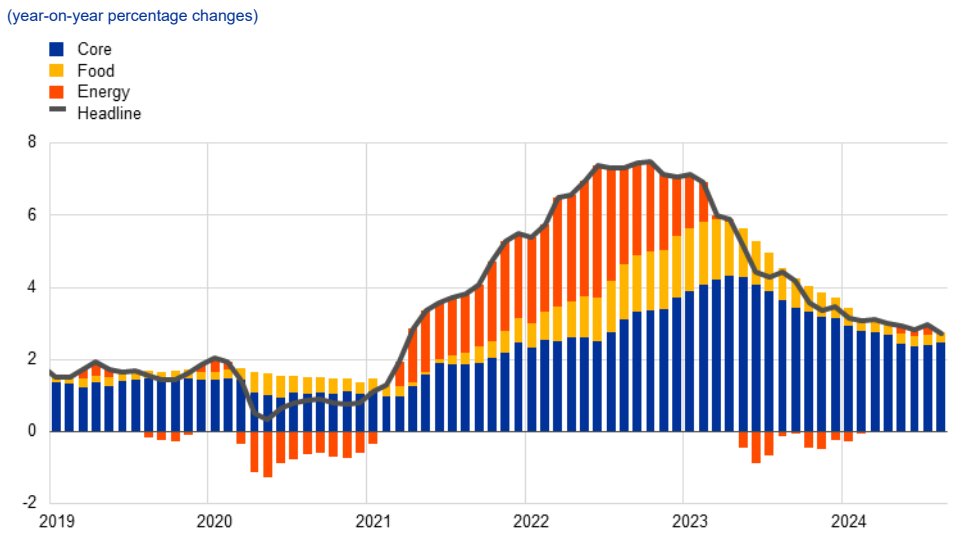
Sources: S&P Global Market Intelligence and ECB staff calculations.
Note: The latest observations are for September 2024.

The shift in demand for manufactured goods was reflected in weaker trade data. In the first half of the year, global trade growth was supported by strong demand for imported goods brought forward amid concerns about disruptions to shipping routes in the Red Sea and possible delays ahead of the end-of-year holiday

season. In the second half of this year, import demand is set to weaken again as the earlier frontloading of import orders fades out, as also indicated by survey data. The global (excluding the euro area) PMI for new export orders in manufacturing fell into contractionary territory in the third quarter of 2024 at 49.0, the lowest value observed since the fourth quarter of 2023. Nonetheless, steady global economic activity overall should provide sources of trade growth in the third and fourth quarters of the year. With trade in manufactured goods slowing somewhat, shipping costs continued to fall from their previous peaks. The increases in shipping costs observed in the second quarter of 2024 reflected higher demand consistent with the frontloading of imports at the start of the year. Now that this phenomenon is reversing and demand has slowed, shipping costs are beginning to normalise.

Inflation across OECD economies continues to moderate, yet underlying price pressures remain. In August the annual headline rate of consumer price index (CPI) inflation across OECD countries (excluding Türkiye) declined to 2.7%, compared with 3.0% in the previous month (Chart 2). Excluding food and energy prices, OECD core inflation remained unchanged in August at 3.2%. The decline in headline inflation was due in large part to lower energy inflation, while food prices remained broadly stable. Underlying price pressures are sustained in particular by services inflation, which tends to lag headline inflation more than other measures such as the energy, food and goods categories.[2] Services inflation in turn is closely linked to wage growth. With wage growth expected to ease in 2025 in the context of cooling labour markets, headline inflation is expected to further normalise.

Chart 2
OECD CPI inflation



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 August 2024.

[2] See also recent comments by Philip R. Lane, "Underlying inflation: an update", speech at the Inflation: Drivers and Dynamics Conference 2024 organised by the Federal Reserve Bank of Cleveland and the ECB, Cleveland, 24 October 2024.

Brent crude oil prices have risen by 3.0% since the September Governing Council meeting in the wake of recent geopolitical tensions and a first interest rate cut by the Federal Reserve.[3] The main drivers of higher oil prices were the heightened tensions in the Middle East following Iran's missile attack on Israel on 1 October 2024 and the improved sentiment for the growth outlook following the rate cut by the Federal Reserve. These factors came in tandem with the existing support for oil prices stemming from the earlier decision taken by OPEC+ to delay oil production hikes. Nonetheless, concerns about an economic slowdown in China have partially mitigated the upward pressure on oil prices. European gas prices have risen by 6.9% since the September Governing Council meeting. This increase has been driven by investors' concerns over the impending expiration of the gas transit agreement between Ukraine and Russia at the end of the year, with the Ukrainian government reluctant to renew the arrangement. Escalating tensions in the Middle East and predictions of colder than average temperatures have further fuelled the increase in gas prices. The concerns over supply disruptions are likely to continue until new LNG capacity comes online, which is not expected before the second half of 2025. Metals prices have increased by 7.9%, influenced in part by the Federal Reserve's interest rate cut. Meanwhile, food prices have risen by 3.8%, driven primarily by droughts in Brazil.

In the United States, economic activity is moderating but continues to grow at a solid pace. In the second quarter of 2024, real GDP continued to grow at a robust pace of 0.7% quarter on quarter. Inventories and strong consumer spending carried on boosting activity despite moderating considerably since the second half of 2023. The US labour market continues to cool but remains healthy overall, with non-farm job gains averaging 116,000 per month over the past three months, down from a monthly average of 202,000 in 2023. The unemployment rate eased to 4.1% in September, from 4.2% in August, but has risen overall in 2024 from 3.7% at the start of the year. Meanwhile, the vacancy-to-unemployed ratio has also now declined to pre-pandemic levels. Wage growth moderated to 3.9% year on year in the second quarter of 2024, albeit remaining above the range of 3-3.5% which the Federal Reserve considers to be consistent with its inflation target. Headline CPI inflation fell to 2.4% in September, while core inflation rose marginally to 3.3% from 3.2% in August. Shelter inflation remains persistent, but is expected to further normalise over the next few months. The Federal Open Market Committee (FOMC) decided to cut the federal funds rate by 50 basis points at its September meeting, citing progress on inflation and balanced risks to its employment and inflation goals. In the September FOMC projections, the median forecast for the federal funds rate was revised down by 75 basis points in 2024-25 and 25 basis points in 2026, as compared with the June projections.

Chinese economic growth momentum remains weak. Over recent months, subdued consumer sentiment amplified the slowing of retail sales, particularly in the automotive sector. Infrastructure investment slowed markedly owing to greater financial constraints at the local government levels. At the same time, the real estate market remains a significant drag on overall activity. While there are early signs of

[3] The cut-off date for data included in this issue of the Economic Bulletin was 16 October 2024.

stabilisation in new home sales, housing starts and property development funds, prices for new and existing homes continue to decline, and unsold housing inventory remains high. The People's Bank of China responded in September by introducing the most significant stimulus package since the pandemic. This includes a reduction of 20 basis points in the key (seven-day repo) policy rate to 1.5%, a 50 basis point cut in the reserve requirement ratio, an expanded re-lending programme and a 50 basis point cut on rates for existing mortgages. The impact of this package is, however, uncertain, as it may not fully address the underlying issues such as weak income expectations and home completion concerns. In October the Ministry of Finance announced plans for an additional fiscal stimulus aimed at supporting household consumption and stabilising the real estate market, although the details remain unclear at this stage. Overall, policymakers are signalling serious concerns about a slowing economy and an increased likelihood of missing the 5% growth rate target for 2024.

Activity in the United Kingdom slowed, while core inflation edged up on base effects. In July the UK economy recorded a second consecutive month of zero GDP growth, which, if unadjusted, implies a quarterly growth rate for the third quarter of 2024 of only 0.1%. Consequently, the Bank of England revised down its growth forecast for the third quarter to 0.3%. Despite weak data for the month of July, indicators including the composite PMI and business confidence remain positive, supported by strong retail sales and rising real wages. However, consumer confidence declined in September. The Government will present its budget plan in October, which is widely expected to increase fiscal headwinds. Growth is forecast to be modest in the second half of 2024 on account of tight fiscal and monetary policies. Headline inflation remained at 2.2% in August, while core inflation rose to 3.6%, driven by services inflation. At its September meeting, the Bank of England kept its policy rate at 5.0% and opted to keep the pace of its quantitative tightening unchanged, continuing to reduce bond holdings by GBP 100 billion over the next year, primarily through asset runoff.

2 Economic activity

Euro area real GDP grew at a modest pace in the first half of 2024, after broadly stagnating throughout 2023. However, activity is likely to have been somewhat weaker than expected in the third quarter of the year. Across sectors, incoming data point to the continuing weakness of manufacturing activity, reflecting low demand for goods, competitiveness losses and rising regulatory costs. Services activity, supported by a strong summer tourism season, continues to expand, but the latest data point to slower growth. Across demand components, business investment remains subdued, against a background of high uncertainty and the lingering effects of the past monetary policy tightening. Housing investment continues to fall. Although incomes rose in the second quarter, households consumed less, contrary to expectations. However, recent survey evidence points to a gradual recovery in household spending.[4] Looking ahead, the economy is expected to strengthen over time, as rising real incomes allow households to consume more. The gradually fading effects of restrictive monetary policy should support consumption and investment, and exports should contribute to the recovery as global demand rises.

The euro area economy grew at a modest pace in the first half of 2024, after broadly stagnating in previous quarters (Chart 3). Real GDP growth was 0.3%, quarter on quarter, in the first quarter of 2024, and moderated to 0.2% in the second quarter as a result of the slowdown in private domestic demand. Services continued to drive this modest expansion, while manufacturing activity remained weak. Moreover, growth dynamics in the second quarter were uneven among the largest euro area economies: GDP increased by 1.0% in the Netherlands, by 0.8% in Spain and by 0.2% in France and Italy, while it shrank by 0.1% in Germany.

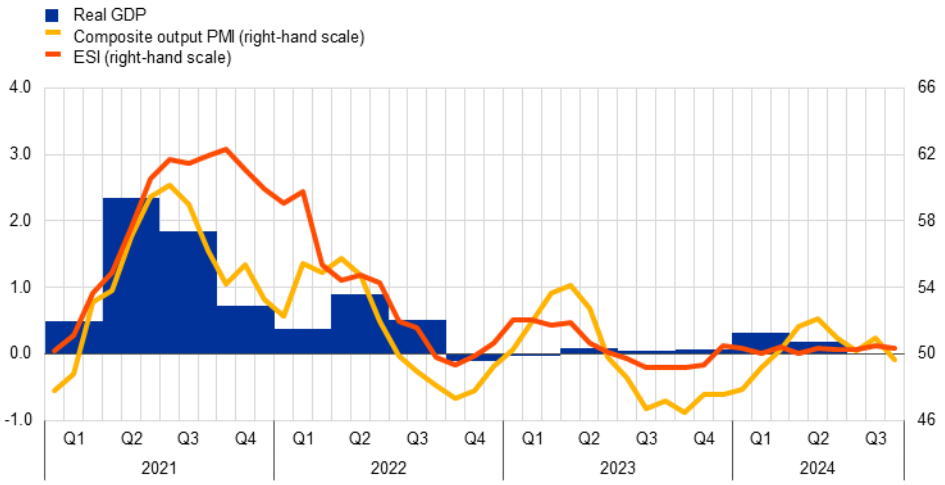
Available data suggest that the economy weakened again towards the end of the third quarter of 2024. The composite output Purchasing Managers' Index (PMI) fell in September, bringing the average indicator for the third quarter down to the 50-point threshold, which suggests that the euro area economy is broadly stagnating.

[4] The cut-off date for data included in this issue of the Economic Bulletin was 16 October 2024, except for HICP data, which had a cut-off date of 17 October. According to Eurostat's updated estimate of euro area national accounts, which was released on 18 October, private consumption growth for the second quarter of 2024 was revised upwards and is now positive (0.1%).

Chart 3

Euro area real GDP, composite output PMI and ESI

(left-hand scale: quarter-on-quarter percentage changes; right-hand scale: diffusion index)



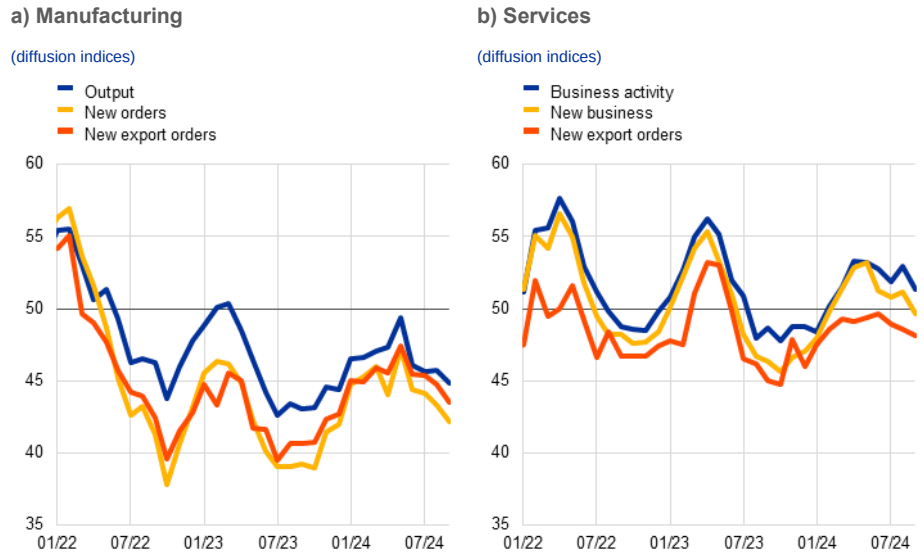
Sources: Eurostat, European Commission and S&P Global.
Notes: The two lines indicate monthly developments; the bars show quarterly data. The European Commission's Economic Sentiment Indicator (ESI) has been standardised and rescaled to have the same mean and standard deviation as the composite output PMI. The latest observations are for the second quarter of 2024 for real GDP and September 2024 for the composite output PMI and ESI.

The subdued growth of the economy reflects a continuation of the downward trend in manufacturing activity, with the euro area PMI for manufacturing output in contractionary territory since April 2023 (Chart 4, panel a). Industrial production (excluding construction) was particularly volatile over the summer months. It increased by 0.3% on average over July and August, compared with the second quarter of 2024, but remains at a low level. Looking ahead, the PMIs for new orders and future manufacturing activity fell further in September, signalling the ongoing deterioration of operating conditions in the sector. The European Commission's Economic Sentiment Indicator (ESI) also showed a pronounced drop in industrial business confidence in September. While supply-side constraints have eased, weak demand has become the main headwind for European manufacturers. This was confirmed by feedback from the ECB's corporate contacts in September, who also stressed their increasing concerns about the green transition, competitiveness and global political uncertainty (see Box 4). These factors were reported to be holding back investment and confidence.

Services sector activity continued to expand – albeit at a slower pace. Following the temporary boost from the Paris 2024 Olympics in August, the decline in the PMI for services activity resumed in September (Chart 4, panel b), suggesting a modest average expansion during the third quarter (52.1). This is consistent with the still strong dynamics in contact-intensive services, as reported by corporate contacts, reflecting robust consumer demand for tourism services, while other services have been more affected by the elevated uncertainty. In September, the ESI for the services sector remained resilient, and although the PMI for business expectations for services activity over the coming 12 months has been marking a downward trend since May, it stayed well above 50.

Chart 4

PMIs across sectors of the economy



Source: S&P Global Market Intelligence.
Note: The latest observations are for September 2024.

The unemployment rate remains low, while signs of a slowdown in the labour market are emerging. The unemployment rate stood at 6.4% in August, unchanged from July – its lowest level since the euro was introduced (Chart 5). Nonetheless, signs of cooling in the labour market continue to emerge. Growth in the labour force, which has been a key driver of employment growth in the post-pandemic period, continued to moderate as the implicit labour force remained constant between July and August.[5] At the same time, labour demand is softening. The rate of job postings from the online job listings website Indeed, a measure of the share of unfilled job openings in the euro area, continued to fall in August, reaching its lowest level since September 2021.[6]

Short-term indicators suggest that the labour market will continue to cool in the third quarter. The monthly composite PMI employment indicator declined from 49.9 in August to 49.7 in September, remaining around the neutral threshold of 50 points in the third quarter of 2024 (Chart 5). The deteriorating perceptions of employment growth have been driven by the manufacturing sector, which fell further into contractionary territory in September. The PMI for employment in the services sector was still in expansionary territory at 51.0 but remains well below the levels recorded earlier in the year. The evidence of a muted outlook for employment furnished by the PMIs is consistent with the findings from the ECB's recent contacts with non-financial companies (see Box 4). Overall, weaker employment dynamics should support a gradual recovery in labour productivity going forward.

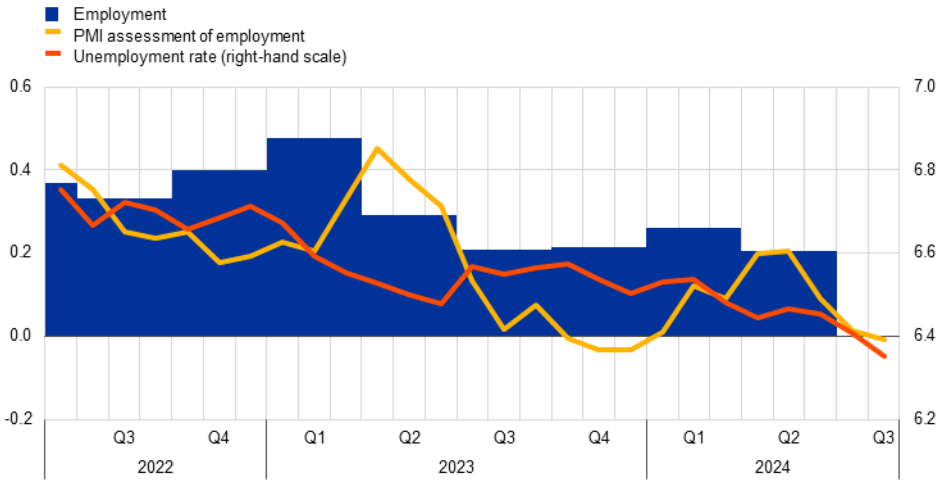
5 The implicit labour force is inferred from the monthly unemployment rate and the number of unemployed.

6 The job postings rate is defined as the number of job postings divided by the sum of the number of job postings and the number of employed workers.

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)

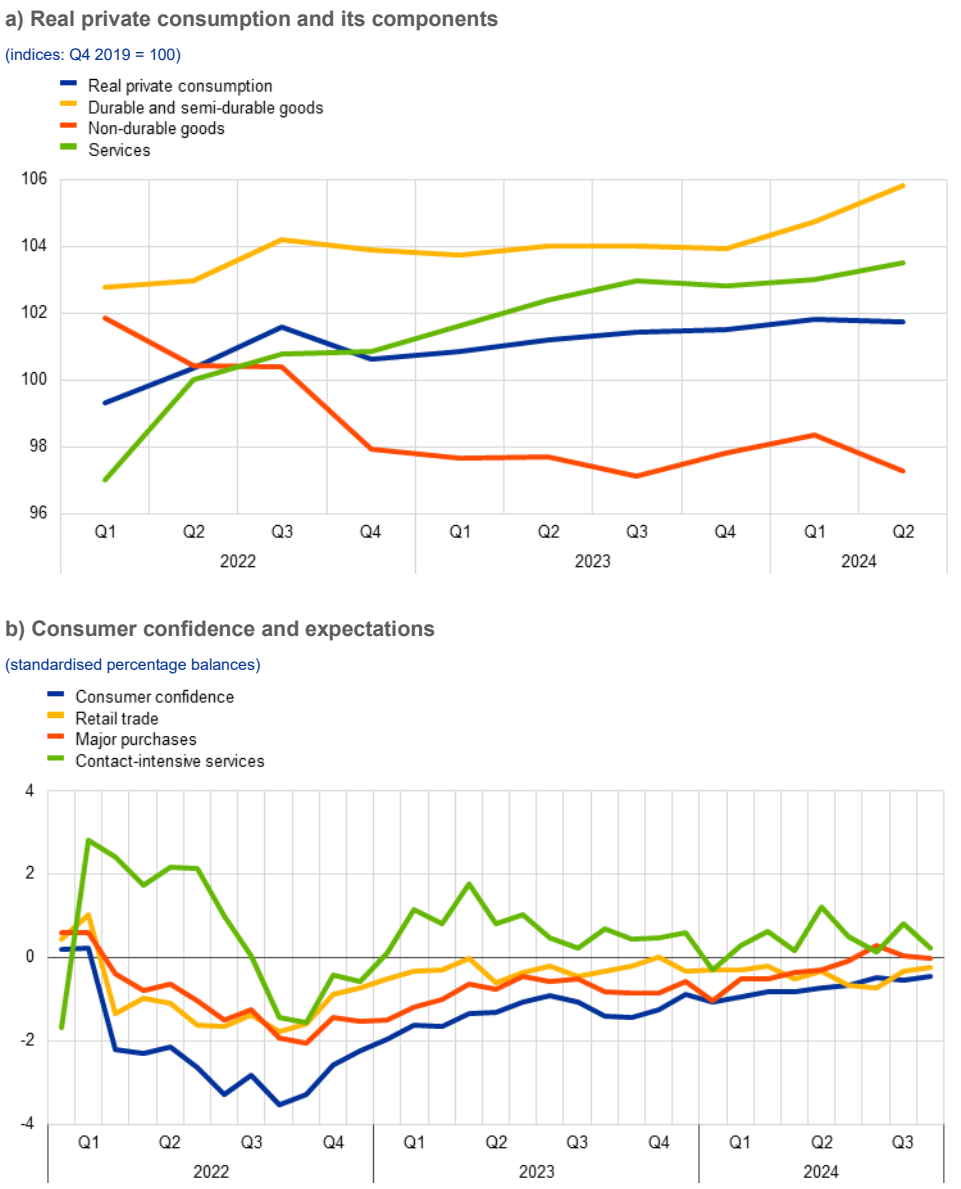


Sources: Eurostat, S&P Global Market Intelligence and ECB calculations.
Notes: The two lines indicate monthly developments, while the bars show quarterly data. The PMI is expressed in terms of the deviation from 50, then divided by ten. The latest observations are for the second quarter of 2024 for employment, September 2024 for the PMI assessment of employment and August 2024 for the unemployment rate.

Real private consumption remained weak in the second quarter of 2024, but surveys suggest a strengthening of household spending dynamics in the near term. Although incomes rose in the second quarter, households consumed less, contrary to expectations. The household saving ratio increased to 15.7%, amid still subdued consumer confidence, elevated uncertainty, restrictive financing conditions and weak borrowing. The weak consumption in the second quarter reflected a drop in non-durable goods (Chart 6, panel a), largely food and energy products, which were the most affected by the inflation surge in 2022-23. The further moderation of food and energy inflation in the third quarter of 2024, coupled with the gradual adjustment of households' spending to their increasing purchasing power, suggests that the consumption of goods likely improved during the summer months. This is also implied by a small increase in retail trade in August. While expectations across sectors remained moderate in September, surveys suggest that growth in household spending is strengthening. The European Commission's consumer confidence indicator, while still subdued – mainly owing to weak expectations for the economy –, continued its upward trend in September (Chart 6, panel b). Business expectations for demand in contact-intensive services in the next three months declined but remained elevated from a historical perspective. At the same time, retail trade expectations for the next three months continued to improve, drawing closer to their pre-pandemic average. Finally, consumer expectations for major purchases in the next 12 months moderated in September but remained in line with their pre-pandemic average.

Chart 6

Real private consumption, consumer confidence and expectations



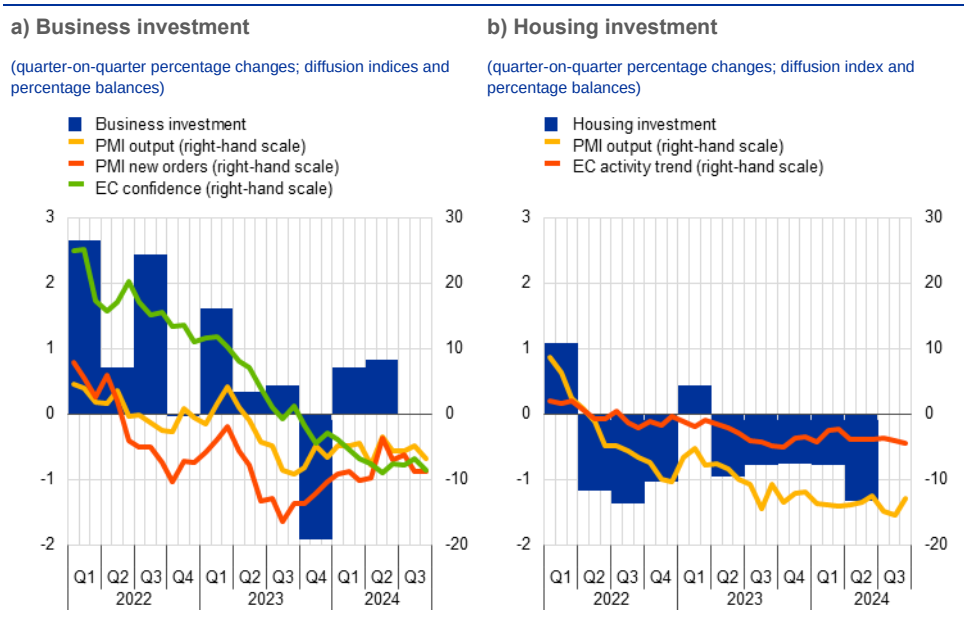
Sources: Eurostat, European Commission and ECB calculations.
Notes: In panel a), real private consumption refers to the national concept and the components refer to the domestic concept of consumption. The latest observations are for the second quarter of 2024. In panel b), business expectations for demand in contact-intensive services and retail trade expectations refer to the next three months, while consumer expectations for major purchases refer to the next 12 months. The first series is standardised for the period January 2005-19, owing to data availability, whereas the other three series on the chart are standardised for the period 1999-2019. "Contact-intensive services" include accommodation, travel and food services. The latest observations are for September 2024.

Growth in business investment was moderate in the second quarter of 2024 and is expected to slow in the near term. After increasing by 0.7%, quarter on quarter, in the second quarter of 2024, business investment growth (excluding volatile Irish intangibles) is likely to have been muted in the third quarter of 2024, according to short-term indicators for the capital goods sector (Chart 7, panel a). PMI output and the European Commission's confidence indicator for the sector up to September have broadly levelled off in recent months and PMI new orders have edged down. Investment dynamics have differed across investment categories since

the start of the monetary policy tightening cycle at the end of 2021. Overall, cumulated investment in machinery and equipment contracted in this period, while intangibles have continued to grow. Findings from the ECB's dialogue with non-financial companies in September point to rising uncertainty surrounding the green transition and competitiveness concerns that are causing new investment in machinery and equipment to stall. Corporate contacts also reported weaker foreign and domestic demand than they did three months ago, in a context of elevated (geo)political and regulatory uncertainty, in addition to high energy and wage costs, which are weighing on investment (see Box 4). Yet firms also reported some support for demand in general from expected lower inflation and interest rates, which should ultimately underpin investment. Overall, lacklustre demand growth, coupled with the incomplete absorption of Next Generation EU funds and the slow implementation of both green and digital investment plans, could delay the expected gradual acceleration in business investment.

Chart 7

Real private investment dynamics and survey data



Sources: Eurostat, European Commission (EC), S&P Global Market Intelligence and ECB calculations.
Notes: The lines indicate monthly developments, while the bars refer to quarterly data. The PMIs are expressed in terms of the deviation from 50. In panel a), business investment refers to non-construction investment excluding Irish intangibles. Monthly data reflect the capital goods sector. The latest observations are for the second quarter of 2024 for business investment and September 2024 for the PMIs and the European Commission's confidence indicator. In panel b), the line for the European Commission's activity trend indicator refers to the building and specialised construction sector's assessment of the trend in activity over the preceding three months. The latest observations are for the second quarter of 2024 for housing investment and September 2024 for the PMI and the European Commission's indicator.

Housing investment fell in the second quarter of 2024 and most likely also in the third quarter (Chart 7, panel b). Housing investment declined by 1.3%, quarter on quarter, in the second quarter, as the unwinding of the favourable one-off effects of the mild weather in Germany and of the large fiscal incentives in Italy exacerbated the negative momentum in housing demand. Moreover, residential building permits remained at historically low levels in the second quarter, suggesting that there were limited pressures from projects in the pipeline. Survey-based activity measures, such as the PMI for residential construction output and the European Commission's

indicator for building and specialised construction activity in the last three months, remained subdued up to September. Overall, these developments suggest that housing investment is likely to have declined in the third quarter. Looking ahead, recent ECB surveys point to a moderation in the pace of decline in the coming quarters. In the August Consumer Expectations Survey, household expectations for the housing market improved markedly, as reflected by the increased attractiveness of housing as a good investment. In September, the ECB's corporate contacts in the construction sector reported ongoing depressed activity but expected a recovery during 2025. The October bank lending survey indicates that dynamics in credit standards and demand for housing loans are expected to continue to improve (see Section 5, "Financing conditions and credit developments").

Euro area exports contracted in July 2024, despite the growth in global imports. Manufacturing export orders continued to drop sharply in September, while the services sector also entered contractionary territory. The slowdown in export growth reflects the continuation of a broader trend of declining euro area market shares, amid persistent competitiveness issues for euro area manufacturers and increasing competition from China. Meanwhile, imports contracted by 1.1% in July in three-month-on-three-month terms, against a backdrop of sluggish domestic consumption.

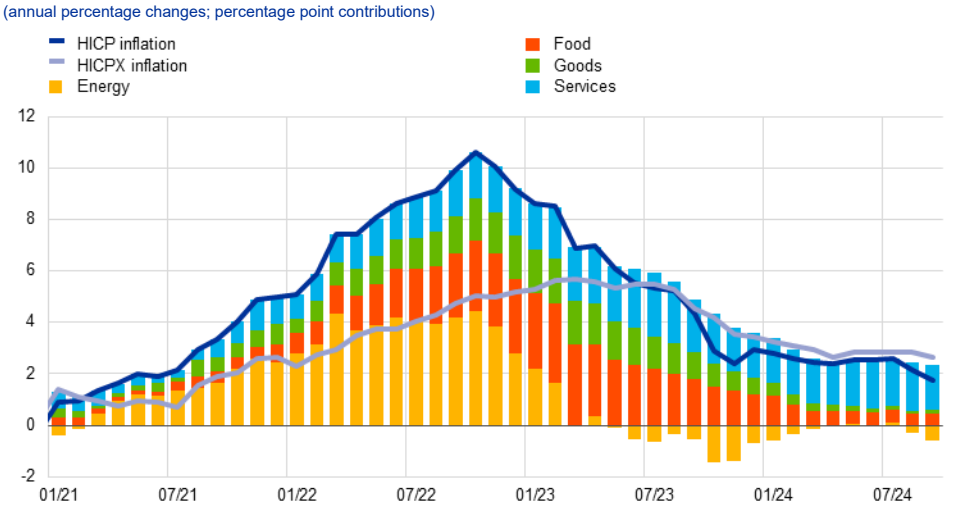
Overall, euro area activity is expected to strengthen over time. The economic outlook remains shrouded in uncertainty, with geopolitics and trade tensions representing downside risks. Nevertheless, the factors supporting a medium-term recovery are still in place: real incomes are rising, the labour market – even if softening – remains resilient, and the impact of the past monetary policy tightening is expected to diminish, bolstering consumption and investment going forward. Exports should also contribute to the recovery as global demand rises.

3 Prices and costs

Euro area headline inflation dropped to 1.7% in September 2024, the lowest level since April 2021. Most of the drop from 2.2% in August was due to lower energy prices, although inflation excluding energy and food also declined somewhat to 2.7% in September. Indicators of underlying inflation have fallen recently or moved sideways. The domestic inflation indicator remains high, as wages are still rising at an elevated pace. However, labour cost pressures have eased overall and are expected to continue declining gradually, with profits partially buffering their impact on inflation. Measures of longer-term inflation expectations were broadly unchanged at around 2%, while measures of shorter-term inflation expectations have decreased.

Euro area headline inflation, as measured in terms of the Harmonised Index of Consumer Prices (HICP), declined to 1.7% in September from 2.2% in August (Chart 8). The decrease was mainly driven by lower energy inflation and, to a smaller extent, by a moderation in HICP excluding energy and food (HICPX). Although headline inflation is still expected to increase again somewhat until the end of the year owing to upward energy base effects, the latest spot and futures prices for energy commodities imply a short-term outlook for headline inflation that is lower than expected in the September 2024 ECB staff macroeconomic projections for the euro area.

Chart 8
Headline inflation and its main components



Sources: Eurostat and ECB calculations.
Notes: Goods refers to non-energy industrial goods. The latest observations are for September 2024.

Energy inflation decreased substantially from -3.0% in August to -6.1% in September. The decrease was mainly driven by lower rates of change for fuel and electricity prices, whereas the year-on-year growth rate for gas prices increased. The lower rates of change for energy inflation reflect a downward base effect that owes to a significant increase in energy prices in September 2023 as well as a recent drop in crude oil prices and a sharp decline in refining margins for petrol.

Food inflation was slightly stronger, increasing to 2.4% in September from 2.3% in August. The increase was due to a higher rate of unprocessed food inflation (1.6% in September compared with 1.1% in August), while processed food inflation decreased slightly to 2.6% in September from 2.7% in August. The increase in the annual rate of unprocessed food inflation was related to a stronger than usual month-on-month rise in unprocessed food prices, particularly for fruit, which may partly reflect some unfavourable weather effects.

HICPX inflation declined slightly to 2.7% in September, from 2.8% in August. This reflects a slightly lower rate of services inflation, which stood at 3.9% in September after 4.1% in August. Services inflation has hovered around 4.0% since November 2023, but the latest month-on-month developments point to moderating dynamics. The decline was mainly driven by a lower annual rate for transport services, communications services and restaurant prices. Non-energy industrial goods (NEIG) inflation was unchanged at 0.4% in September, having come down from 0.7% in July. The September developments in NEIG inflation reflect the broadly unchanged annual inflation rate for all main components, with durable goods recording the lowest rate.

Indicators of underlying inflation have moved sideways or fallen slightly (Chart 9). Their range continued to narrow towards its historical average, with the majority of indicators hovering around 1.9% to 2.8%[7]. Most exclusion-based measures, such as HICP excluding unprocessed food and energy, HICPXX (which refers to HICPX inflation excluding travel-related items, clothing and footwear) and the 10% trimmed mean, decreased by 0.1 percentage points in September. At the same time, the 30% trimmed mean was unchanged, and the weighted median increased slightly to 2.4%, from 2.3% in August.[8] The domestic inflation indicator, which mainly covers services items, decreased to 4.3% in September, its lowest level since August 2022. However, it remained elevated, reflecting the lagging effect of repricing in some services-related items and the impact of still high wage growth. Both the Supercore indicator (which comprises HICP items sensitive to the business cycle) and the Persistent and Common Component of Inflation (PCCI) were unchanged in September, at 2.8% and 1.9% respectively.

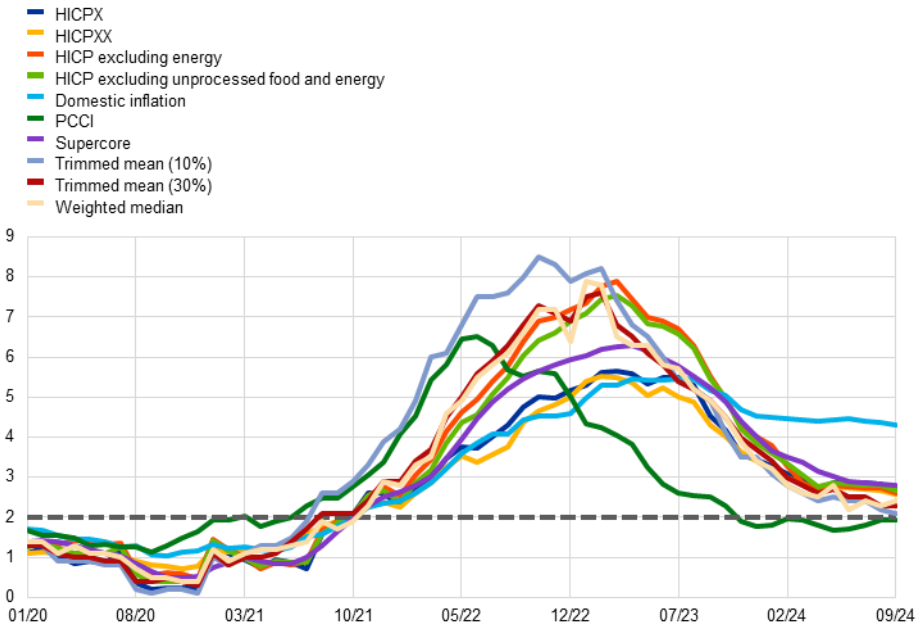
7 For more information see Lane, P.R., "Underlying inflation: an update", speech at the joint European Central Bank and Federal Reserve Bank of Cleveland's Center for Inflation Research conference "Inflation: Drivers and Dynamics Conference 2024", 24 October 2024.

8 The 10% (30%) trimmed mean removes 5% (15%) of the annual rates of change from each tail of the distribution of 93 price changes in the HICP each month and aggregates the annual rates of change using rescaled weights. The (weighted) median is an extreme form of the trimmed mean as it trims all but the (weight-based) mid-point of the distribution of price changes. See also Silver, M., "Core inflation: Measurement and statistical issues in choosing among alternative measures", *IMF Staff Papers*, Vol. 54, No 1, International Monetary Fund, 2007.

Chart 9

Indicators of underlying inflation

(annual percentage changes)



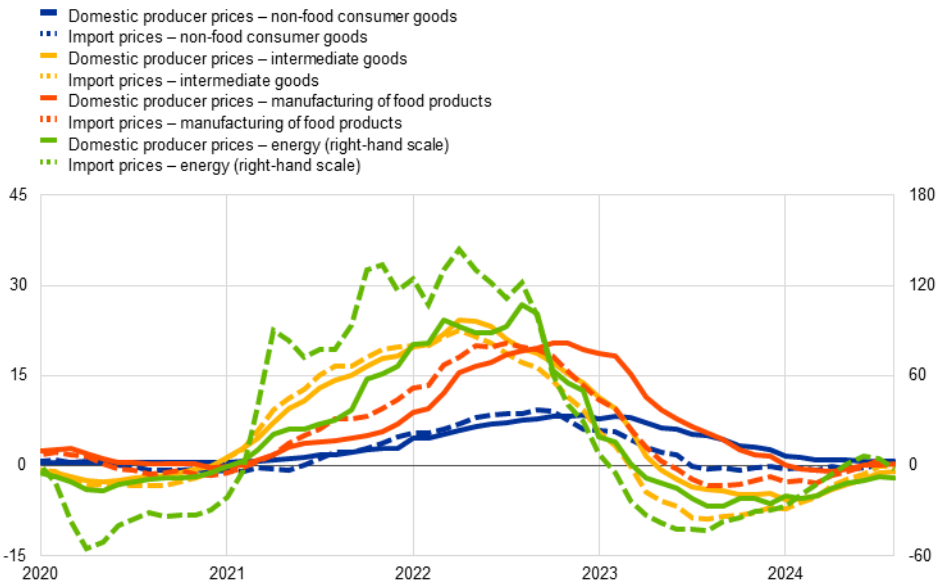
Source: Eurostat and ECB calculations.
Notes: The grey dashed line represents the ECB's inflation target of 2% over the medium term. The latest observations are for September 2024.

Most indicators of pipeline pressures for goods inflation remained subdued in August (Chart 10). At the early stages of the pricing chain, producer price inflation for domestic sales of intermediate goods was still negative, but less so than in the previous month (-0.8% in August after -1.1% in July). At the later stages of the pricing chain, the annual growth rates of producer prices for non-food consumer goods decreased slightly to 0.8% in August from 0.9% in July. The annual growth rate of producer prices for food products increased to 0.4% from 0.1% over the same period, confirming previous indications that the gradual easing of pipeline pressures has been fading out in this segment. The annual growth rates of import prices for the consumer goods and non-food consumer goods categories have moved upwards but remain moderate overall. The annual growth rate of import prices for energy decreased substantially to -1.8% in August from 5.0% in July, suggesting a renewed weakening of pipeline pressures at the early stages of the production and pricing chains.

Chart 10

Indicators of pipeline pressures

(annual percentage changes)



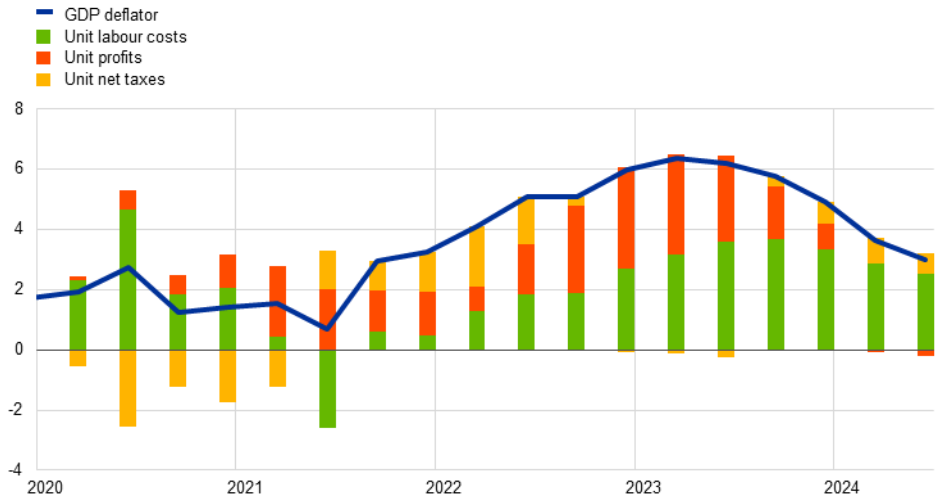
Sources: Eurostat and ECB calculations.
Note: The latest observations are for July 2024 for import prices for non-food consumer goods and import prices for manufacturing of food products and August 2024 for the rest.

Domestic cost pressures, as measured by growth in the GDP deflator, decreased further to 3.0% in the second quarter of 2024 from 3.6% in the previous quarter (Chart 11). This implies substantial disinflation from the peak of 6.4% in the first quarter of 2023, but the rate was still almost twice as high as its long-term pre-pandemic average of 1.6%. The decline in the second quarter of 2024 mainly reflected a decrease in unit labour costs growth, but also a slight decline in unit profits growth. The decrease in labour costs growth was largely due to lower wage growth. While data on negotiated wages point to some volatility in wage developments in the second half of the year, the expected recovery of productivity growth, driven by cyclical factors, combined with lower wage drift should support a further moderation in labour costs growth.

Chart 11

Breakdown of the GDP deflator

(annual percentage changes; percentage point contributions)



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

Survey-based indicators of longer-term inflation expectations and market-based measures of longer-term inflation compensation were broadly unchanged, with most standing at around 2% (Chart 12). In the ECB Survey of Professional Forecasters (SPF) for the fourth quarter of 2024, average longer-term inflation expectations remained unchanged at 2.0%, as did the median expectations in the October 2024 ECB Survey of Monetary Analysts (SMA). Longer-term market-based measures of inflation compensation (based on the HICP excluding tobacco) were slightly higher over the review period, with the five-year forward inflation-linked swap rate five years ahead standing at around 2.2%. However, when corrected for model-based estimates of inflation risk premia, market participants expect inflation to be around 2.0% in the longer-term.

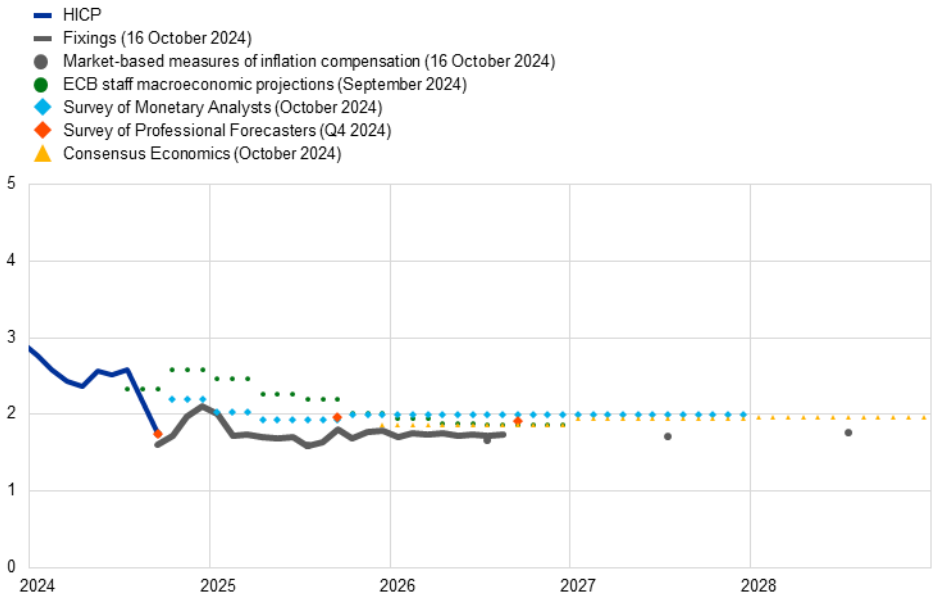
Market-based measures of near-term euro area inflation outcomes, as measured by inflation fixings, have declined. These measures suggest that investors expect inflation to rise above 2.0% for the remainder of this year before settling below 2.0% in 2025. Beyond the very short-term, the one-year forward inflation-linked swap rate one year ahead was unchanged at around 1.8% over the review period. On the consumer side, the September 2024 ECB Consumer Expectations Survey (CES) reported that the median rate of perceived inflation over the previous 12 months declined noticeably in September to 3.4%, from 3.9% in August. Meanwhile, median expectations for headline inflation over the next year and for three years ahead continued on a declining path. The former dropped to 2.4% in September, from 2.7% in August, and the latter declined to 2.1% in September from 2.3% in August. The share of consumers reporting inflation perceptions and expectations close to 2% continued to rise in September.

Chart 12

Headline inflation, inflation projections and expectations

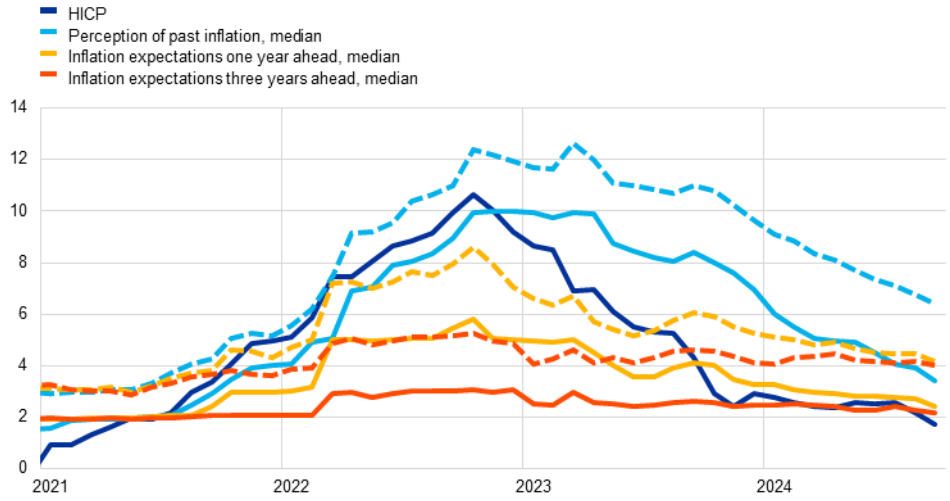
a) Headline inflation, survey-based indicators of inflation expectations, inflation projections and market-based measures of inflation compensation

(annual percentage changes)



b) Headline inflation and ECB Consumer Expectations Survey

(annual percentage changes)



Sources: Eurostat, Refinitiv, Consensus Economics, CES, SPF, SMA, ECB staff macroeconomic projections for the euro area, September 2024 and ECB calculations.
Notes: Panel a): The market-based measures of inflation compensation series are based on the one-year spot inflation rate, the one-year forward rate one year ahead, the one-year forward rate two years ahead and the one-year forward rate three years ahead. The observations for market-based measures of inflation compensation are for 16 October 2024. Inflation fixings are swap contracts linked to specific monthly releases in euro area year-on-year HICP inflation excluding tobacco. The SPF for the fourth quarter of 2024 was conducted between 1 and 3 October 2024. The cut-off date for the Consensus Economics long-term forecasts was October 2024. The cut-off date for data included in the ECB staff macroeconomic projections was 16 August 2024. Panel b): For the CES, dashed lines represent the mean and solid lines the median. The latest observations are for September 2024.

4 Financial market developments

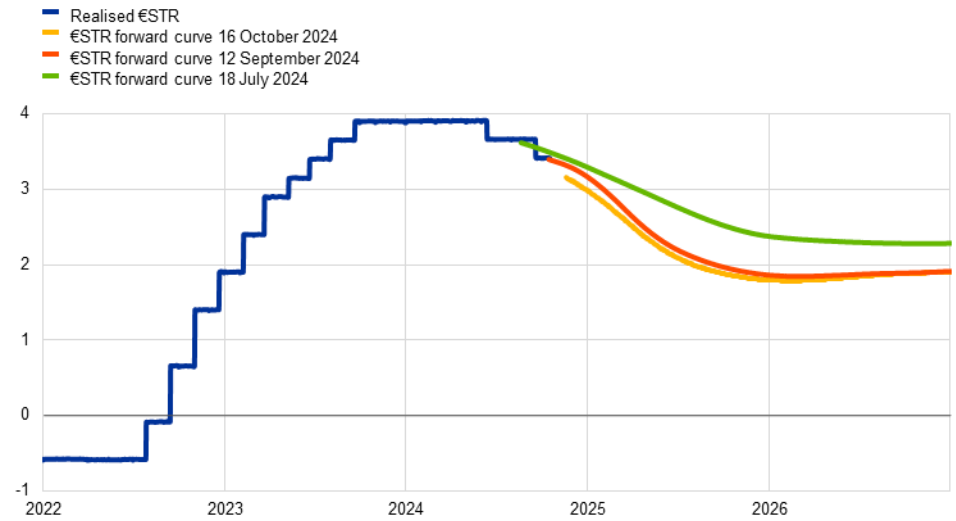
During the review period from 12 September to 16 October 2024, euro area financial market movements were influenced by incoming economic data and adjustments in expectations for the path of monetary policy. Euro area short-term interest rates declined over the review period, with market participants anticipating a quicker pace of policy rate cuts during the remainder of 2024 and in early 2025. At the end of the review period, forward rates were pricing in around 49 basis points of cumulative interest rate cuts by the end of the year, with markets almost fully pricing in a rate cut of 25 basis points at the October Governing Council meeting. Euro area long-term risk-free nominal interest rates ended slightly lower, having fluctuated over the review period as incoming data for the euro area and concerns around tensions in the Middle East created uncertainty over the economic outlook. Sovereign bond yields mostly declined in line with the re-pricing of risk-free rates. Prices of risky assets increased over the review period, with equity prices continuing to recover since the summer sell-off, amid a rise in risk appetite. Corporate bond spreads narrowed for both investment-grade and high-yield firms. In foreign exchange markets, the euro depreciated moderately both against the US dollar and, albeit to a lesser extent, in trade-weighted terms.

Since the September Governing Council meeting, the short end of the overnight index swap (OIS) forward curve has shifted downwards, as market participants expect a quicker pace of policy rate cuts (Chart 13). The benchmark euro short-term rate (€STR) averaged 3.5% over the review period, following the Governing Council's decision at its September meeting to lower the deposit facility rate (DFR) by 25 basis points. In September, the spread between the ECB's main refinancing rate and the DFR was reduced to 15 basis points, in line with the decision already announced by the Governing Council on 13 March 2024. Excess liquidity decreased by around €87 billion between 12 September and 16 October, to stand at €2,981 billion. This mainly reflected repayments in September of funds borrowed in the third series of targeted longer-term refinancing operations (TLTRO III) and the decline in the portfolios of securities held for monetary policy purposes, as the Eurosystem no longer reinvests the principal payments from maturing securities in the asset purchase programme (APP) portfolio and only partially reinvests principal payments in the pandemic emergency purchase programme (PEPP) portfolio. The short-end of the €STR-based OIS forward curve has shifted downwards since the September Governing Council meeting, amid weaker euro area macroeconomic data releases and expectations of monetary policy easing by major central banks in the near term. On 16 October markets were almost fully pricing in a 25 basis point rate cut at the October Governing Council meeting and anticipating a further 25 basis point reduction at the December meeting. Overall, the forward curve moved from pricing in around 33 basis points of cumulative interest rate cuts in the remaining part of 2024 (as of 12 September) to pricing in around 49 basis points of cumulative cuts (as of 16 October).

Chart 13

€STR forward rates

(percentages per annum)

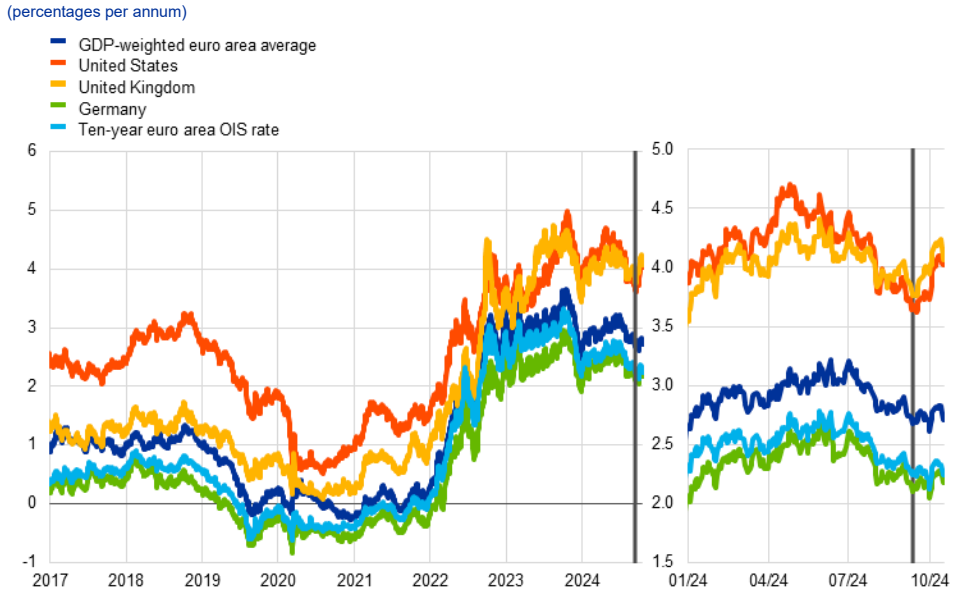


Sources: Bloomberg and ECB calculations.
Note: The forward curve is estimated using spot OIS (€STR) rates.

Euro area long-term risk-free rates have slightly decreased since the September Governing Council meeting, in contrast to their US and UK counterparts (Chart 14). The ten-year euro area OIS rate fell by 3 basis points to around 2.3%, having fluctuated over the review period as incoming data for the euro area and concerns around tensions in the Middle East created uncertainty over the economic outlook. The slight decrease in euro area long-term nominal risk-free rates reflected market expectations for the path of monetary policy in the euro area and stands in contrast to the increase in risk-free interest rates in the United States. In the United States, long-term nominal rates increased strongly, with the ten-year US Treasury yield rising by 34 basis points to 4.0%. This increase reflected stronger than expected US labour market data releases, higher inflation expectations and an adjustment of market expectations for the future level of US nominal interest rates across all maturities. As a result, the differential between long-term risk-free rates in the euro area and the United States has widened by approximately 36 basis points. Meanwhile, the ten-year UK sovereign bond yield increased by 28 basis points to 4.1%.

Chart 14

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

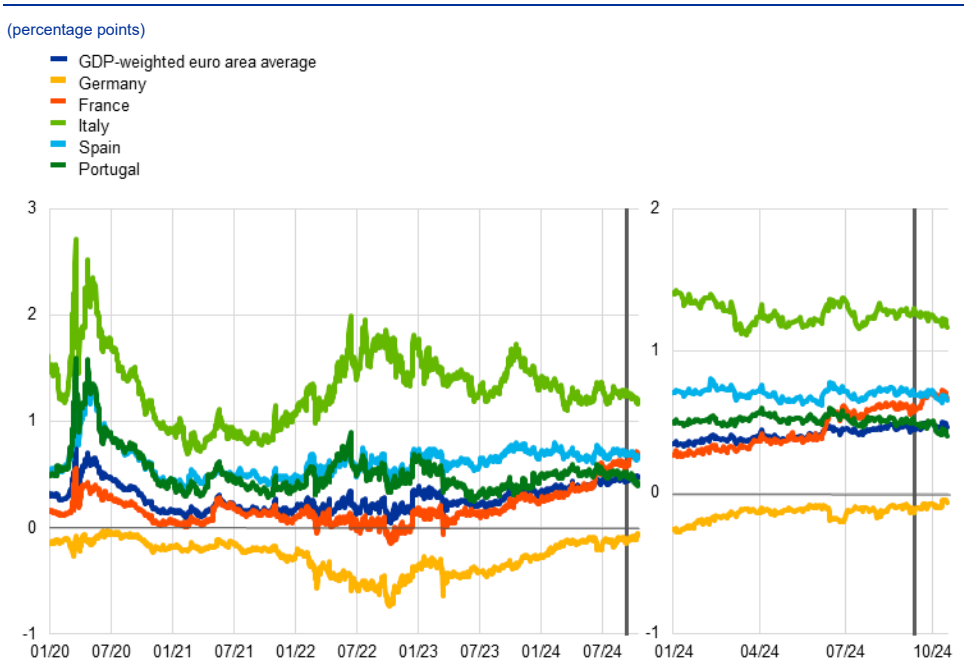


Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 12 September 2024. The latest observations are for 16 October 2024.

Euro area long-term sovereign bond yields mostly decreased in line with risk-free rates (Chart 15). At the end of the review period, the ten-year GDP-weighted euro area sovereign bond yield was 1 basis point lower, at around 2.7%, while its spread over the OIS rate was 2 basis points higher. An increase was observed only for the French ten-year sovereign bond spread against the ten-year OIS yield, which widened by 9 basis points over the review period amid uncertainty regarding France's fiscal outlook, while the German ten-year sovereign bond spread was less negative by 5 basis points at the end of the review period. A narrowing of sovereign spreads was observed for Greece, Spain, Italy and Portugal, with spreads tightening by between 5 and 11 basis points amid improved risk appetite in financial markets and a more positive sentiment around the fiscal outlook for some of these countries. For example, over the review period Fitch raised the outlook for Portugal's rating (currently A-) from stable to positive, as it expects a continued reduction in the country's public debt as a percentage of GDP.

Chart 15

Ten-year euro area sovereign bond spreads vis-à-vis the ten-year OIS rate based on the €STR



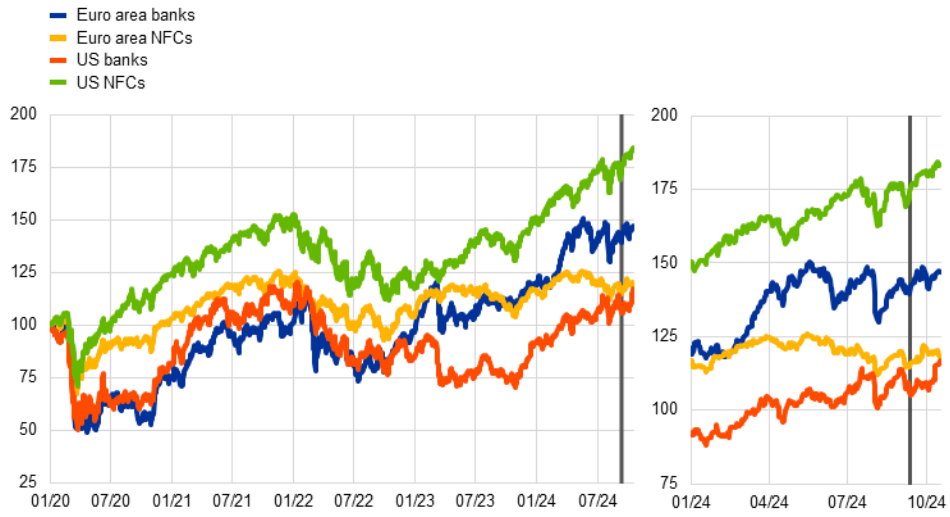
Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 12 September 2024. The latest observations are for 16 October 2024.

Corporate bond spreads narrowed for both investment-grade and high-yield firms in line with developments in equity prices. Spreads of investment-grade corporate bonds fluctuated but stood 7 basis points lower at the end of the review period. Spreads tightened for both financial and non-financial corporate bonds, with financials tightening more. Similarly, spreads in the high-yield segment narrowed by 8 basis points amid the more positive risk sentiment. High-yield non-financials performed more strongly than financials during the review period.

Euro area equity prices ended the review period higher amid a rebound in risk appetite (Chart 16). The rise in euro area equity prices continued the general trend of recovery since the sell-off during the summer. Risk sentiment improved despite lower earnings expectations, with the equity risk premium contributing strongly to the rise in equity prices. Broad stock market indices in the euro area rose by 2.1% over the review period, with equity prices of non-financial corporations (NFCs) and banks rising by 2.1% and 3.3% respectively. Equities in the United States rose by more than in the euro area, as the release of better than forecast economic data boosted expectations of a stronger economic performance in the United States. The overall US equity price index increased by 4.7% over the review period, with NFC and bank equity prices strengthening by around 4.4% and 11.1% respectively.

Chart 16

Euro area and US equity price indices



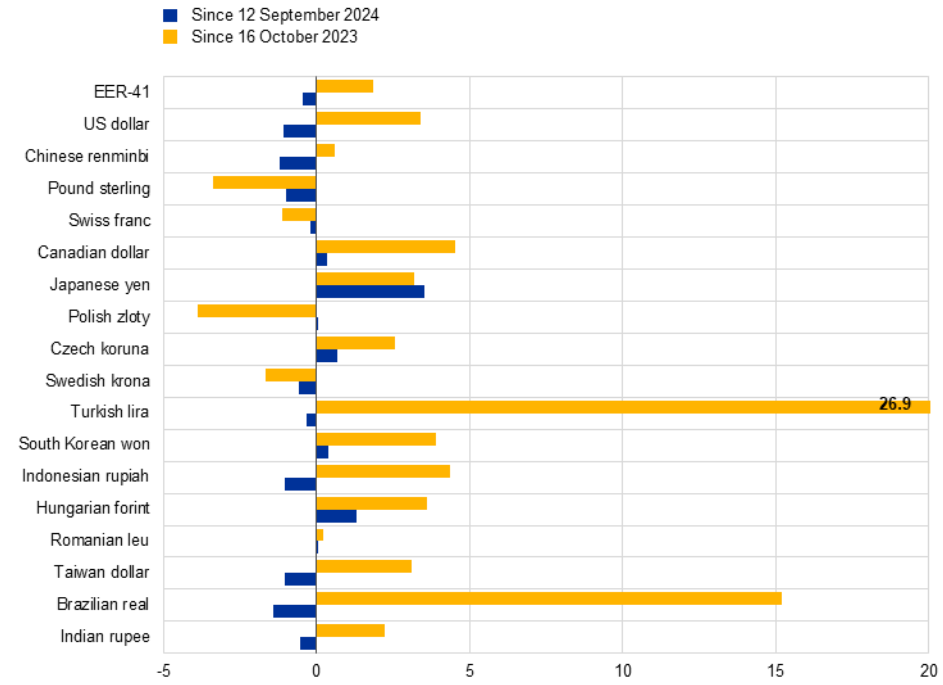
Sources: LSEG and ECB calculations.
Notes: The vertical grey line denotes the start of the review period on 12 September 2024. The latest observations are for 16 October 2024.

In foreign exchange markets, the euro depreciated moderately both against the US dollar and, albeit to a lesser extent, in trade-weighted terms (Chart 17). Major currencies remained within recent trading ranges amid low volatility. During the review period, the nominal effective exchange rate of the euro – as measured against the currencies of 41 of the euro area's most important trading partners – depreciated slightly by 0.4%. The moderate depreciation of the euro against the US dollar (-1.1%) was largely driven by swings in global risk sentiment, which affected the US dollar more broadly, and by economic data surprises, which weighed on the euro and supported the US dollar. Following a temporary recovery, the Japanese yen resumed its broad-based depreciation, weakening by 3.5% against the euro. The euro depreciated by 1.2% against the Chinese renminbi following the announcement of a stimulus package in China which included targeted measures aimed at supporting the equity market. It also depreciated against the Swiss franc (-0.2%) as markets pared back their expectations of rate cuts by the Swiss National Bank in the coming months, and against the pound sterling (-1.0%), particularly following a slightly hawkish market interpretation of the September meeting of the Bank of England's Monetary Policy Committee.

Chart 17

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 16 October 2024.

5 Financing conditions and credit developments

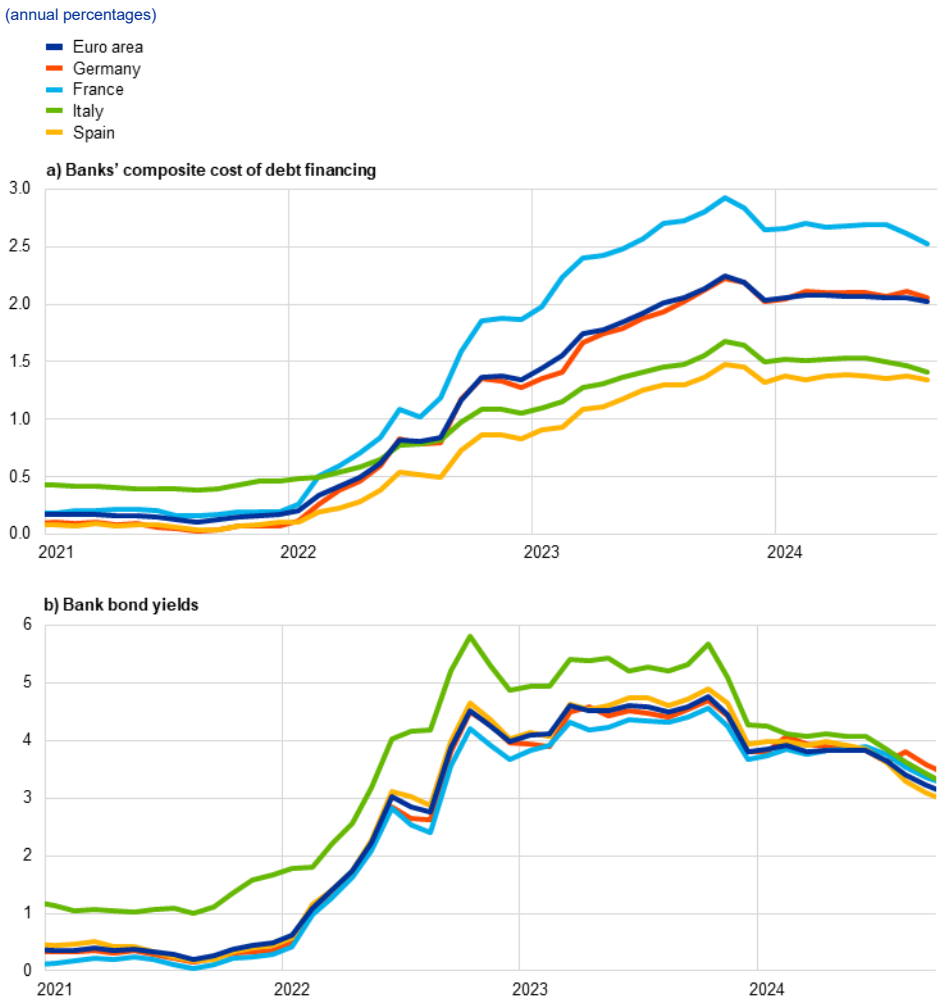
Shorter-term market interest rates have declined since the September 2024 meeting of the ECB Governing Council, owing mainly to weaker news on the euro area economy and the further fall in inflation. While financing conditions remain restrictive, the average interest rates on new loans to firms and on new mortgages were down slightly in August, to 5.0% and 3.7% respectively. In August composite euro area bank funding costs and bank lending rates remained at tight levels. Growth rates for bank loans to firms and to households continued to be subdued, reflecting high lending rates, weak economic growth and tight credit standards. According to the October 2024 euro area bank lending survey, credit standards for loans to firms remained unchanged in the third quarter of this year, after more than two years of consecutive tightening, while credit standards for housing loans eased further. The demand from firms for loans increased in the third quarter, while remaining weak overall. Housing loan demand rebounded strongly, however. Over the period from 12 September to 16 October 2024, the cost to firms of both market-based debt and equity financing fell, coinciding with a small decline in the long-term risk-free interest rate and a decrease in the equity risk premium. The annual growth rate of broad money (M3) continued to recover from low levels, with net foreign inflows still the main contributor to growth.

Euro area bank funding costs remained high. Following the decline in autumn 2023, the composite debt financing cost for euro area banks has been stable at high levels since January 2024 and saw only a minor decrease in August (Chart 18, panel a). High bank funding costs have persisted amid the ongoing shift in the composition of funding towards more expensive sources, reflecting ongoing adjustments to the higher interest rate environment and the gradual phasing out of funding under targeted longer-term refinancing operations (TLTROs). Interest rates on time deposits edged down in August, while those for overnight deposits and for deposits redeemable at notice remained broadly unchanged, leaving them close to the peak of the current cycle. The yields on bank bonds (Chart 18, panel b), which are a more expensive funding source than deposits, declined significantly against the backdrop of a decline in the long-term risk-free rate (see Section 4).

Bank balance sheets have been robust overall, despite a weak economic environment and increased uncertainty. In the second quarter of 2024, banks continued to improve their capitalisation and maintained capital ratios well above Common Equity Tier 1 (CET1) requirements. Bank profitability remained high in the second quarter, buoyed by sizeable interest rate income and relatively low loan loss provisions. Non-performing loans remained broadly unchanged at the low levels seen in the first quarter of this year. The proportion of underperforming (i.e. Stage 2) loans, especially as regards small firms, has risen slightly compared with the previous year, pointing to worsening asset quality and higher provisioning costs for banks looking ahead.

Chart 18

Composite bank funding costs in selected euro area countries

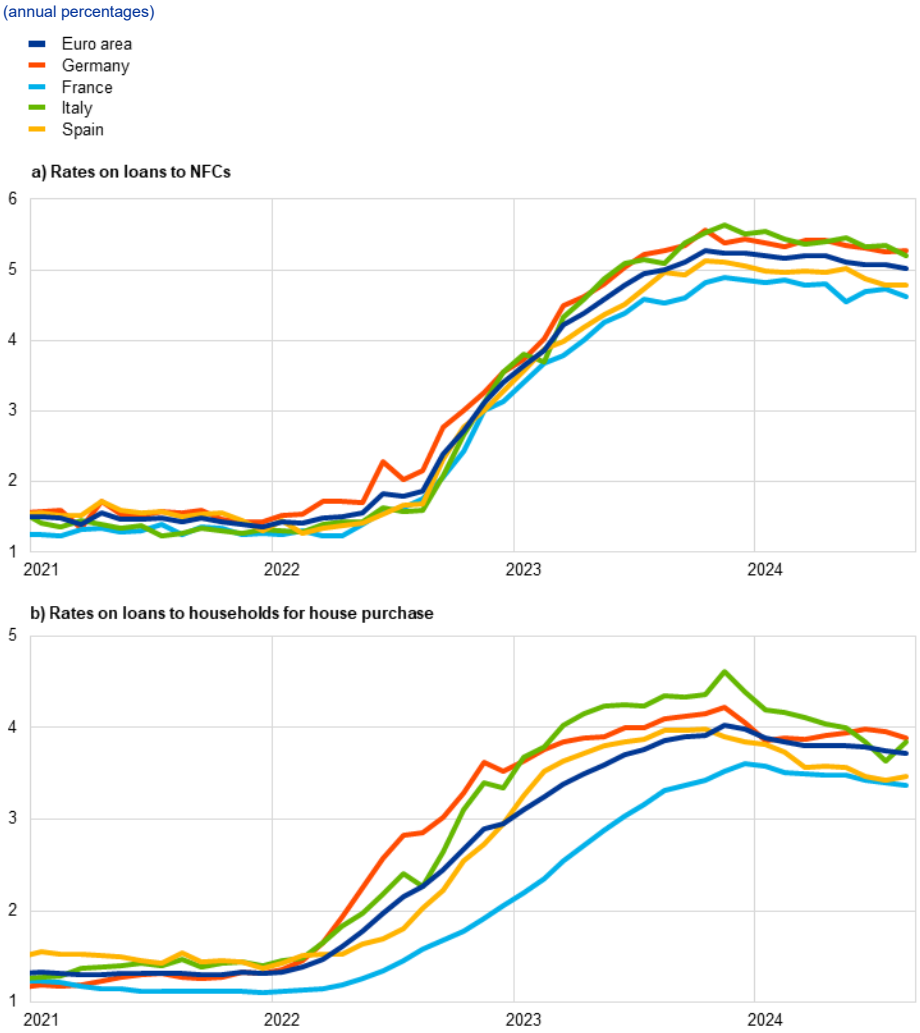


Sources: ECB, S&P Dow Jones Indices LLC and/or its affiliates, and ECB calculations.
Notes: Composite bank funding costs are a weighted average of the composite cost of deposits and unsecured market-based debt financing. The composite cost of deposits is calculated as an average of new business rates on overnight deposits, deposits with an agreed maturity and deposits redeemable at notice, weighted by their respective outstanding amounts. Bank bond yields are monthly averages for senior tranche bonds. The latest observations are for August 2024 for the composite cost of debt financing for banks (panel a) and for 16 October 2024 for bank bond yields (panel b).

Bank lending rates for firms and those for households declined slightly, while still standing at levels close to the peaks of the past twelve years. In August lending rates for new loans to non-financial corporations (NFCs) fell by 6 basis points to stand at 5.01% (Chart 19, panel a), amid heterogeneity across euro area countries and maturities. Lending rates on new loans to households for house purchase stood at 3.72% in August, down from 3.75% in July (Chart 19, panel b), although with some variation across countries.

Chart 19

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 August 2024.

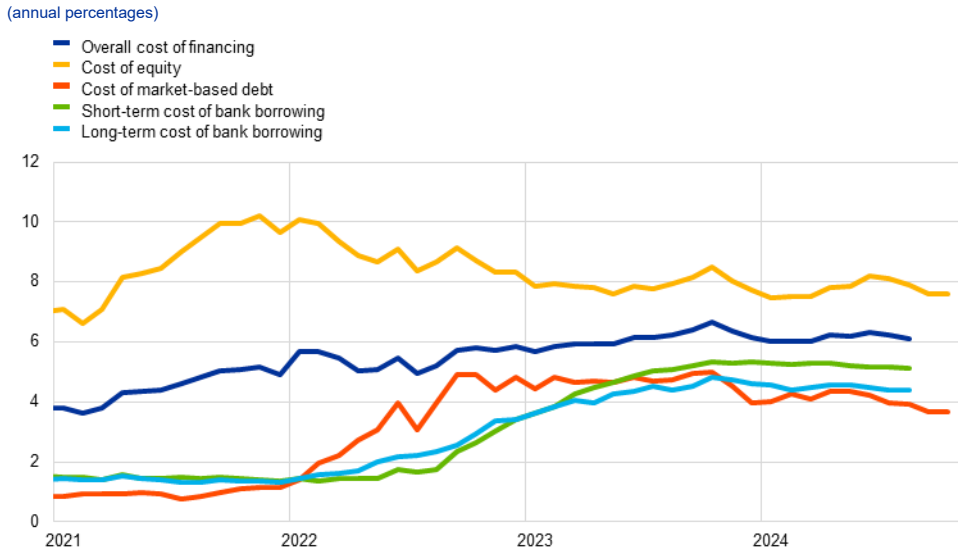
Over the period from 12 September to 16 October 2024, the cost to firms of both market-based debt and equity financing fell. Based on the available monthly data, the overall cost of financing for NFCs – i.e. the composite cost of bank borrowing, market-based debt and equity – stood at 6.1% in August, slightly lower than the level recorded in July and below the multi-year high reached in October 2023 (Chart 20).[9] This was the result of a reduction in all components of NFC financing costs, most notably in the cost of equity financing. Daily data covering the period from 12 September to 16 October 2024 confirm a further fall in the cost of both market-based debt and equity financing, coinciding with a marginal decline in the long-term risk-free interest rate – as approximated by the ten-year overnight index swap (OIS) rate. The easing of the cost of market-based debt was driven by

[9] 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 August 2024.

the significant downward shift of the OIS curve at maturities of up to two years and a slight compression of corporate bond spreads. The reduction in the cost of equity financing derived more from a lower equity risk premium than from the slight decline in the long-term risk-free rate.

Chart 20

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



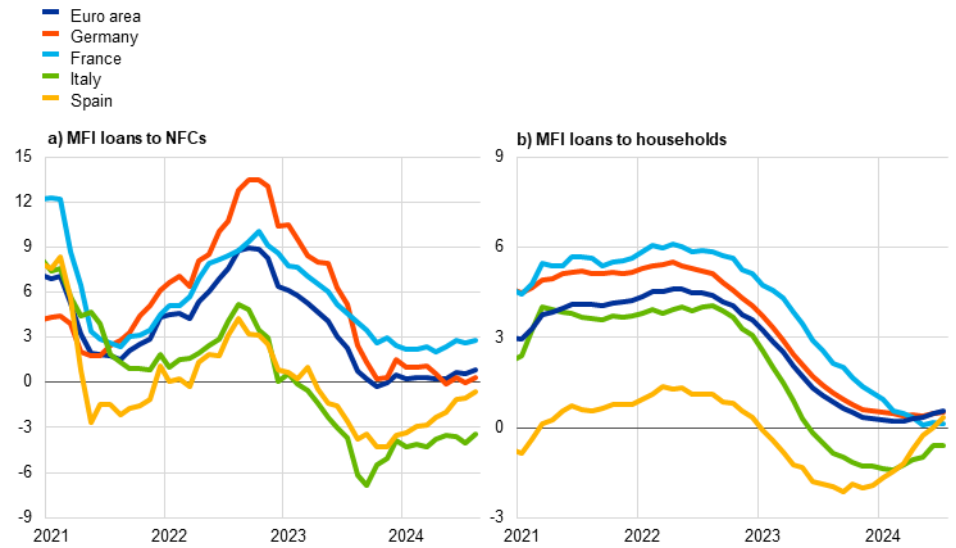
Sources: ECB, Eurostat, Dealogic, Merrill Lynch, Bloomberg, LSEG and ECB calculations.
Notes: The overall cost of financing for non-financial corporations (NFCs) is based on monthly data and is calculated as a weighted average of the long and short-term cost of bank borrowing (monthly average data), market-based debt and equity (end-of-month data), based on their respective outstanding amounts. The latest observations are for 16 October 2024 for the cost of market-based debt and the cost of equity (daily data), and for August 2024 for the overall cost of financing and the cost of borrowing from banks (monthly data).

Lending dynamics remained weak in August, although lending to households is showing early signs of improvement. In August the annual growth rate of bank lending to firms increased to 0.8%, up from 0.6% in July (Chart 21), albeit this was due to a large base effect. Short-term bank lending flows for firms decreased in August and this was only partly offset by lending at longer maturities (of more than one year). Net issuance of debt securities by firms picked up in August, broadly offsetting the negative flow recorded in July. The annual growth rate of loans to households edged up to 0.6% in August, from 0.5% in July, the short-term dynamics of its core components having strengthened somewhat over the summer owing to an increase in loans for house purchases (annual growth rising to 0.6% in August), amid stable consumer credit growth (annual growth of 2.8% in August) and the ongoing contraction of other lending (annual growth standing at -2.5% in August). The ECB's Consumer Expectations Survey in August 2024 confirmed a still large net percentage of survey respondents reporting that credit access had become harder over the previous 12 months and expecting it to become even more difficult over the next 12 months.

Chart 21

MFI loans in selected euro area countries

(annual percentage changes)



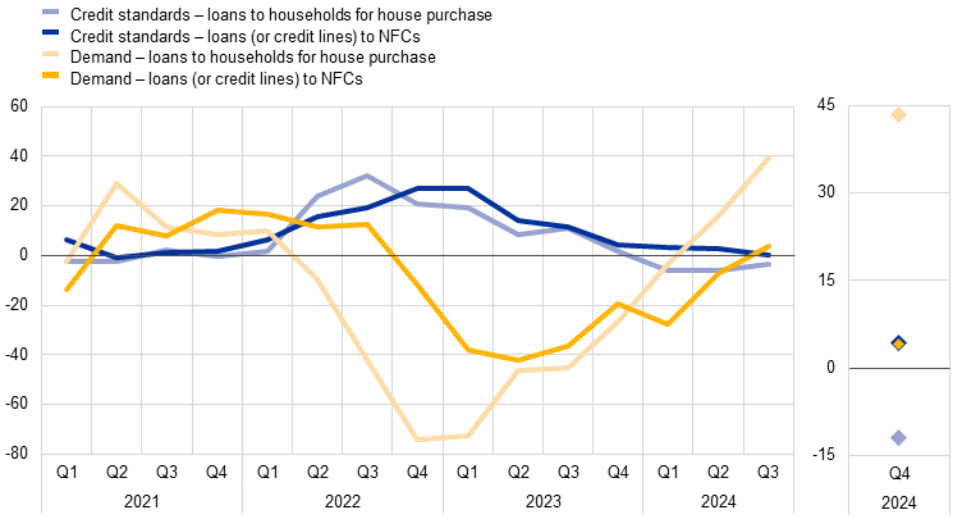
Sources: ECB and ECB calculations.
Notes: Loans from monetary financial institutions (MFIs) are adjusted for loan sales and securitisation; in the case of non-financial corporations (NFCs), loans are also adjusted for notional cash pooling. The latest observations are for August 2024.

According to the October 2024 euro area bank lending survey**, banks reported unchanged credit standards for loans to firms in the third quarter of 2024, after more than two years of consecutive tightening, and further easing for housing loans (Chart 22).** Credit standards for loans to firms remained unchanged, after more than two years of consecutive tightening, although risk perceptions continued to have a small tightening impact. For households, credit standards eased somewhat more than expected for housing loans, driven primarily by competitive pressures, and tightened more than expected for consumer credit, mainly owing to additional perceived risks. For the fourth quarter of 2024, euro area banks expect a tightening of credit standards for loans to firms and for consumer credit, and continued easing of credit standards for housing loans.

Chart 22

Changes in credit standards and net demand for loans to NFCs and loans to households for house purchase

(net percentages of banks reporting a tightening of credit standards or an increase in loan demand)



Source: Euro area bank lending survey.
Notes: NFCs stands for non-financial corporations. For survey questions on credit standards, "net percentages" are defined as the difference between the sum of the percentages of banks responding "tightened considerably" and "tightened somewhat" and the sum of the percentages of banks responding "eased somewhat" and "eased considerably". For survey questions on demand for loans, "net percentages" are defined as the difference between the sum of the percentages of banks responding "increased considerably" and "increased somewhat" and the sum of the percentages of banks responding "decreased somewhat" and "decreased considerably". The diamonds denote expectations reported by banks in the current round. The latest observations are for the third quarter of 2024.

In the third quarter of 2024, banks reported a moderate increase in loan demand by firms for the first time since the third quarter of 2022, although the demand remained weak overall, and a strong rebound in housing loan demand. The rise in loan demand by firms was driven by lower interest rates, while fixed investment exerted a muted impact. For housing loans, the increase in demand primarily reflected declining interest rates and improving housing market prospects, whereas the demand for consumer credit was bolstered by consumer confidence and spending on durables. For the fourth quarter of 2024, banks expect demand to increase across all loan segments, especially for housing loans.

The ad hoc survey questions revealed that the impact of ECB policy rate decisions on bank net interest income turned negative for the first time since the end of 2022. Euro area banks reported that ECB interest rate decisions had dampened their net interest margins over the past six months and that the impact in terms of volumes of interest-bearing assets and liabilities remained negative. Banks expect the negative impact on net margins associated with ECB policy rates to deepen, resulting in a decline in overall profitability from the high levels reached during the 2022-23 tightening cycle. Banks also anticipate that rising provisions and impairment charges will weigh marginally on profitability. The reduction in the ECB's monetary policy asset portfolio had likewise had a slightly unfavourable impact on the market financing conditions of euro area banks over the last six months, and the phasing out of the third series of targeted long-term refinancing operations (TLTRO III) had continued to negatively affect bank liquidity positions. However, in light of the small remaining outstanding amounts under TLTRO III, banks reported a broadly

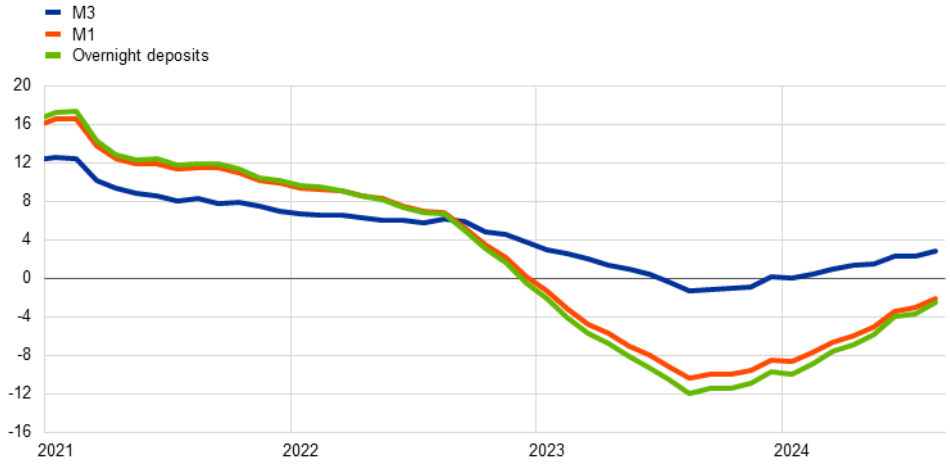
neutral impact on their overall funding conditions and neutral effects on lending conditions and loan volumes.

The annual growth rate of broad money (M3) in the euro area continued to recover, with net foreign inflows still the main contributor to money creation. Annual M3 growth increased to 2.9% in August, up from 2.3% in July (Chart 23). Annual growth of narrow money (M1) – which comprises the most liquid assets of M3 – stayed in negative territory but continued to strengthen, rising to -2.1% in August compared with -3.1% in July. Likewise, the annual growth rate of overnight deposits rose to -2.5% in August, up from -3.6% in July. Foreign inflows remained the main source of money creation, given the ongoing marginal contribution of lending to households and to firms. The continuing contraction of the Eurosystem balance sheet and the issuance of long-term bank bonds (which are not included in M3) amid the phasing out of TLTRO funding by the end of 2024 contributed negatively to money creation.

Chart 23

M3, M1 and overnight deposits

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



Source: ECB.
Note: The latest observations are for August 2024.

Boxes

1 Geopolitical fragmentation in global and euro area greenfield foreign direct investment

Prepared by Lukas Boeckelmann, Lorenz Emter, Isabella Moder, Giacomo Pongetti and Tajda Spital

This box reviews recent developments in global and euro area greenfield foreign direct investment (FDI) and analyses the role of geopolitics in shaping these. As firms and policymakers increasingly look at ways to reduce the vulnerability of their supply chains, understanding recent dynamics in greenfield investment is important as these may foreshadow a reconfiguration of global trade networks, the fragmentation of which could be particularly detrimental for the euro area.[1] Greenfield FDI flows refer to foreign investments made by companies to build new or extend existing production capacity. In the last decade, annual FDI outflows and inflows amounted to 1.4% and 0.6% respectively of euro area GDP and 1.0% and 1.2% respectively of global GDP excluding the euro area. The euro area is the largest source of outward greenfield FDI, accounting for 19% of global outflows in the last two years, followed by the United States, which accounted for 15%. This box uses information on announced greenfield FDI projects from a dataset provided by fDi Markets.[2]

Ex ante, the effect of geopolitical fragmentation on the direction of FDI flows is ambiguous. On the one hand, firms and policymakers might look to friend-shore and/or near-shore production to make supply chains less vulnerable to geopolitical tensions or to safeguard their assets from potential future violations of property rights. On the other hand, firms might increase their investments in geopolitically distant countries, i.e. countries which take an observably different stance on foreign policy issues, if they think that future trade tensions might impede their access to local markets.

Aggregate greenfield FDI flows are already showing increasing signs of fragmentation along geopolitical fault lines. Western companies have been ramping up investment in friendly (western) countries, while lowering investment in geopolitically distant (eastern) countries.[3] Greenfield FDI flows within the western bloc have been on the rise since 2016, while flows between the eastern and western

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1 Geoeconomic fragmentation of trade would be detrimental to the euro area, lowering GDP by more than 2% and raising consumer prices by almost 4%. See also the box entitled "Friend-shoring global value chains: a model-based assessment", *Economic Bulletin*, Issue 2, ECB, 2023.

2 The data are collected primarily from publicly available sources (e.g. media outlets, industry organisations and investment-promoting agency newswires) and report investment-level information for over 300,000 greenfield FDI announcements between 186 countries starting in January 2003.

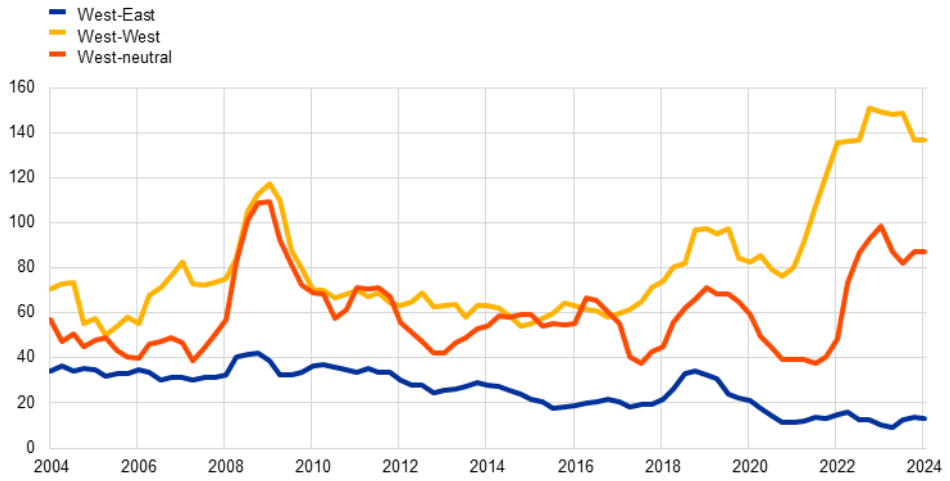
3 To analyse FDI fragmentation, the world economy is assumed to fragment into three distinct blocs: a "western" (United States-centric) bloc, an "eastern" (China-centric) bloc and a "neutral" bloc comprising non-aligned countries. This classification is based on the geopolitical index outlined in the special feature entitled "Geopolitical fragmentation risks and international currencies", *The international role of the euro*, ECB, June 2023.

blocs have declined, suggesting that western companies are increasingly friend-shoring or near-shoring their production capabilities (Chart A). The increase in greenfield investment within blocs is in line with evidence collected from earnings calls, which have seen a noticeable uptick in references to “friend-shoring”.

Chart A

Global greenfield FDI flows

(four-quarter moving averages, USD billions)



Sources: fDi Markets and ECB staff calculations.
Note: The latest observations are for the first quarter of 2024.

Euro area outward flows have followed the same trend, with greenfield investments increasingly tilted towards geopolitically friendly countries, such as the United States. Euro area FDI outflows seem to be increasingly pulled towards western bloc countries, in particular the United States. One driver may be that euro area firms are trying to increase their local production content for the US market in response to incentives created by the US Inflation Reduction Act (IRA).[4] Flows of greenfield FDI into the euro area are, in turn, dominated by US investments, which accounted for more than 30% of overall inflows in 2023. The recent pick-up in investment in the euro area appears to be part of a broader trend of rerouting US investments away from China to the benefit of more friendly and neutral countries.

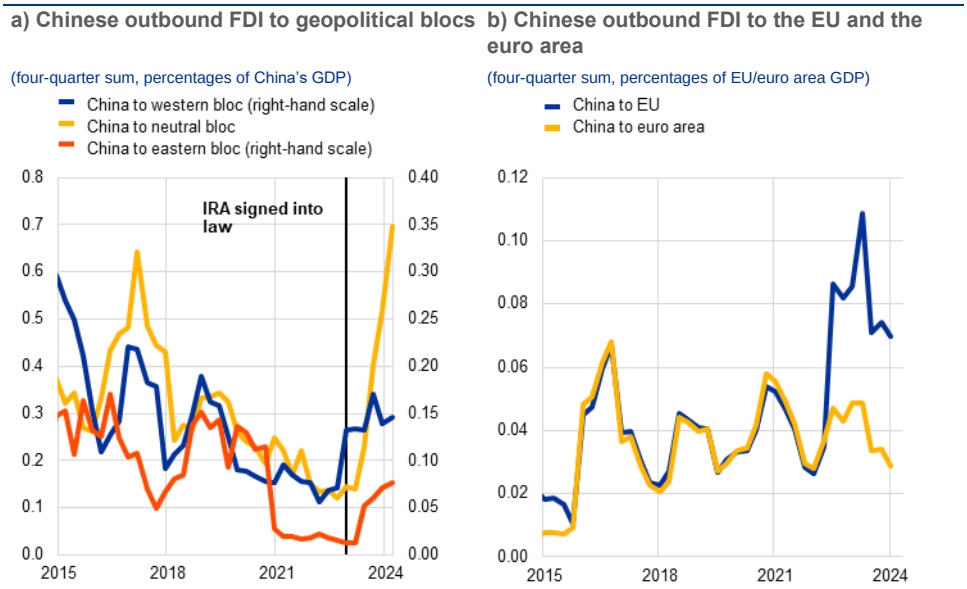
While flows between opposing blocs have been relatively contained, there is also evidence that firms have stepped up investment between geopolitical blocs in anticipation of protectionist measures and retaliatory tariffs. Available data suggest that the flow of Chinese FDI to the neutral and western blocs increased steeply around the time the IRA was passed into law. This suggests that, in response to the heightened domestic content requirements introduced by the IRA, Chinese firms shifted their production in order to bypass the trade restrictions imposed on their goods (Chart B, panel a). This mirrors similar developments after 2016 when the threat of higher US tariffs on Chinese goods coincided with an increase in Chinese FDI flows to the western and neutral blocs. Moreover, while

[4] The IRA significantly steps up US efforts in the fight against climate change and aims to increase the ability of the United States to attract key green technologies. It provides for significant financial incentives (such as tax credits for the purchase of electric vehicles and investment in renewable energy equipment) that are conditional on specific domestic content requirements.

overall greenfield FDI flows from the euro area to China are on a declining trend, German firms, mainly driven by the automotive sector, have increased their investment in China in recent years. At the same time, we see evidence of Chinese companies increasing domestic production content in the EU, mostly in non-euro area countries, particularly Hungary (Chart B, panel b). This might also be due to firms pre-emptively relocating their production in anticipation of rising trade tensions.

Chart B

Greenfield FDI from China



Sources: fDi Markets and ECB staff calculations.
Notes: The vertical line in panel a) refers to the third quarter of 2022, the period when the IRA was signed into law. The latest observations are for the first quarter of 2024.

A more formal econometric analysis suggests that fragmentation along geopolitical fault lines has increased over time. We employ a gravity model for FDI flows that distinguishes between flows within the western and eastern blocs and flows between the blocs.[5] The results suggest that trends in global FDI flows along geopolitical fault lines, as shown in Chart A, were not driven by country-specific characteristics (such as economic growth) and instead reflect increasing geopolitical fragmentation. Independent of geographic distance, it is estimated that FDI flows within geopolitical blocs were almost three times higher than FDI flows between geopolitical blocs in the three years up to the first quarter of 2024 (Chart C).

5 We estimate a gravity model for quarterly greenfield FDI flows between nearly 200 source and destination countries for the period from the first quarter of 2003 to the first quarter of 2024, using dummy variables for FDI flows within and between the geopolitical blocs. The gravity model assesses the flows within and between the western and eastern blocs against a third category, "other", encompassing flows between these two blocs and neutral (non-aligned) countries and flows between neutral countries.

Chart C

Ratio of FDI flows within blocs to FDI flows between blocs

Source: ECB staff calculations.
Notes: The chart plots the ratio of the coefficients of FDI flows within the western and eastern blocs to the coefficients of FDI flows between the two blocs, estimated using a gravity model for 12-quarter rolling windows between the first quarter of 2003 and the first quarter of 2024. The latest observation is for the first quarter of 2024 and refers to an estimation period between the second quarter of 2021 and the first quarter of 2024.

Econometric evidence shows that the overall effect of geopolitical divides on FDI is negative. We find that the effect of geopolitical distance on global and euro area greenfield FDI flows has increased since Russia's invasion of Ukraine (Chart D).[6] Our estimates suggest that the widening geopolitical divide has dampened global FDI flows by around 3% (or €30 billion).[7] For the euro area, the value of announced greenfield FDI projects is also significantly smaller in destination countries that are geopolitically more distant, and this negative relationship has become much more pronounced since the Russian invasion of Ukraine, with annual flows falling by €14 billion. Moreover, we find that the increase in geopolitical distance between the euro area and China over the same period is associated with a decrease of around 20% in the value of flows between the two areas.[8]

6 Instead of including dummy variables for geopolitical alignment as above, we use geopolitical distance as measured by an index proposed in Bailey, M.A., Strezhnev, A. and Voeten, E., "Estimating Dynamic State Preferences from United Nations Voting Data", *The Journal of Conflict Resolution*, Vol. 61, No 2, February 2017, pp. 430-456, which is based on voting patterns in the United Nations General Assembly in order to proxy geopolitical distance, following Aiyar, S., Malacrino, D. and Presbitero, A.F., "Investing in friends: The role of geopolitical alignment in FDI flows", *European Journal of Political Economy*, Vol. 83, June 2024.

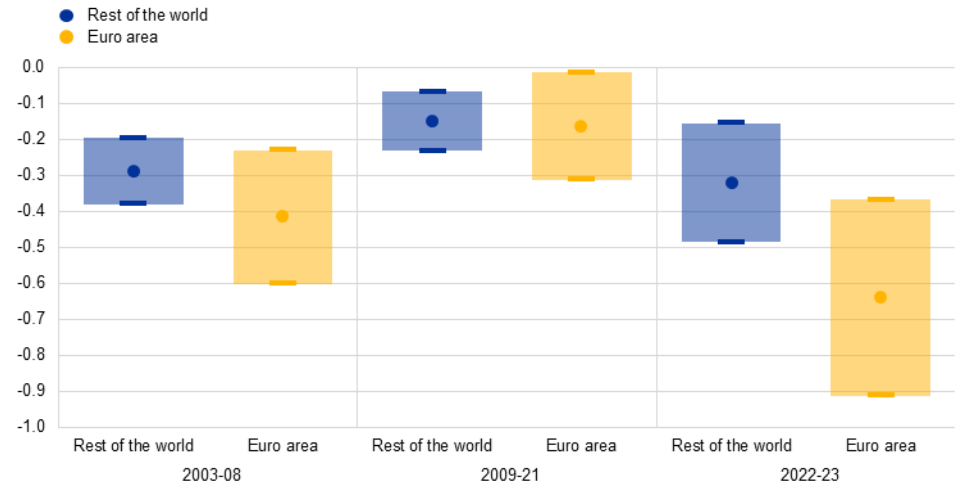
7 These effects are relative to a counterfactual of no geopolitical tensions – but not necessarily relative to a counterfactual in which firms do not respond optimally to the associated risks by diversifying supplies and production and by buying insurance against future shocks.

8 These results are robust to excluding Russia from the sample, so we can exclude the possibility that a general decoupling between the West, in particular the euro area, and Russia is driving the larger coefficient estimates in the most recent period. Moreover, the extent to which the euro area may have become generally less attractive as an investment location, owing to its proximity to the conflict and, for example, the energy price shock it triggered, would be controlled for by the time-varying destination country fixed effects.

Chart D

Effect of geopolitical distance on value of bilateral greenfield FDI flows over time

(elasticities, percentages)



Sources: fDi Markets and ECB staff calculations.
Notes: The chart plots the coefficients of geopolitical distance for the euro area and the rest of the world, estimated using a gravity model following Aiyar et al., op. cit. Dots depict point estimates while bars refer to the 95% confidence interval. Intra-euro area flows are excluded.

The impact of the shifts in FDI on trade and euro area output remains uncertain. On the one hand, a shift by euro area firms to increase production in the United States or other countries – for example, in response to domestic content requirements – may dampen production at home. On the other hand, higher FDI outflows may safeguard the overall competitiveness of European exporters and may, for example by increasing FDI income streams, preserve some domestic jobs, particularly in high-skilled corporate services. Moreover, euro area and other EU countries also appear to have benefited from inward FDI, which has averaged 0.7% of GDP since 2022, exceeding pre-pandemic levels.[9] More broadly, to the extent that a change in global greenfield FDI patterns along geopolitical lines foreshadows an accelerating fragmentation of global trade networks, the trends detected may prove detrimental to global and euro area output. Given its greater openness to trade and stronger integration into global value chains, such fragmentation would be more detrimental for the euro area than for other large economies.[10]

9 These developments are comparable to the United States, where FDI inflows have averaged 0.6% of GDP since 2022, also exceeding pre-pandemic levels.

10 See the box entitled "Friend-shoring global value chains: a model-based assessment", op. cit.

2 The link between oil prices and the US dollar: evidence and economic implications

Prepared by Martino Ricci

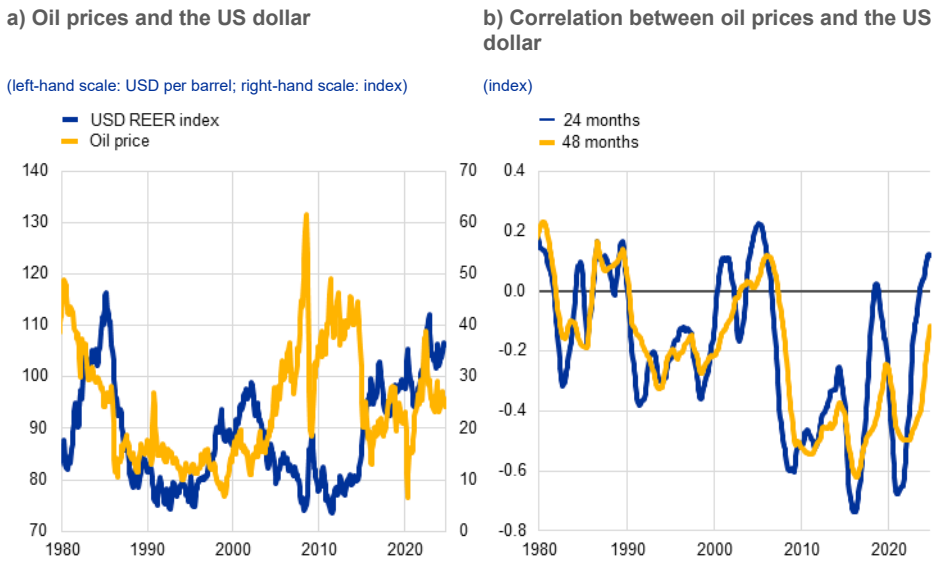
In recent years rising oil prices have often coincided with a strengthening of the US dollar – which has potentially intensified inflation dynamics in the euro area. Historically, there has been no clear link between oil prices and the US dollar (Chart A, panel a). In the period after the global financial crisis, the correlation tended to be negative. This co-movement was most likely the result of specific shocks – in particular shifts in global risk aversion – which sent oil prices and the US dollar in opposite directions (Chart A, panel b), rather than the reflection of a causal relationship.[1] However, recent studies suggest that the emergence of the United States as an oil exporter has been a factor in rendering the correlation consistently positive.[2] As crude oil is mainly traded in US dollars, a systematically positive co-movement would imply that the price of oil in local currency is more volatile than the dollar price of oil. This could strengthen the inflationary impact of oil shocks in net oil importers such as the euro area. The empirical models presented in this box show that the co-movement observed still seems to be largely the result of specific shocks that have steered both variables in the same direction rather than the reflection of a structural change in the link between oil prices and the US dollar.

1 Past studies have shown that spikes in global risk aversion largely explained the negative correlation around the time of the global financial crisis, see Fratzscher, M., Schneider, D. and Van Robays, I., "Oil prices, exchange rates and asset prices", *Working Paper Series*, No 1689, ECB, 2014.

2 Hofmann, B., Igna, D. and Rees, D., "The changing nexus between commodity prices and the dollar: causes and implications", *BIS Bulletin,* No 74, Bank for International Settlements, 2023, and Rees, D., "Commodity prices and the US Dollar", *BIS Working Papers,* No 1083, Bank for International Settlements, 2023. This positive correlation is not a new development, however, as the correlation was also positive at times before 2007, when the United States was still a net importer of oil.

Chart A

Developments in and correlation between oil prices and the US dollar



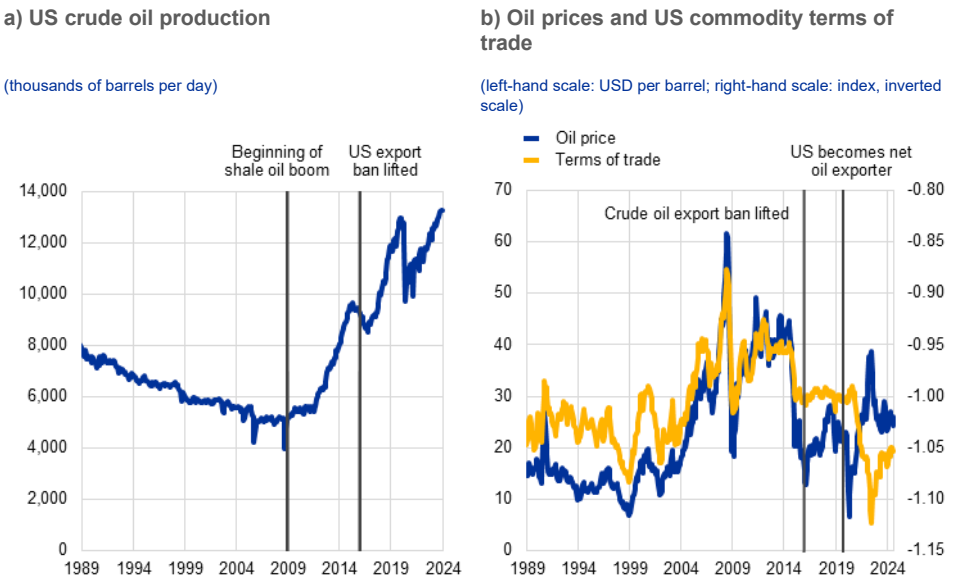
Sources: J.P. Morgan, US Energy Information Administration and ECB staff calculations.
Notes: The latest observations are for August 2024. Panel a): "USD REER index" is the US dollar real narrow effective exchange rate index. "Oil price" is the spot USD price per barrel of West Texas Intermediate deflated by the US consumer price index. Panel b): 24 and 48 months rolling correlations are computed for month-on-month changes in the variables.

The link between oil prices and the US dollar might have changed when the United States started to produce and export oil on a large scale. US crude oil production has more than doubled in the last 15 years (Chart B, panel a), driven by the shale oil boom and the lifting of the crude oil export ban by US Congress in 2015. As a result, the United States became a net exporter of oil in late 2019.[3] There are two main ways in which this might have altered the link between oil prices and the US dollar. First, it may have changed the effect of oil supply shocks on the US terms of trade – which are linked to exchange rates via the trade balance. The terms of trade for commodity products and oil prices, which had been closely correlated, started to gradually decouple in the United States after 2015, and the correlation switched sign when the country became a net exporter (Chart B, panel b). Second, the surge in US oil production may have changed the response of domestic aggregate demand to oil supply shocks. For instance, higher oil prices could make investment in the oil sector more attractive, supporting domestic demand and thus causing the US dollar to strengthen.

[3] According to US Energy Information Administration data, the United States is a net oil exporter when petroleum products are included but a net importer when considering crude oil alone.

Chart B

US crude oil production, oil prices and US commodity terms of trade



Sources: International Energy Agency, US Energy Information Administration, Citi and ECB staff calculations.
Notes: The latest observations are for August 2024. Panel b): "Oil price" refers to the West Texas Intermediate oil spot price deflated by the US consumer price index. "Terms of trade" refers to the Citi Commodity Terms of Trade Index.

The empirical results presented in this box indicate that the structural change in the US oil market has not been sufficient to turn the oil-dollar correlation systematically positive. A monthly local projections model based on estimated oil supply shocks is used to analyse time variation in the link between oil prices and the US dollar. The estimation period is split into three episodes, each capturing a different step in the transformation of the United States into a net exporter of oil.[4]

- In the period from 1989 to 1999, when US oil production was low and the country was still a net importer of oil, supply shocks that caused oil prices to rise led to a deterioration in the terms of trade and a weakening of the US dollar – which was as to be expected for an oil-importing country (Chart C, left-hand column).

- In the period from 2000 to 2010, when oil production started to ramp up but the country was still mostly an importer, oil supply shocks began to support domestic industrial production – albeit not to any significant extent. The effect on the terms of trade remained negative, however, as the United States was still a net importer of oil. This implied that the response of the US dollar to a shock to oil supply was less negative – insignificant even – during this period (Chart C, middle column).

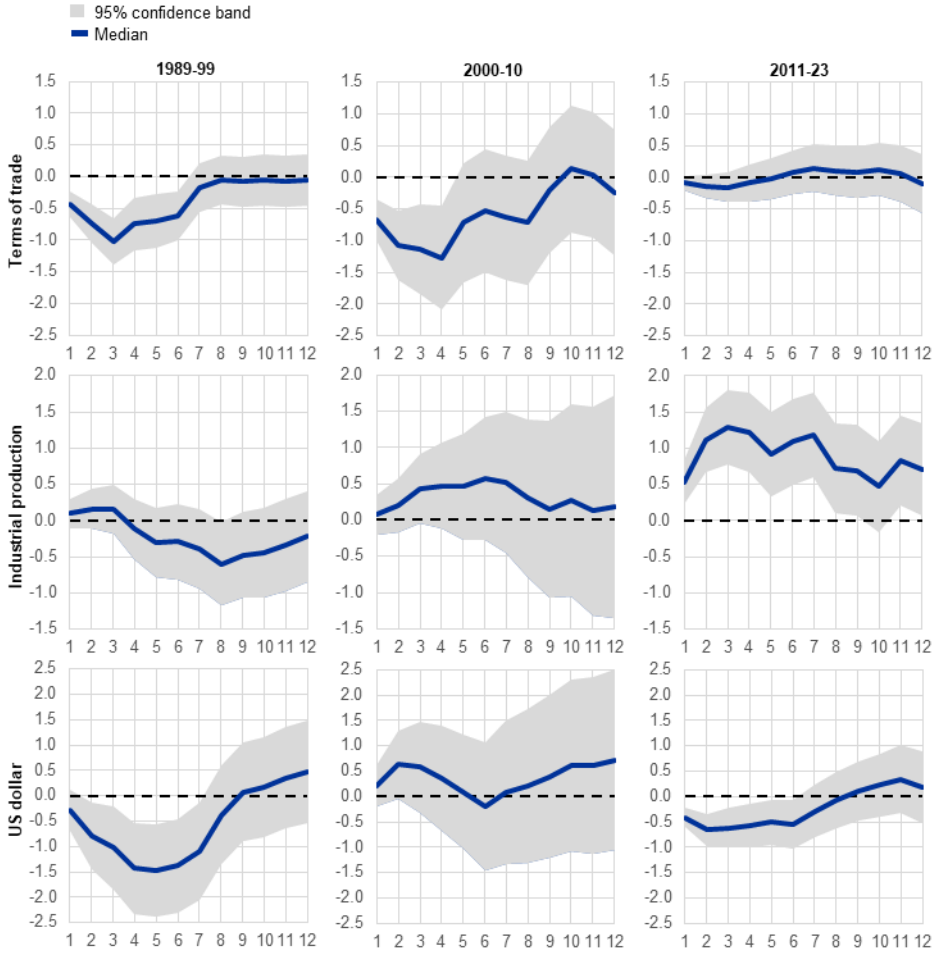
[4] The local projection model regresses the variables shown in Chart C on the oil supply shocks estimated in Baumeister, C. and Hamilton, J.D., "Structural Interpretation of Vector Autoregressions with Incomplete Identification: Revisiting the Role of Oil Supply and Demand Shocks", *American Economic Review*, Vol. 109, No 5, May 2019, pp. 1873-1910. The model uses six lags and controls for economic activity, inflation and monetary policy. The sample used ranges from January 1989 to March 2023.

- In the most recent period, from 2011 to 2023, when the country produced significant amounts of crude oil and became a net exporter, the terms of trade no longer deteriorated after oil supply shocks caused prices to rise. At the same time, the boost to industrial production increased in line with stronger domestic oil production. But overall, according to the model, these changes were not forceful enough to significantly lift the US dollar and create a systematic positive link between the two variables, as the dollar's response to oil supply shocks during this period was negative (Chart C, right-hand column).

Chart C

Response of US variables to oil supply shocks over time

(percentages)



Source: ECB staff calculations.
Note: The charts show the responses over time of US terms of trade, US industrial production and the US dollar (real effective exchange rate) to oil supply shocks that increase oil prices by 10% on impact.

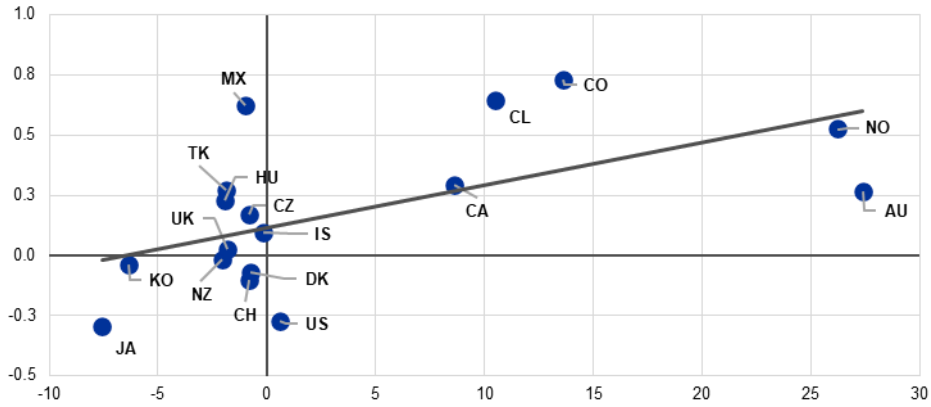
There are two main factors potentially explaining the absence of a stronger positive effect on the US dollar. First, US net oil exports as a share of total exports are still low compared with countries such as Norway or Australia that have "commodity currencies" which clearly appreciate following oil supply shocks (Chart

D). Second, it could be because higher oil prices dampen global trade, which is dollar-intensive and thus has a negative impact on the US dollar.[5]

Chart D

Exchange rate response to oil supply shocks and net exports of commodities

(y-axis: exchange rate impact response as a percentage; x-axis: net commodities exports as a share of total trade)



Sources: ECB staff calculations and The Growth Lab at Harvard University..
Notes: The chart shows the real exchange rate response in the first month following an oil supply shock that raises oil prices by 10%. The shock is taken from Baumeister and Hamilton.[1] Commodities are defined as minerals in the Harvard Kennedy School of Government's Atlas of Economic Complexity and include energy and metals.
1) See Baumeister, C. and Hamilton, J.D., "Structural Interpretation of Vector Autoregressions with Incomplete Identification: Revisiting the Role of Oil Supply and Demand Shocks", *American Economic Review*, Vol. 109, No 5, May 2019, pp. 1873-1910.

The positive correlation still seems be explained by a combination of shocks rather than a structural change in the link between oil prices and the US dollar.

A daily Bayesian vector autoregression (BVAR) model, which jointly identifies the main drivers of movements in oil prices and the US dollar, can be used to assess the importance of oil shocks compared with other drivers of US dollar dynamics.[6] According to this model, the positive co-movement between oil prices and the US dollar is mostly the result of a specific constellation of shocks that occurred in the past which happened to send oil prices and the US dollar in the same direction. This can be illustrated by decomposing oil prices and the US dollar into their main drivers during a recent episode characterised by a persistently high positive correlation (Chart E).

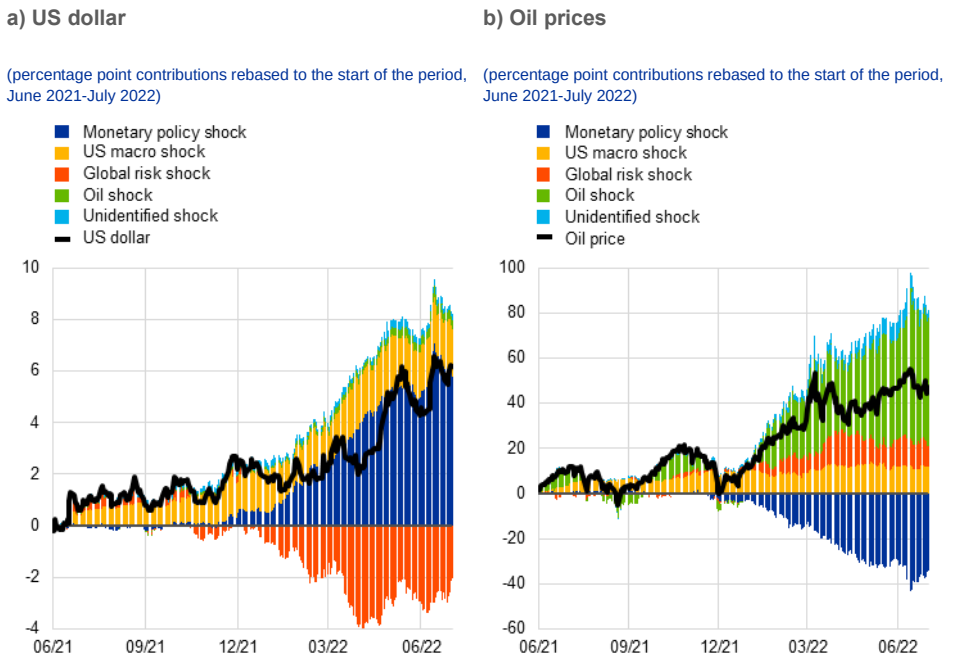
- From June 2021 to June 2022, as the US economy emerged from the COVID-19 shock, the Federal Reserve System embarked on its monetary tightening cycle and Russia launched its invasion of Ukraine, much of the US dollar's strength was explained by the Federal Reserve's tighter monetary policy, together with a stronger than expected US economy (Chart E, panel a). At the same time, oil prices rose sharply, mostly as a result of disrupted supply related to geopolitical risks (Chart E, panel b).

5 See Boz, E., Casas, C., Georgiadis, G., Gopinath, G., Le Mezo, H., Mehl, A. and Nguyen, T., "Patterns of invoicing currency in global trade: New evidence", *Journal of International Economics*, Elsevier, Vol. 136, 2022.

6 The model considers the following variables: US NEER, oil prices, commodity terms of trade, US equities (excluding the oil sector) and US two-year yields. Shocks are identified using sign and narrative restrictions. The sample considered is for the period 2015-24 to account for the structural change observed in the US economy.

Chart E

Historical decomposition of the US dollar and oil prices – selected episodes



Source: ECB staff calculations.
Notes: The charts show the historical decomposition of the cyclical component of the nominal broad US dollar and oil prices using a daily BVAR model with sign and narrative restrictions. The model is estimated over the period 2015-24.

Overall, these results indicate that the positive co-movement often observed between oil prices and the US dollar is not likely to be systematic. The correlation still reflects a specific constellation of shocks. A strengthening US dollar might at times reinforce the inflationary impact of higher oil prices in oil-importing countries, while a weakening dollar might dampen this impact. Over time, as the United States becomes a larger net exporter of oil, the link between oil shocks and the US dollar could continue to move further into positive territory.

3 The impact of special-purpose entities on euro area cross-border financial linkages

Prepared by Lorenz Emter, Fausto Pastoris, Carmen Picón Aguilar and Martin Schmitz

Newly released ECB data on special-purpose entities (SPEs) show that these have a considerable impact on euro area cross-border financial linkages. In the context of external sector statistics, SPEs are defined as legal entities controlled by non-resident investors with no autonomy of decision-making and no meaningful economic activity in the country of incorporation.[1] The interpretation of global cross-border statistics has become challenging in recent decades owing to the growing importance of financial centres and the increasing complexity of financial intermediation chains.[2] Multinational enterprises (MNEs), in particular, tend to use complex organisational structures involving numerous entities (including SPEs) as part of their tax optimisation and profit maximisation efforts. Hence, data on SPEs are essential for proper analysis of euro area financial linkages. The newly released ECB data identify the external transactions and positions of SPEs separately. This allows the impact of SPEs on the cross-border financial linkages of individual euro area countries and the euro area as a whole to be investigated.[3]

Although SPEs contribute to outsized cross-border financial linkages, these tend to have a very limited impact on real economic activity in the host economy. Non-residents set up SPEs to benefit from advantages in the host jurisdiction, such as a lower regulatory or tax burden, easier access to capital markets and financial services, or high levels of investor protection. SPEs in the euro area include passive holding companies, entities involved in intra-group lending activities, financial conduits and entities collecting intra-group royalties and licensing fees. SPEs often involve large "pass-through" flows which are not absorbed into the domestic economy but inflate global cross-border investment. Moreover, such flows complicate analysis of the geography of global financial linkages, as SPEs disproportionately involve financial centres. In addition, SPEs may blur the link between cross-border investment flows and real economic activity.

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1 According to the internationally agreed definition of SPEs for external sector statistics (see "Final Report of the Task Force on Special Purpose Entities", IMF Committee on Balance of Payments Statistics, 2018), such entities (i) have a maximum of five employees, (ii) have zero – or minimal – physical presence and production in the host economy, (iii) transact almost entirely with non-residents and (iv) have a financial balance sheet consisting mostly of cross-border claims and liabilities.

2 For a recent overview of the measurement challenges affecting statistics on cross-border investment, see Lane, P.R., "Euro area international financial flows: analytical insights and measurement challenges", keynote speech at the joint Banco de España, Irving Fisher Committee on Central Bank Statistics and ECB conference entitled "External statistics after the pandemic: addressing novel analytical challenges", 12 February 2024, Madrid.

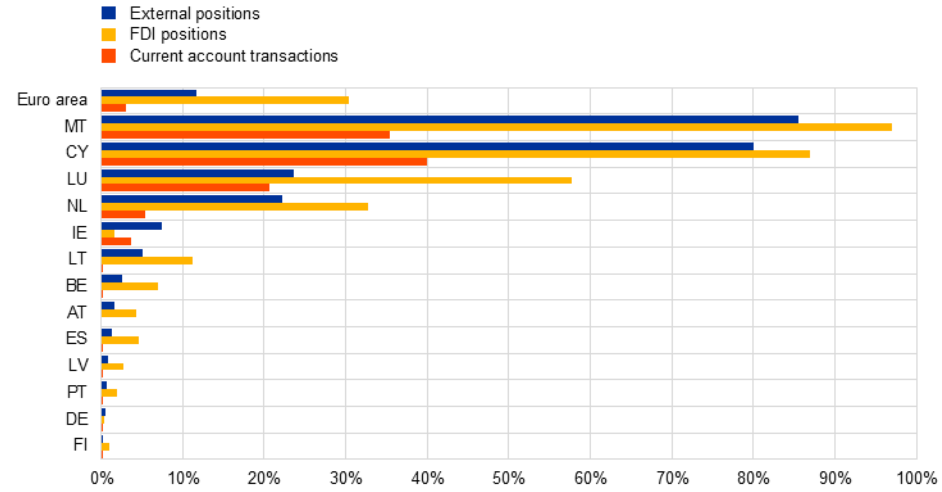
3 These statistics are reported in accordance with the amended ECB External Statistics Guideline (Guideline ECB/2022/23) and include additional breakdowns of the quarterly balance of payments and international investment position for resident SPEs. Quarterly series on SPEs were first published in April 2024 for all euro area countries and the euro area as a whole. Further details are available on the ECB's website.

SPEs account for more than 10% of total euro area cross-border financial linkages and 30% of euro area foreign direct investment (FDI) linkages, driven by a number of financial centres in the euro area. SPEs also account for around 20% of the gross FDI income flows of the euro area, mostly reflecting profits or interest income passing through them from foreign subsidiaries to foreign parents. At the level of individual countries, SPEs dominate the external accounts of Malta and Cyprus (particularly for FDI) and have a substantial impact on those of Luxembourg, the Netherlands and Ireland (Chart A).

Chart A

Relevance of SPEs for euro area external accounts

(SPEs' shares of the respective totals)



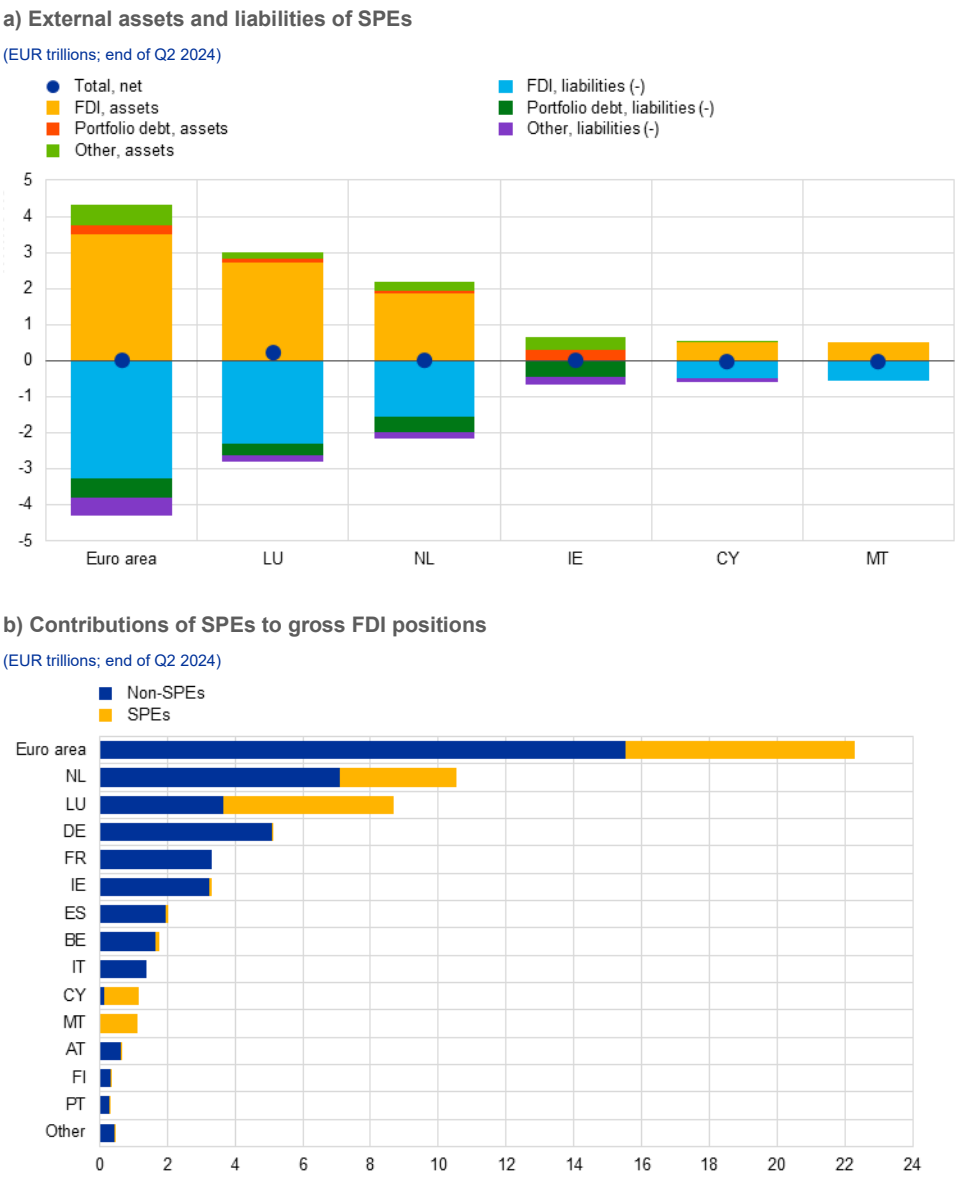
Sources: ECB and ECB calculations.
Notes: For positions, data show the situation at the end of the second quarter of 2024; for current account transactions, data show sums for the four quarters to the end of the second quarter of 2024. For each country, data are based on the sum of assets and liabilities for positions and the sum of credits and debits for transactions. Only euro area countries hosting SPEs are shown; the remaining euro area countries do not host SPEs. The values for the euro area as a whole refer only to positions and transactions vis-à-vis non-euro area counterparties. The value for the FDI positions of SPEs in Malta is an estimate based on detailed annual FDI data from Eurostat and Malta's National Statistics Office. The Lithuanian figures for external and FDI positions refer to liabilities only.

Although SPEs inflate the gross external positions of the euro area, their impact on the net international investment position is limited. SPEs contribute more than €4 trillion to the gross external assets and liabilities of the euro area (Chart B, panel a), accounting for 12% of the total. The large gross FDI positions of the Netherlands and Luxembourg decrease considerably when linkages due to SPEs are removed (Chart B, panel b). The sizeable gross FDI positions of Ireland, on the other hand, are not due to SPEs, mostly reflecting affiliates of foreign MNEs with some physical presence and production in the country.[4] Malta and Cyprus, the smallest euro area countries in terms of GDP, also have outsized gross FDI positions owing to SPEs. Despite these large gross external positions, the net international investment positions of SPEs tend to be balanced, both for the euro area as a whole and for each individual euro area country (Chart B, panel a), as the assets and liabilities of SPEs are, by definition, largely vis-à-vis non-residents.

4 Irish SPEs are mainly involved in the issuance of debt securities, so these are visible in the country's portfolio debt liabilities.

Chart B

SPEs inflate the external positions of financial centres in the euro area



Sources: ECB and ECB calculations.
Notes: The values for the euro area as a whole refer only to positions vis-à-vis non-euro area counterparties. The values for the FDI assets and liabilities of SPEs in Malta are estimates based on detailed annual FDI data from Eurostat and Malta's National Statistics Office. In panel a, liabilities are shown with a negative sign, and "other" comprises portfolio equity, financial derivatives and other investment. In panel b, figures show combined stocks of FDI assets and liabilities, and "other" comprises all of the euro area countries that are not shown individually in the chart.

The contributions of SPEs to the total external assets and liabilities of the euro area have declined recently from a high level amid national and global initiatives affecting regulatory and taxation environments for MNEs. While SPEs accounted for more than 15% of the total external assets and liabilities of the euro area at the beginning of 2020, their share has gradually declined, standing at 12% at the end of the second quarter of 2024. This mainly reflects developments in FDI, where the shares of SPEs in total assets and liabilities have fallen. This is linked, for example, to foreign investors downsizing or closing affiliates in the euro area or repaying outstanding intra-group loans. In the quarterly profile of the

underlying transactions, the retrenchments in SPE assets and liabilities have been strongly correlated, which supports the hypothesis that foreign investors have been reducing the balance sheets of SPEs in the euro area.[5] This may indicate that MNEs have restructured their global activities and corporate structures in response to recent corporate tax reform initiatives at a global, EU and national level, such as the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting, the EU directive on a global minimum level of taxation for MNEs, and changes to national corporate income tax legislation.[6]

The recent retrenchment episode in euro area FDI has been linked to SPEs and "other financial institutions" with similar characteristics, while non-financial corporations have shown more resilience in terms of their investment patterns. Indeed, strong divestment patterns have been observed over the past two years for "other financial institutions" that share certain characteristics with SPEs but do not meet all of the criteria in the definition of SPEs (Chart C). These are mostly "captive" financial institutions that are instrumental to MNEs' intra-group holdings and financing activities and may be affected by corporate restructuring considerations similar to those relating to SPEs. In contrast, non-financial corporations tend to be associated with more traditional forms of FDI (such as greenfield investment, investment for the expansion of capacity, and mergers and acquisitions), and their investment dynamics are normally aligned more closely with euro area and global economic and financial cycles.[7]

5 For example, transaction data indicate that SPEs in Luxembourg saw cumulative retrenchments of around €600 billion in both assets and liabilities alike in the period from the first quarter of 2020 to the second quarter of 2024, while SPEs in the Netherlands saw retrenchments of around €250 billion in both assets and liabilities over the same period.

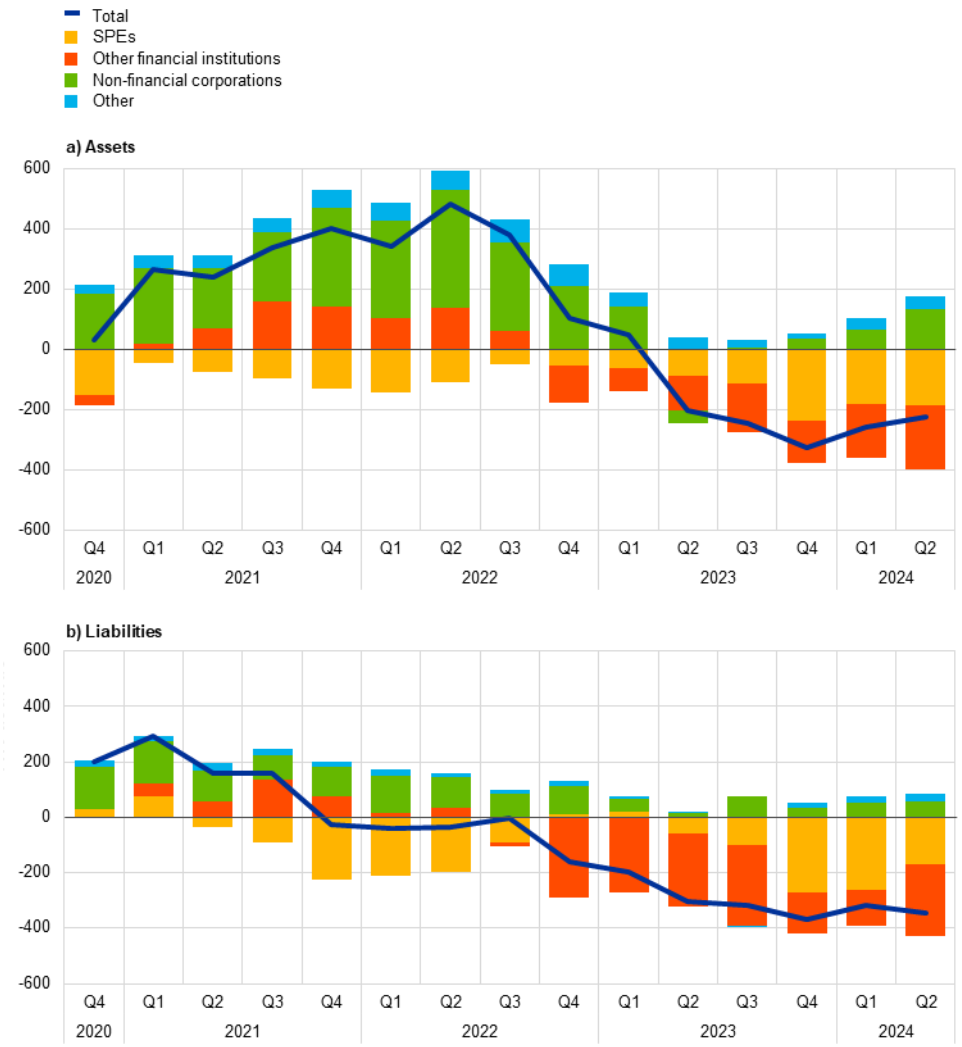
6 For an overview of the considerations underpinning the OECD/G20 Inclusive Framework's agreement on a global minimum effective corporate tax rate of 15% for large MNEs, see the OECD publication entitled "Tax Incentives and the Global Minimum Corporate Tax".

7 See the box entitled "Geopolitical fragmentation in global and euro area greenfield foreign direct investment" in this issue of the Economic Bulletin for evidence of the effect that geopolitical alignment has on global and euro area greenfield FDI.

Chart C

Sectoral decomposition of euro area FDI transactions

(EUR billions; four-quarter cumulative flows)



Sources: ECB and ECB calculations.
Notes: For each of the quarters indicated on the horizontal axes, data show cumulative flows for the four quarters to the end of the quarter in question. “Other financial institutions” comprises financial institutions that are not banks, money market funds, investment funds, insurance corporations or pension funds and are not classified as SPEs. “Other” comprises all remaining resident sectors.

The evidence in this box highlights the important role that SPEs play in euro area financial linkages, particularly as regards developments in the FDI of financial centres. For many policy-relevant questions, it is useful to exclude the contributions of SPEs – and “other financial institutions” with similar characteristics – from the data. Further improvements to available statistics, such as information on the ultimate controlling countries involved in an FDI relationship, could contribute to an even better understanding of the euro area’s cross-border financial developments.

4 Main findings from the ECB's recent contacts with non-financial companies

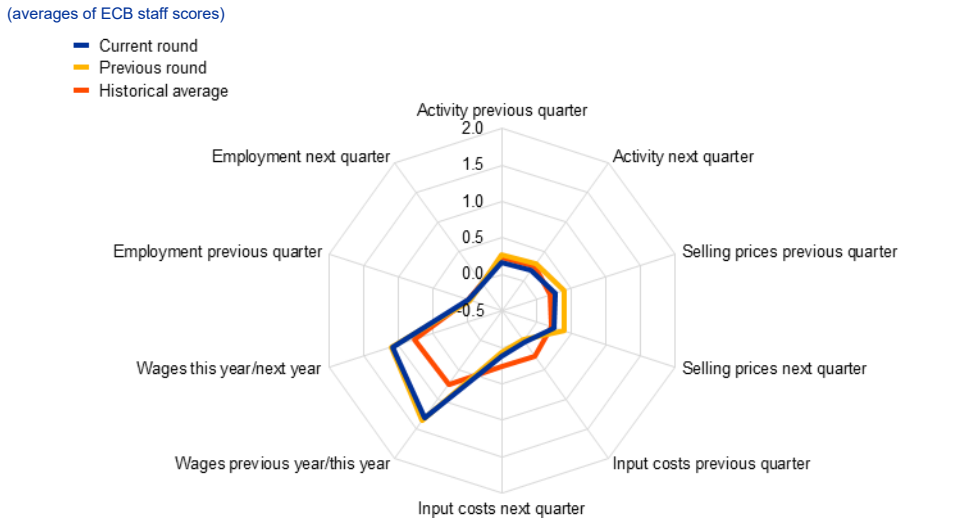
Prepared by Gwenaël Le Breton, Richard Morris and Moreno Roma

This box summarises the findings of recent contacts between ECB staff and representatives of 95 leading non-financial companies operating in the euro area. The exchanges took place between 16 and 26 September 2024.[1]

Contacts pointed to a slowdown in business momentum over the summer months, largely observed in the industrial sector (Chart A and Chart B, panel a). This reflected, in particular, growing concerns about competitiveness and mounting uncertainty surrounding the green transition as well as both European and global political developments. This was causing businesses to scale back investment and focus on cost cutting, which also weighed on consumer confidence. The overall picture was nonetheless still consistent with modest growth in overall activity, as continued growth in services offset contracting manufacturing output. Overall activity tended to be below prior expectations, mainly in Germany and France, but was generally more resilient elsewhere.

Chart A

Summary of views on activity, employment, prices and costs



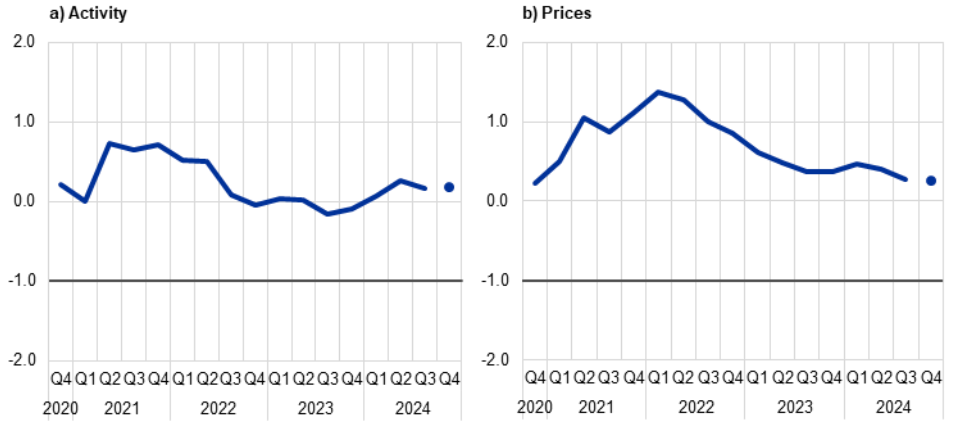
Source: ECB.
Notes: The scores reflect the average of scores given by ECB staff in their assessment of what contacts said about quarter-on-quarter developments in activity (sales, production and orders), input costs (material, energy, transport, etc.) and selling prices, and about year-on-year wage developments. Scores range from -2 (significant decrease) to +2 (significant increase). A score of 0 would mean no change. For the current round, previous quarter and next quarter refer to the third and fourth quarters of 2024 respectively, while for the previous round these refer to the second and third quarters of 2024. Discussions with contacts in January and in March/April regarding wage developments normally focus on the outlook for the current year compared with the previous year, while discussions in June/July and September/October focus on the outlook for the next year compared with the current year. The historical average is an average of scores compiled using summaries of past contacts extending back to 2008.

[1] For further information on the nature and purpose of these contacts, see the article entitled "The ECB's dialogue with non-financial companies", *Economic Bulletin*, Issue 1, ECB, 2021.

Chart B

Evolution of views on developments in and the outlook for activity and prices

(averages of ECB staff scores)



Source: ECB.
Notes: The scores reflect the average of scores given by ECB staff in their assessment of what contacts said about quarter-on-quarter developments in activity (sales, production and orders) and selling prices. Scores range from -2 (significant decrease) to +2 (significant increase). A score of 0 would mean no change. The dot refers to expectations for the next quarter.

Contacts gave somewhat mixed views of developments in consumer spending, suggesting a still rather muted recovery thus far. Most contacts in the consumer goods and retail sectors continued to describe a somewhat polarised market in which demand from wealthy customers for the most expensive products continued to grow healthily, while other consumers were still "trading down" and seeking to save money. In the food retail sector, this continued to benefit discounters over regular stores and own brands over traditional labels. Younger consumers' appetite for online deals was increasingly being met by non-EU online retail platforms offering products at rock-bottom prices. Other signs of consumers still adjusting their budgets included lower volume purchases and the strength of sales in the "circular economy". This type of reusage not only extended the lifetime of products and reduced waste but was also more affordable. Several contacts did, by contrast, point to a pick-up in consumer goods spending, which they attributed to moderating inflation and recovering real incomes. While this pick-up mostly related to purchases of non-durable consumer goods, there were also reports of retail spending on large kitchen appliances starting to recover from its post-pandemic low, even if overall demand for such appliances remained feeble due to the continued weakness in residential construction. Growth in consumer spending on services continued to outpace that of spending on goods. This was reflected by strong tourism-related activity over the summer months and even healthier trends in hotel bookings thus far for the autumn and winter seasons. That said, there were also increasing signs of consumer demand for tourism services becoming more sensitive to high prices, as reflected, for example, in the sturdier growth in demand for low season hotel bookings as compared with those for the high season.

Demand in the automotive sector had weakened in recent months, with knock-on effects elsewhere in the manufacturing industry. This reflected both a general lack of consumer and corporate demand as well as still fragile or waning demand for battery electric vehicles (BEVs). The renewed weakness in the automotive sector

was the most widely cited cause of reportedly declining activity across many parts of the capital and intermediate goods sectors. Moreover, faltering BEV demand was seen as raising questions about the transition of this important sector in the wider context of meeting climate targets, contributing to – and symptomatic of – such broader uncertainty in the manufacturing industry.

There was increasing apprehension across the industrial sector, as it struggled with high costs and political uncertainty, causing firms to scale back investment and focus on cost cutting. Contacts cited high and volatile energy prices, rising regulatory costs and strong wage growth, which were eroding many European firms' competitiveness in global markets. Many raised growing concerns about an approach to reducing carbon emissions based on complex regulations and reporting requirements, ultimately pushing up the costs to firms. This was coupled with the uncertainty caused by a lack of stability in political decision-making surrounding the relevant regulations and subsidies. Furthermore, contacts pointed to a deteriorating global economic and political environment, including, most notably, the slowing and increasingly self-sufficient Chinese economy, which was dampening export demand and intensifying import competition. These factors combined were increasingly causing both capacity and climate-related investments to be put on hold. This was reflected in a lower intake of orders across much of the capital goods sector, as well as continued low, if not still declining, demand for intermediate goods, such as steel and chemicals which were also facing overcapacity and continued falling demand from a contracting construction sector. Frozen investment plans and a focus on cost cutting were observed to some extent in a reduced demand for consultancy services, while however boosting the demand for certain intangible assets such as efficiency-enhancing software. Contacts operating in civil engineering or manufacturing equipment for the aerospace and rail industries reported growing levels of production. However, these levels reflected past orders with delivery times spanning several years; and the same contacts also pointed to relatively low levels of new orders, in part due to political paralysis and fiscal policy constraints.

Contacts did not anticipate much change to the overall subdued growth dynamic in the short term. This contrasted somewhat with the mood from previous survey rounds this year which had been one of gradually growing optimism. Many still thought that lower inflation, falling interest rates and rising incomes would eventually provide a greater boost to consumer spending. Contacts tended, however, to push back their expectations for such a recovery into 2025. Many contacts also emphasised significant structural downside risks to the industrial sector in the absence of a more stable and less onerous regulatory environment.

The employment outlook was subdued, reflecting the focus of many firms on raising efficiency and productivity. In some parts of the manufacturing sector (automotive, chemicals, steel), this meant not only taking a cautious approach towards recruitment but also restructuring in response to weak demand and/or rising wage costs. The effect of this on aggregate employment was, however, expected to be muted, as employment was still growing in much of the services sector, and because, even in the manufacturing sector, many firms still faced labour shortages and had positions to fill. The cost-cutting measures being undertaken by some firms

therefore provided recruitment opportunities for other firms in labour markets that were still structurally tight.

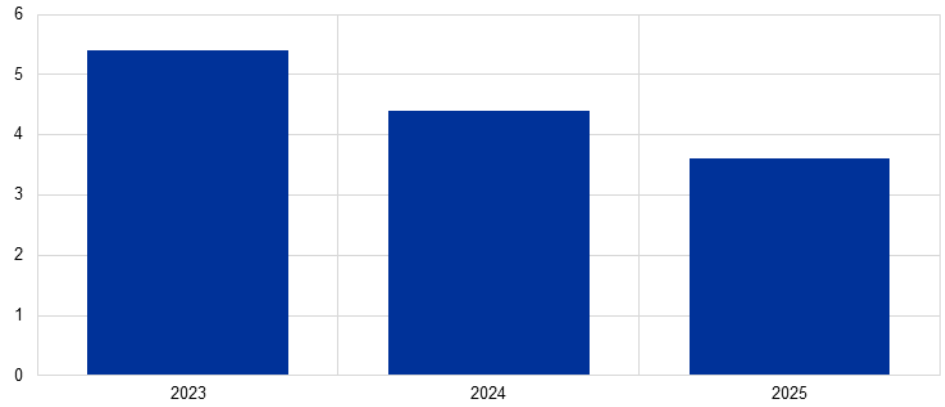
Contacts reported a further moderation in price growth overall (Chart A and Chart B, panel b). Retailers continued to report a competitive environment in which customers remained price-sensitive and this was reflected in rather stable prices. While contacts in the food retail sector still saw prices rising slightly, on average, in the third and fourth quarters, non-food retailers mostly reported stable or declining prices. Prices in the manufacturing sector were reportedly fairly stable overall. While, on average, prices were said to be increasing in the capital and consumer goods sectors, this was offset by decreasing prices in parts of the intermediate goods sector, mostly notably for steel. The overall stable price environment in the industrial sector was a result of the challenging economic situation, strong competition and largely unchanged prices of energy and raw materials, reflecting overall demand and supply conditions across global markets. Several contacts still alluded to higher shipping costs given the substantial increases in costs seen earlier in the year as a result of the rerouting of cargo ships between Asia and Europe around the southern tip of Africa. However, shipping freight rates were now falling once again as strong growth in shipping capacity currently outpaced demand, which had been somewhat frontloaded this year given the aforementioned Red Sea crisis. Most contacts in the business and consumer services sectors continued to report climbing prices. This reflected the need to pass on rising labour costs and continued growing demand. However, the overall momentum seemed to have eased in recent months. Besides wages, the mostly widely cited driver of cost growth was regulation.

Contacts continued to expect a gradual moderation of wage growth next year (Chart C). On the basis of a simple average of the quantitative indications provided, contacts assessed wage growth as slowing, from 5.4% in 2023 to 4.4% in 2024, expecting a further decline to 3.6% in 2025. Despite the rotating nature of the panel of contacts, these expectations were basically unchanged from the previous survey round. Several contacts nonetheless pointed to very high wage demands made by the unions recently. In their view, these demands did not reflect the currently challenging economic environment and they increased uncertainty regarding both the wage and employment outlook.

Chart C

Quantitative assessment of wage growth

(percentages)



Source: ECB.
Notes: Averages of contacts' perceptions of wage growth in their sector in 2023 and 2024 and of their expectations for 2025. The averages for 2023, 2024 and 2025 are based on indications provided by 75, 81, and 73 respondents respectively.

5 What consumers think is the main driver of recent inflation: changes in perceptions over time

Prepared by Pedro Baptista, Colm Bates, Omiros Kouvavas, Pedro Neves and Katia Werkmeister

Understanding how consumers perceive drivers of inflation is crucial for interpreting shifts in their inflation expectations, which can significantly influence real economic decisions. The narratives consumers construct to explain inflation play a key role in shaping their expectations, with different drivers – such as wages or profits – implying different degrees of inflation persistence.[1] To explore this further, in June 2023 and March 2024 the ECB's Consumer Expectations Survey (CES) asked consumers to select what they thought had been the main driver of the 2022-23 surge in inflation from three answer options: firms' profits, wage costs, or other input costs. While consumer perceptions shifted, notably in the lead-up to early 2024, they have since stabilised, making the March 2024 survey data indicative of broader trends. Analysing these evolving perceptions helps explain adjustments in inflation expectations and how shifts in macroeconomic narratives affect inflation dynamics going forward.

In March 2024 most consumers in the euro area attributed the 2022-23 surge in inflation mainly to (other) input costs, followed by profits and wages. Panel a) of Chart A shows the percentages of respondents selecting each option for each country. Other input costs (e.g. energy, raw materials or other business costs) was selected as the main driver by 66% of euro area respondents, followed by firms' profits (20%) and wages (14%). While this ranking of inflation drivers was common across individual countries, there was considerable variation in the frequency of each answer. The order of the countries is based on the percentage of respondents selecting wages as the main driver. The Netherlands (27%) and Belgium (22%) lead this ranking, with Austria (19%) and Germany (17%) following closely behind, and France (9%), Finland (8%) and Greece (8%) at the bottom. In Greece, a noticeable percentage of consumers (43%) believe firms' profits were the main driver of inflation.

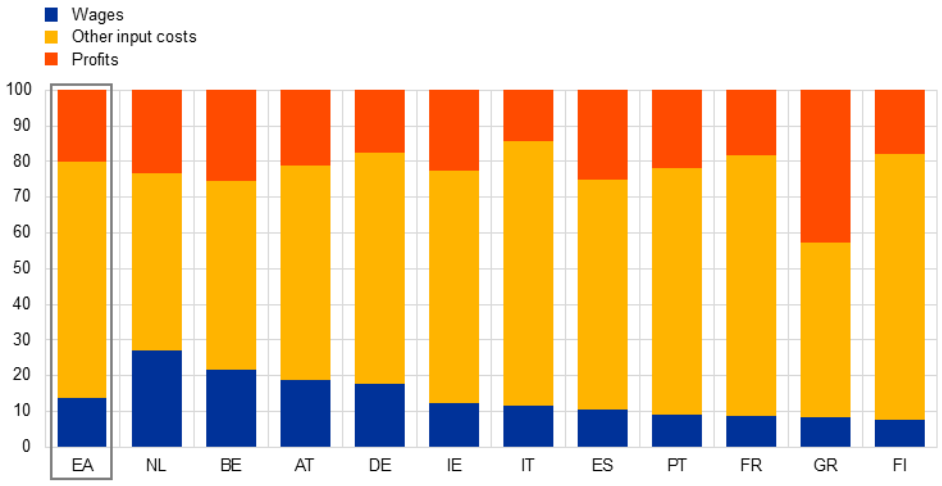
[1] For empirical evidence, see Andre, P. et al., "Narratives about the Macroeconomy", *Discussion Paper*, No 17305, Centre for Economic Policy Research (CEPR), May 2022.

Chart A

Perceived main driver of inflation

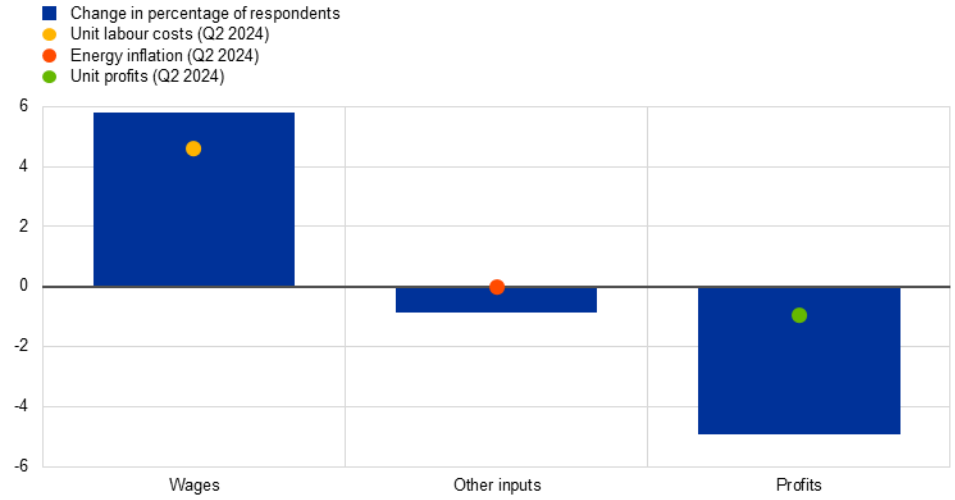
a) By country

(percentages of respondents)



b) Change between June 2023 and March 2024

(percentage point changes; annual percentage changes)



Sources: ECB Consumer Expectations Survey (CES), Eurostat and ECB calculations.
Notes: Panel a): Weighted estimates. Percentages of respondents selecting each option per country in March 2024. The question in the CES reads as follows: "According to your view, what is the main factor driving the change in the general level of prices for goods and services in your country during the past 12 months". The answer options were: "1. The main driver is firms' profits; 2. The main driver is wage costs for firms; 3. The main driver is other input costs for firms (e.g. energy, raw materials or other business costs)". Panel b): The bars refer to weighted estimates of the change in the percentages of respondents selecting each answer option between June 2023 and March 2024. The coloured points refer to the annual percentage changes in the second quarter of 2024 for unit labour costs, energy inflation and unit profits, as derived from official data.

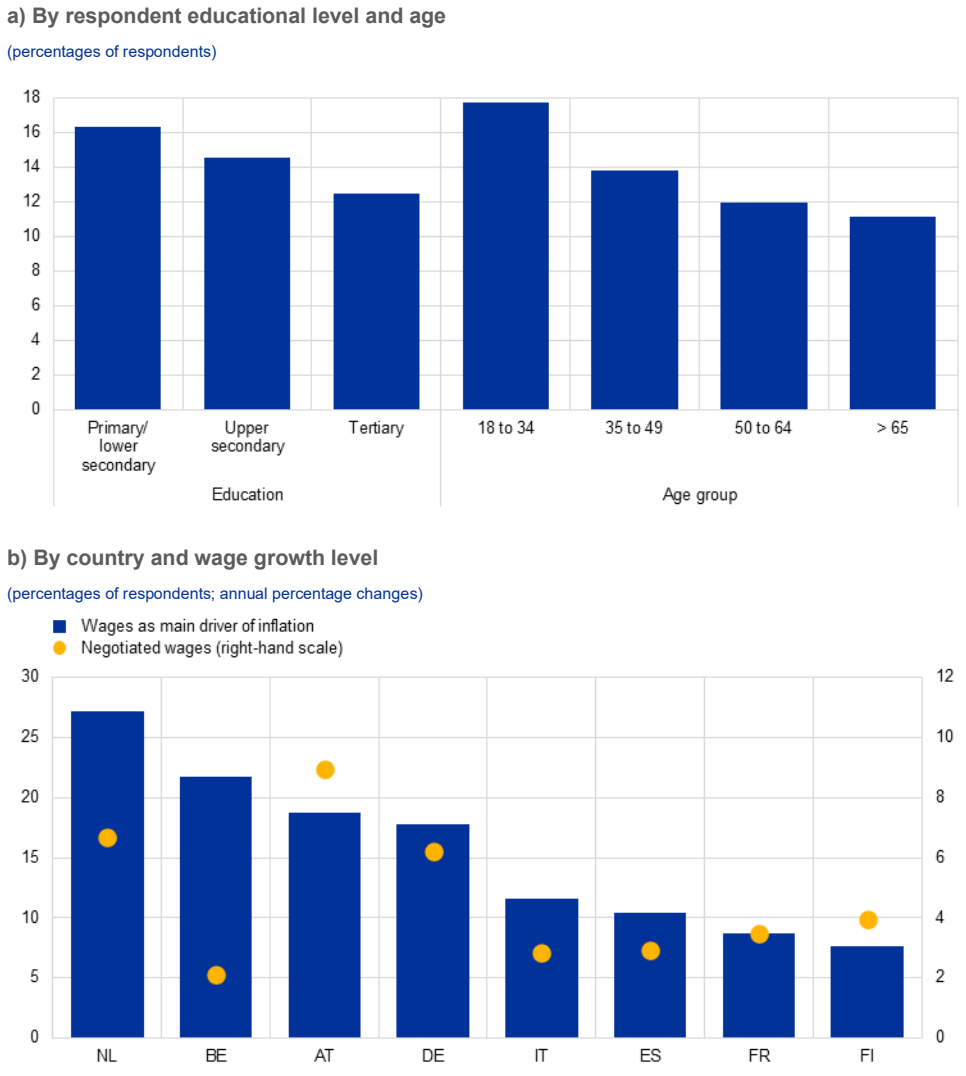
Compared with June 2023, consumers' perceptions of the main drivers of inflation shifted towards wages, although other input costs were still seen as the strongest driver overall. The question on the perceived main driver of inflation was first posed in the June 2023 CES and repeated in the March 2024 CES.[2] Panel b) of Chart A shows the change in the percentages of respondents selecting each answer option between June 2023 and March 2024 for the euro area as a whole.

2 The findings from the June 2023 CES are presented and discussed in the box entitled "What do consumers think is the main driver of recent inflation?", *Economic Bulletin*, Issue 6, ECB, 2023.

The percentage of consumers selecting firms' profits decreased by 5 percentage points, while the percentage selecting wage costs increased by 6 percentage points. This is in line with developments in wage growth and unit profits over the same period. The percentage of respondents selecting other input costs remained broadly constant, changing only by less than 1 percentage point.

Chart B

Wages as the main driver of inflation



Source: ECB Consumer Expectations Survey (CES).
Notes: Weighted estimates. Percentage of respondents selecting wages as the main driver of inflation per country in March 2024. Negotiated wages refers to the annual growth rate, including one-off payments, for the first quarter of 2024.

Consumers selecting wages as the main driver of inflation are generally younger, without a college degree and live in countries where wage growth has been relatively high in the past year. Panel a) of Chart B shows the prevalence of wages as the main driver of inflation according to educational level and age. A possible explanation for this finding is that recent wage growth has been particularly strong among minimum-wage employees, who typically have a lower level of education and are in the younger age group. Furthermore, in countries where

past wage growth has been high, a greater proportion of respondents tend to select wages as the main driver of inflation (Chart B, panel b).

Changes in consumer perceptions of the main drivers of inflation follow recent developments. Wages have gained more weight in their perceptions, while the role of profits has waned, in line with recent developments in wages and unit profits. Such changes demonstrate how narratives about inflation are reflected in consumer perceptions of the main drivers of inflation, which, in turn, may affect how they form their inflation expectations. This therefore highlights the importance of monitoring shifts in inflation narratives.

6 The performance of Eurosystem/ECB staff projections for economic growth since the COVID-19 pandemic

Prepared by Adrian Page

In the post-pandemic period, Eurosystem/ECB staff projections for growth have performed well over short horizons, despite the large shocks that have occurred. While the performance of inflation projections since the start of the pandemic has been extensively documented in previous issues of the Economic Bulletin, this box looks at how the Eurosystem/ECB staff projections for real GDP growth have fared during this turbulent period.[1] The growth fluctuations in 2020 related to the initial phases of the pandemic could not have been predicted, resulting in historically high forecast errors.[2] This box therefore focuses on the performance of the projections made after the start of the pandemic. During this period, the near-term growth forecasts have been remarkably accurate (Chart A, panel a). With only some exceptions during 2021, when growth continued to be affected by the pandemic's unpredictable path and the associated containment measures, errors in next-quarter projections for real GDP growth have been even smaller than usual despite large shocks, including those caused by supply chain disruptions and Russia's war in Ukraine.

However, over one-year horizons, staff projections overestimated growth from mid-2022 onwards. Looking at a longer horizon, the one-year-ahead projections for annual GDP growth have been less accurate and, on several occasions – in 2022 and the first half of 2023, in particular – the absolute projection errors were bigger than the average absolute historical errors over that horizon (Chart A, panel b).[3] The projections between mid-2022 and mid-2023 overestimated growth but underestimated inflation. This is consistent with the fact that the largest shocks during that period related to supply chain bottlenecks and to energy supply shocks caused by the disruptions brought about by Russia's war in Ukraine. These supply shocks pushed inflation higher while supressing growth. Although the magnitude of the projection errors for growth have diminished over the past year, they have nevertheless remained negative over the one-year horizon, implying a persistent overestimation of the strength of the recovery.

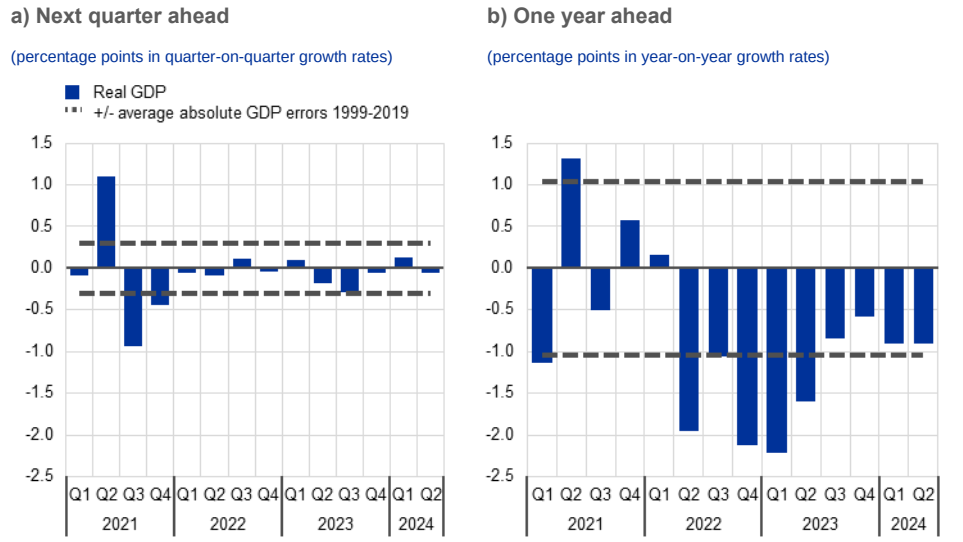
1 See "An update on the accuracy of recent Eurosystem/ECB staff projections for short-term inflation", *Economic Bulletin*, Issue 2, ECB, 2024; "What explains recent errors in the inflation projections of Eurosystem and ECB staff?", *Economic Bulletin*, Issue 3, ECB, 2022. See also "The empirical performance of ECB/Eurosystem staff inflation projections since 2000", *Economic Bulletin*, Issue 5, ECB, 2024.

2 The projection for the second quarter of 2020 made in the March 2020 ECB staff macroeconomic projections resulted in the largest ever error for this horizon, with widespread COVID-19-related lockdown measures causing growth to contract by 11.1% compared with a projected value of 0.1%.

3 Projection errors over longer horizons, such as two years ahead, are not shown for the sake of brevity but follow a very similar pattern as those shown in Chart A, panel b, with systematic over-predictions from mid-2022 onwards.

Chart A

Projection errors in real GDP growth since 2021



Sources: Eurosystem/ECB staff projections and ECB staff calculations.
Notes: Error is the outturn (as published by Eurostat on 6 September 2024) minus the projection. "Next quarter ahead" refers to the projection for the quarter-on-quarter rate of change for the quarter after the one in which the respective projection was published (e.g. the error for the second quarter of 2024 in the March 2024 ECB staff macroeconomic projections). "One year ahead" refers to the projection for the annual rate of change for the same quarter in the year following the respective publication (e.g. the error for the second quarter of 2024 in the June 2023 Eurosystem staff macroeconomic projections). Average absolute real GDP errors refer to the period 1999-2019 and exclude outliers during the global financial crisis.

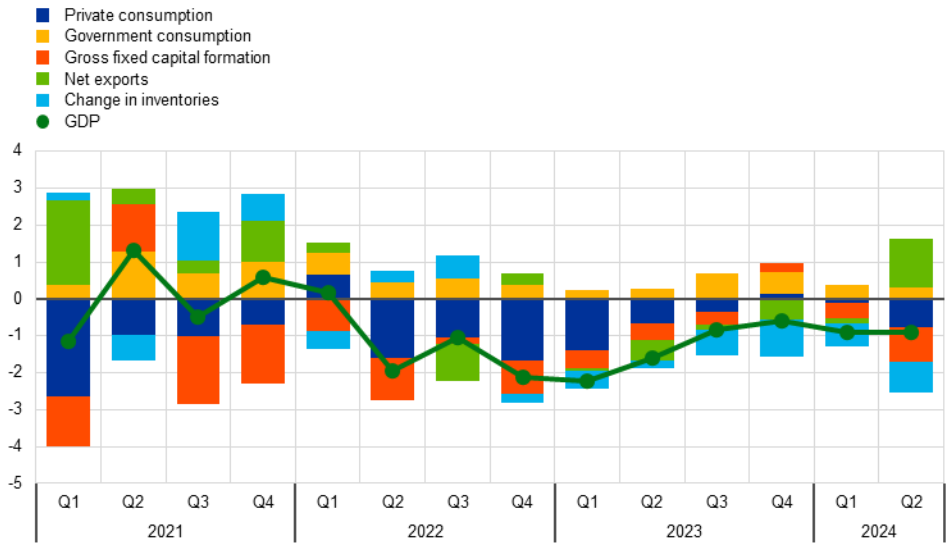
Private consumption and investment have been the main drivers behind one-year-ahead projection errors for most of this period, with net exports and stocks also playing a role more recently. Decomposing the projection errors into the individual demand components of GDP helps explain the source of the errors (Chart B). In 2021, projections made in the course of the previous year (i.e. during the initial phase of the pandemic) were subject to huge uncertainty, resulting in large but partially offsetting errors across the different components. Significant shifts in consumption patterns towards goods during the earlier phases of the pandemic and subsequently back to services led to disruptions in historical economic relationships, thus reducing the predictability of consumption, investment and trade. As the economic impact of the pandemic began to fade, global supply chain disruptions emerged during 2021, followed by Russia's invasion of Ukraine in early 2022, which disrupted Europe's energy supply. These shocks pushed up inflation, causing real incomes to fall unexpectedly and private consumption to surprise to the downside up until mid-2023. Since then, private consumption errors have been small, as upside surprises in disposable income have led to higher savings rather than higher consumption. Investment growth has also consistently surprised to the downside throughout the post-pandemic period. This can partly be explained by the high levels of uncertainty, which had been expected to dissipate but which instead persisted in the face of the series of adverse shocks mentioned. Another factor affecting real GDP and several demand components was the ECB's monetary policy, which was tightened considerably in the face of surging inflation and by more than expected by markets. The contribution of net exports to growth has also tended to surprise to the downside related to a weaker-than-expected recovery in global trade but also to losses in competitiveness, as energy price shocks have been larger in the euro area

than for other key trading partners. Over recent quarters, destocking has put an unexpected drag on growth, as reflected in the negative contributions from changes in inventories. The only component to have systematically surprised to the upside over this period is government consumption.[4]

Chart B

Decomposition of one-year-ahead real GDP projection errors into contributions of demand components

(percentage points in the year-on-year rate of change)



Sources: Eurosystem/ECB staff projections and ECB staff calculations.
Notes: See notes to Chart A. In the second quarter of 2024, the large and partially offsetting errors in the net exports and investment components partly relate to volatile and unpredictable developments related to intellectual property products in Ireland.

For most of the post-pandemic period, errors in the conditioning assumptions explain a large part of the projection errors. Another way to view the sources of projection errors is to look at the role of the technical assumptions and the projections for euro area foreign demand, both key inputs in the staff projection models.[5] Chart C decomposes the one-year-ahead GDP errors into the impact of errors in these assumptions and an unexplained residual related to other factors. This impact can be estimated using elasticities derived from Eurosystem staff projection models. The sharp, unexpected increases in oil and particularly gas prices from the second half of 2021 onwards played an important role in explaining downside growth surprises up until the end of 2022. From mid-2022 onwards, the financial assumptions also played some role, particularly the stronger-than-assumed increases in interest rates mentioned above. Errors in the exchange rate assumptions had a small, positive offsetting impact during 2022, switching signs to contribute negatively to growth errors from mid-2023 onwards. Lastly, foreign demand surprised mainly to the upside compared with staff expectations in the first

4 This reflects the fact that over the sample period, fiscal policy had loosened beyond initial expectations, as governments progressively adopted and extended the range of stimulus measures and pushed consolidation into the future.

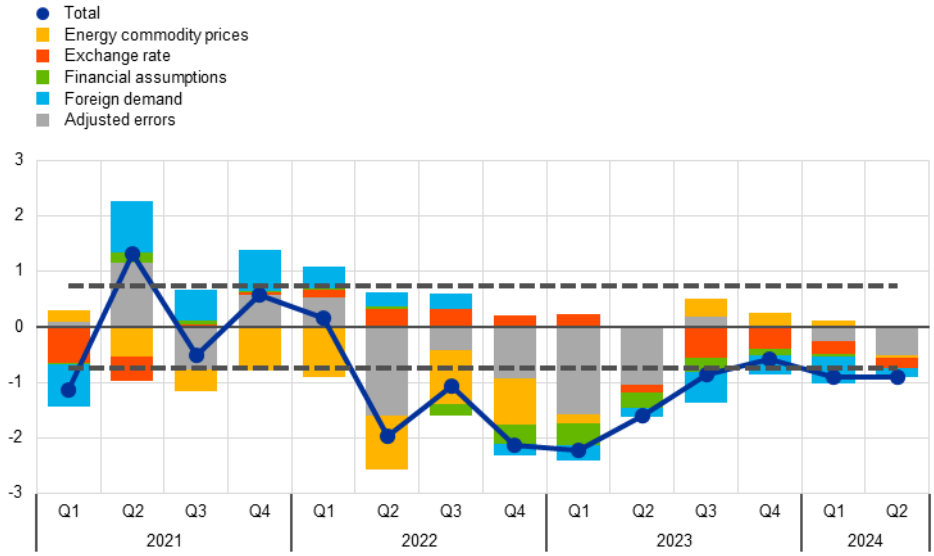
5 Technical assumptions refer to key variables, such as energy commodity prices and market interest rates, which are based on futures prices and the exchange rate, which is assumed to remain at recent levels at the time the projections were conducted.

half of the post-pandemic period, before contributing to the over-predictions of growth as of late 2022.

Chart C

Decomposition of one-year-ahead real GDP projection errors: the role of errors in conditioning assumptions

(percentage points in the year-on-year rate of change)



Sources: Eurosystem/ECB staff projections and ECB staff calculations.
Notes: See notes to Chart A. The contribution of errors in conditioning assumptions to the errors for real GDP growth are based on elasticities derived from Eurosystem staff macroeconomic models. Energy commodity prices refer to assumptions for oil and gas prices. Exchange rate refers to the nominal effective exchange rate of the euro. Financial assumptions refer to assumptions for short and long-term interest rates and stock market prices. "Adjusted errors" refers to all other sources of error beyond the errors in the conditioning assumptions mentioned. The dashed lines indicate the average absolute errors in the "Adjusted errors" component over the period 2003 (the earliest date for which the decomposition is available) until 2019, excluding outliers during the global financial crisis.

Adjusting for the errors in conditioning assumptions results in smaller errors, which may relate to persistent uncertainty and a possibly stronger-than-expected impact of monetary policy tightening. The conditioning assumptions are mainly based on market pricing and treated as exogenous to the staff projections for the euro area. Adjusting for errors in these assumptions makes it possible to isolate the remaining part of the overall projection error (shown as grey bars in Chart C), which can be attributed to the models used to build the projections and staff judgement.[6] These adjusted errors were notably smaller for most of the sample period, especially since mid-2023. The dashed lines in Chart C show the historical average of the absolute values for these adjusted errors during non-crisis periods. The adjusted errors (grey bars) are larger than these averages in absolute terms in only four quarters, despite large uncertainty during this period. But which factors could be behind these errors? As mentioned above, one extraordinary factor was large under-predictions of the surge in inflation (which went beyond what could be explained by technical assumptions) and the associated hit on disposable income. The energy price shock also led to persistent and unexpected losses in competitiveness beyond what was captured by the exchange rate assumptions. Geopolitical tensions, especially in Ukraine and more recently in the Middle East,

6 See "Why we need models to make projections", *The ECB Blog*, 5 July 2023.

have had a significant impact on uncertainty and confidence. Another factor may relate to the impact of monetary policy. While the green bars in Chart C capture the impact of errors in the financial assumptions based on Eurosystem staff projection models, other models suggest stronger impacts.[7] Moreover, non-linearities in the pass-through related to the exceptional speed and intensity of the monetary policy tightening or to the switch from a "low-for-long" to a high interest rate environment, may have had a stronger impact on the economy than suggested by the usual projection models.

In conclusion, despite the series of large shocks which hit the euro area economy in recent years, staff growth projection errors have been comparable to pre-pandemic averages. However, the outlook remains clouded by considerable uncertainty. Staff are continuously looking at ways to improve their forecasting models and make judgemental adjustments where the models systematically miss the mark. Some of the fruits of these efforts can be seen in the projection errors for near-term growth; these have been smaller than the historical average despite the huge shocks we have witnessed. While projection errors over the one-year-ahead horizon have been persistently negative, much of this can be explained by errors in the conditioning assumptions. The remaining errors likely reflect the significant and persistent changes observed in recent years in key economic relationships. It should be noted that the errors presented in this box refer to projections published up until June 2023. Staff have already taken the negative flow of information since then into account: for example, the growth outlook has been revised down from 1.5% in the June 2023 Eurosystem staff macroeconomic projections, to 0.8% for 2024 as recent information suggests a weaker-than-expected recovery. Nevertheless, economic projections remain clouded by considerable uncertainty. To illustrate the potential impact of the most relevant sources of uncertainty on the projections, the staff projections are usually accompanied by alternative scenarios highlighting key risks as well as more generic uncertainty bands.[8]

7 See the box entitled "A model-based assessment of the macroeconomic impact of the ECB's monetary policy tightening since December 2021", *Economic Bulletin*, Issue 3, ECB, 2023.

8 See the uncertainty bands surrounding the projections for real GDP growth shown in Chart 1 and "Alternative scenarios for consumer confidence and the implications for the economy", *ECB staff macroeconomic projections for the euro area*, September 2024.

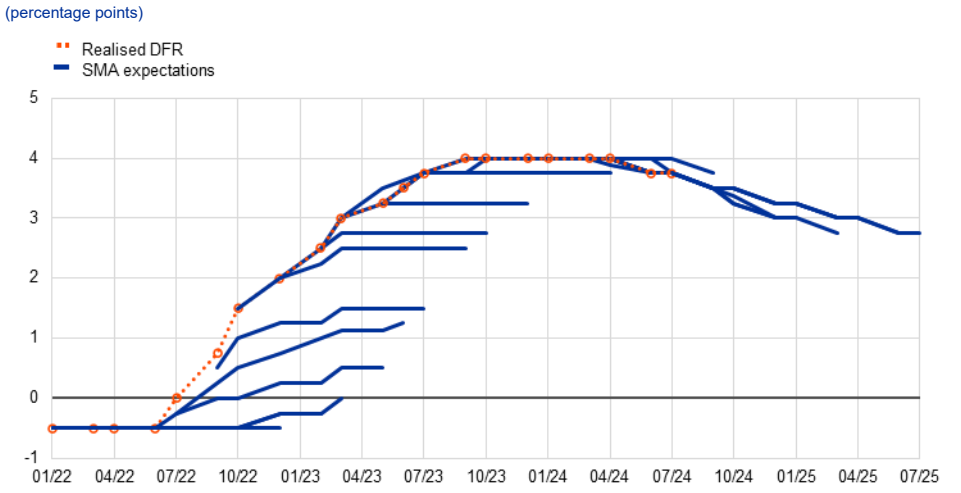
7 Decoding revisions in policy rate expectations: insights from the Survey of Monetary Analysts

Prepared by Yıldız Akkaya and Boryana Ilieva

During the rate-hiking cycle in 2022 and 2023, financial market participants and analysts made frequent and sizeable adjustments to their expectations for ECB policy rate levels. Between July 2022 and September 2023, respondents to the Survey of Monetary Analysts (SMA) continuously revised their interest rate path expectations, with the expected peak for the deposit facility rate (DFR) being raised by 350 basis points from 0.5% to 4% (Chart A).

Chart A

SMA revisions to DFR path expectations (up to one year ahead) and the realised DFR



Sources: Survey of Monetary Analysts (SMA) and ECB calculations.
Notes: The chart shows the evolution of the median SMA expectations (blue) and the DFR (red). The latest observation is for September 2024.

Understanding why SMA participants revise their expectations is important for monetary policy decision-making, as it provides insight into how changes in economic views, inflation projections, market sentiment and policy actions affect the expected policy rate path. Using the responses of individual SMA participants, revisions in the expected path of the DFR can be decomposed into several contributing factors by employing regression analysis.[1] These factors include changes in analysts' own views about the state of the economy – in particular one-year ahead HICP inflation and GDP growth expectations – and the long-run DFR. Another factor concerns changes in the forward rate curve that are not driven by inflation and growth expectations but associated with monetary policy communication and financial market sentiment, as reflected in the Bloomberg

[1] The regression is estimated using SMA data at the individual level and accounts for heteroskedasticity in the estimation of the standard errors. For a similar analysis but with aggregated survey data, see Bernardini, M. and Lin, A., "Out of the ELB: Expected ECB policy rates and the Taylor Rule", *Economics Letters*, Vol. 235, February 2024.

meeting-to-meeting (BBG M2M) forward curve movements. The BBG M2M values are orthogonalised with respect to respondents' expectations for inflation and GDP growth, thereby capturing movements beyond these expectations. A final set of factors includes differences in analysts' expectations from the latest ECB/Eurosystem staff inflation projections and unexpected policy rate changes.[2] Together, these factors account for 50% of the variation in SMA participants' revisions for the expected path of the DFR.[3]

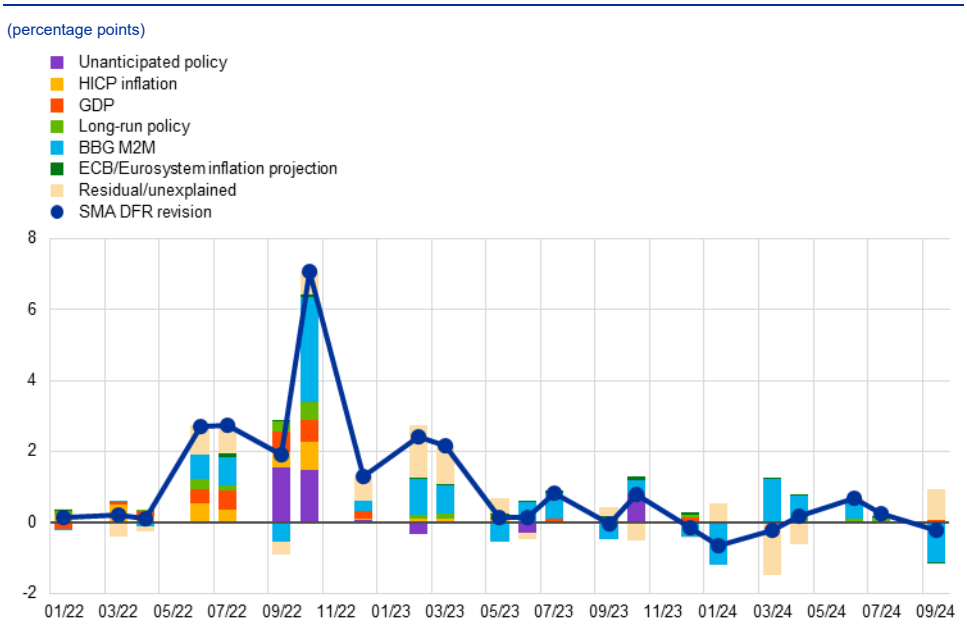
The individual expectations of SMA respondents for inflation and GDP growth account for a significant share of the revisions made in the expected policy rate path (Chart B). Analysing the size of the contributions from the different factors to the DFR revisions since January 2022, revisions to HICP inflation expectations and GDP growth expectations stand out as key drivers during the surge in inflation. The prominence of changes in macro factors for DFR path revisions during this period suggests that analysts perceived a consistent monetary policy reaction function, particularly in times of heightened macroeconomic variability. In the instances when policy rate moves were not anticipated, the unexpected change is naturally reflected as a key driver of revisions of expectations.

2 The precise forward-looking financial market indicator included in the regressions is the weekly average of the expected DFR as reflected by BBG M2M forward rates in the week before the SMA is disseminated. The forward rates are orthogonalised with respect to respondents' own expectations for HICP inflation and real GDP growth. In effect, the changes in the BBG M2M forward rates are related to components of the market curve, such as the impact of the ECB's communication, market sentiment and other factors unrelated to macroeconomic developments. The ECB/Eurosystem staff projections feature as the deviation of the latest available staff projection for HICP inflation one-year ahead from each panellist's own inflation expectation for the same horizon.

3 Previous analysis presented in the box entitled "Policy expectation errors during the recent tightening cycle – insights from the ECB's Survey of Monetary Analysts", *Economic Bulletin*, Issue 1, ECB, 2024, showed that the expectation errors of SMA participants were primarily driven by revisions in their macro expectations, suggesting that analysts perceived a consistent policy reaction function. The current analysis aligns with those findings while incorporating additional control variables, such as ECB/Eurosystem staff inflation projections and BBG M2M forward rates, which are found to have a significant impact on policy rate expectations.

Chart B

Decomposition of cumulative SMA revisions in DFR path expectations (up to one year ahead)



Sources: Survey of Monetary Analysts (SMA) and ECB calculations.
Notes: The chart shows revisions in DFR path expectations and their decomposition since January 2022. Effect sizes are based on panel regression coefficients and the mean of individual contributing factors in each survey round. The regressors are the unexpected components of the factors that are discussed in the text. As the SMA is conducted before each Governing Council meeting, entries lag the dates of those meetings. For example, the September 2024 bar reflects differences from before and after the Governing Council meeting held in July. The latest observation is for September 2024.

The impact of financial market expectations on the DFR expectations of SMA participants plays a key role, alongside updates to their macroeconomic forecasts. A sizeable share of the revisions is consistently explained by changes in the BBG M2M forward rate curve. Forward rates, in turn, respond not just to HICP and GDP growth expectations but movements in a broader set of macroeconomic indicators, as well as the ECB's communication. The alignment of DFR path revisions and forward rates indicates that survey participants consider a wide range of information when forming expectations. This highlights the importance of alternative, more nuanced indicators of the policy stance, particularly in the absence of explicit forward guidance on policy rates.

The evolving influence of financial market information underscores the importance of understanding and managing market expectations. While the importance of financial market information relative to macroeconomic expectations was lower during the inflation surge, the contribution of macroeconomic information on DFR expectation formation became less pronounced as of 2023. This shift occurred as the size of shocks declined significantly and expectations became more closely aligned with incoming macroeconomic information, particularly regarding headline inflation. Instead, market information started playing a dominant role as of 2023, also for the September 2023 hike. This evidence suggests that analysts adapted their policy expectations to financial market expectations, which may have been influenced by a range of factors. While financial markets respond to a broader range of macroeconomic information than is captured by the SMA, it is also

important to note that ECB communication, along with macroeconomic news, does influence forward rates. Overall, the evidence illustrates the crucial role that market information plays in shaping survey expectations, particularly as SMA respondents navigate the complexities of a volatile economic landscape.

8 Euro area fiscal position in 2024

Prepared by Cristina Checherita-Westphal, Sebastian Hauptmeier, Nadine Leiner-Killinger and Philip Muggenthaler

After years of fiscal support to mitigate the impact of the COVID-19 pandemic and the recent energy crisis, plans were made to improve the euro area countries' fiscal positions more markedly in 2024. The general escape clause embedded in the EU's Stability and Growth Pact was activated over 2020-23 to ensure that fiscal policies could provide the support needed by EU economies to address the adverse impact of the pandemic and the energy crisis. For 2024, the European Council agreed in June 2023 on country-specific recommendations for fiscal policies.[1] These called for fiscal policy normalisation as the energy crisis gradually faded. At the same time, the fiscal guidance reflected the fact that 2024 would be a year of transition towards a reformed EU fiscal framework. The new framework came into force on 30 April 2024 with a view to becoming operational as of 2025.[2] Against this background, this box provides an overview of euro area fiscal developments in 2024, as reflected by revisions to fiscal positions across various rounds of Eurosystem and ECB staff macroeconomic projections for the euro area.

The cyclically adjusted fiscal position of the euro area as a whole is indeed projected to continue improving in 2024 but to remain substantially below its pre-pandemic level (Chart A). In the September 2024 ECB staff macroeconomic projections, the euro area cyclically adjusted primary balance (CAPB) − the budget balance net of cyclical developments and interest spending − was seen as improving from -1.9% in 2023 to -1.4% of GDP in 2024. After a marginal increase in 2023, this more substantial improvement largely reflects the unwinding of most of the support measures implemented by euro area governments in response to the energy crisis and high inflation.[3] Despite this improvement, in 2024 the euro area CAPB is projected to remain over 2 percentage points below its pre-pandemic (2019) level. The high-debt group of countries tended to have a weaker cyclically adjusted primary position than the low-debt group over the entire period from 2019 to 2024, notwithstanding the larger projected improvement in 2024.[4]

1 These recommendations included country-specific fiscal guidance for 2023 and 2024 with a focus on winding down energy support measures and using the related savings to reduce government deficits, as soon as possible in 2023 and 2024. See "European Semester 2023: Country-specific recommendations for 2024", *press release*, Council of the EU,16 June 2023.

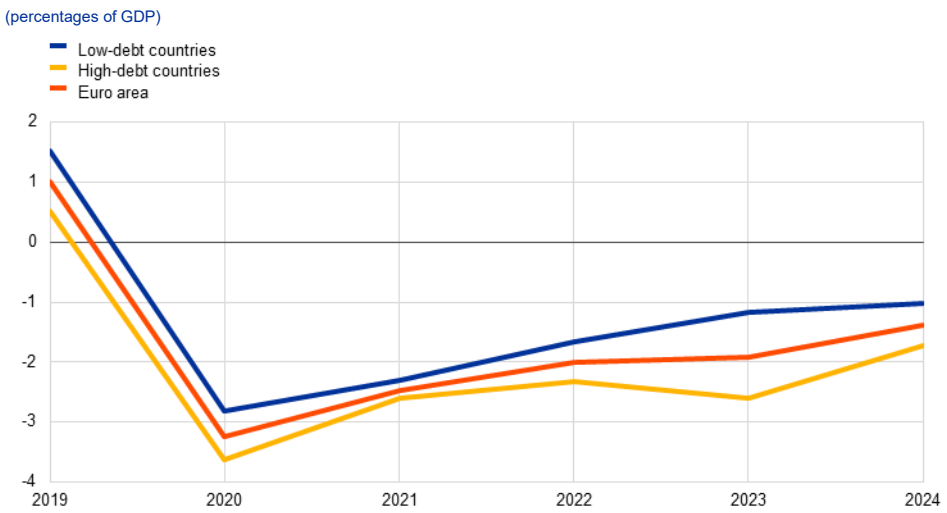
2 See Haroutunian, S. et al. "The path to the reformed EU fiscal framework: a monetary policy perspective", *Occasional Paper Series*, No 349, ECB, 2024.

3 For further details, see the section entitled "Fiscal developments", *Economic Bulletin*, Issue 6, ECB, 2024.

4 Defined as euro area countries with government debt in excess of 90% of GDP in 2023, with indicators for the group presented as a GDP-weighted average.

Chart A

Developments in the cyclically adjusted primary balance: euro area and low vs high-debt countries



Source: ECB staff macroeconomic projections for the euro area, September 2024.
Notes: The chart shows GDP-weighted averages of the CAPB for the euro area aggregate and the two groups of countries according to debt level. The "high-debt countries" group comprises euro area countries with a government debt-to-GDP ratio higher than 90% in 2023 (Belgium, Greece, Spain, France, Italy and Portugal). The rest are grouped as "low-debt countries".

Looking back at projection rounds, the euro area cyclically adjusted fiscal position for 2024 has been consecutively revised downwards since the September 2023 projections. This recent gradual downward revision of the projected GDP-weighted average of the 2024 CAPB was observed in both the high and low-debt country groups, albeit more noticeably in the former (Chart B, panel a).[5] The high-debt group also shows a significantly larger budget deficit (Chart B, panel b), partly explained by interest payments. These are much larger than in the low-debt group and have been revised upwards more significantly since the early projection rounds (Chart B, panel c).

Some uncertainty and mixed signals continue to surround the 2024 outcome. On the one hand, 2024 fiscal positions could turn out somewhat better than shown in the September 2024 ECB staff macroeconomic projections due to expected upward revisions in GDP for several countries in the context of the 2024 benchmark national accounts statistical revisions.[6] Moreover, some governments (in Italy among the large economies, for instance) report better 2024 outcomes in their 2025 draft budgetary plans. On the other hand, the latest official estimate for the 2024 deficit in France stands at above 6% of GDP in the absence of additional consolidation measures, higher than previous estimates.

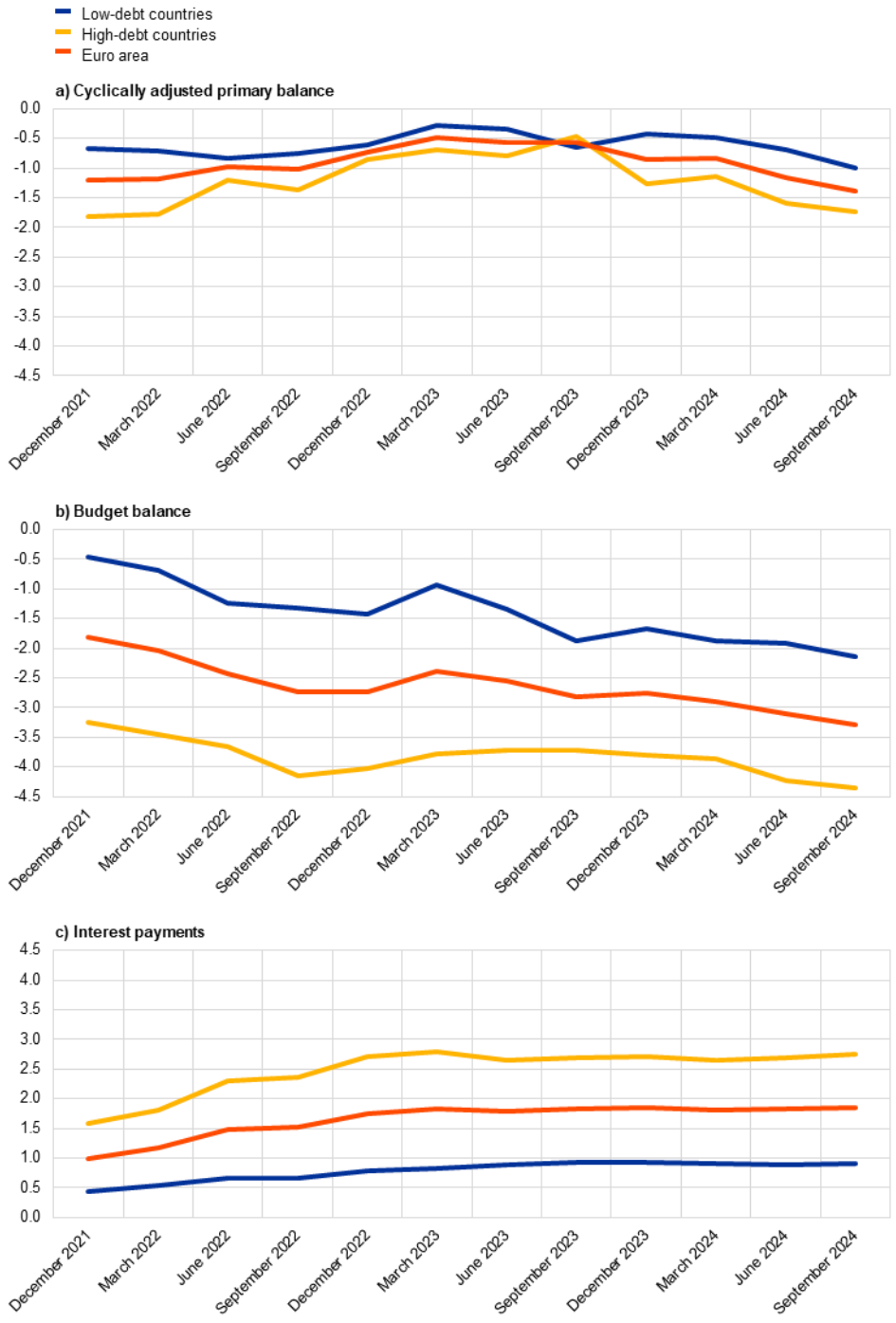
5 It should be noted that for some smaller economies included in the high-debt group (with a lower GDP weight), most importantly Portugal, CAPB projections were revised upwards between the September 2023 and September 2024 projections.

6 For preparatory work related to the benchmark revisions, see "2024 benchmark revision of national accounts and balance of payments: Overview on motivation, main changes and implementation aspects", *press release*, Eurostat, 29 February 2024. For a limited set of countries, the fiscal positions in the September 2024 projections reflect, at least in part, the revisions to benchmark national accounts.

Chart B

Various fiscal indicators for 2024 across projection rounds

(percentages of GDP)



Sources: ECB staff macroeconomic projections for the euro area, September 2024, and previous projection rounds starting with Eurosystem staff macroeconomic projections for the euro area, December 2021 (first round including projections for 2024).
Notes: See notes to Chart A for calculation method for aggregates. The budget balance can be decomposed into CAPB, interest payments (interest spending on government debt) and the cyclical component (which depends on the output gap and the budget elasticities; this component of the budget balance is not shown in the chart). The CAPB is also affected by composition effects, which arise if macroeconomic tax bases change to a different extent compared with the output gap estimates.

As of 2025 countries will be subject to the fiscal requirements under the revised EU governance framework. Most euro area countries had released their draft budgetary plans for 2025 by 15 October 2024. Among other things, these set out how governments intend to comply with the new fiscal framework as of 2025. The plans available by the cut-off date for this issue of the Economic Bulletin point towards an improvement in the CAPB positions for about half of the countries, notably Germany, Italy, Malta and Slovakia.[7,8] Among the group of high-debt countries, the CAPB remains almost unchanged for Greece and Portugal compared with 2024 as these countries envisage posting surpluses for 2025.

The European Commission is expected to assess the budgetary plans of the EU Member States in its Autumn package. The European Commission usually adopts opinions on the draft budgetary plans for the following year in late November. It is also expected to provide an assessment on whether it would recommend the European Council to endorse the medium-term fiscal structural plans that countries have to submit for the first time under the reformed fiscal framework, covering the period 2025-28.[9] These plans will outline a path of net expenditure growth that would, where applicable, allow a country to put its debt ratio on a plausibly declining trajectory over the medium term.[10] This path of net expenditure growth would need to build on the level of the corresponding expenditure aggregate as observed in 2024. Consequently, any differences between current forecasts of this year's fiscal positions and final outcomes will later become relevant when assessing whether countries have sufficiently delivered on their medium-term fiscal structural plans.

7 Due to different methods of calculating the cyclical adjustment, the estimates in the draft budgetary plans are not fully comparable to the ECB methodology used in the September 2024 ECB staff macroeconomic projections.

8 By the cut-off date for this issue of the Economic Bulletin (16 October 2024), draft budgetary plans for Belgium, Spain, France, Croatia, Lithuania and Austria had not been posted on the Commission's dedicated webpage.

9 The Commission's package will also include recommendations under Article 126(7) of the Treaty on the Functioning of the European Union (TFEU) with a view to correcting excessive deficits in seven EU Member States (Belgium, France, Italy, Hungary, Malta, Poland and Slovakia).

10 "Net expenditure" means government expenditure net of interest expenditure, discretionary revenue measures, expenditure on programmes of the Union fully matched by revenue from Union funds, national expenditure on co-financing of programmes funded by the Union, cyclical elements of unemployment benefit expenditure, and one-offs and other temporary measures (see Regulation (EU) 2024/1263 Article 2(2)).

Articles

1 The ECB's accountability to the European Parliament 2019-2024: commitment in times of change

Prepared by Ferdinand Dreher, Nils Hernborg, Sarah Mochhoury, Timothy Mulder and Hanni Schölermann

1 Introduction

The independence of the ECB, particularly in its monetary policy decisions, ensures that it can effectively pursue price stability. At the same time, this independence is counterbalanced by accountability to ensure that the ECB remains answerable to the public and its representatives, thereby providing democratic legitimacy for its actions. The ECB's accountability is primarily exercised through regular reporting to the European Parliament. This includes the publication of the ECB's Annual Report, regular appearances before the European Parliament by the President of the ECB, and the answering of written questions from Members of the European Parliament (MEPs). The dialogue with the European Parliament allows the ECB to answer the questions and concerns of elected representatives, explain its actions and policies in detail, clarify its objectives and demonstrate how it is fulfilling its mandate. This enables EU citizens and their representatives to better understand the ECB's policies and to form a judgement about its performance in respect of its mandate, thereby ensuring transparency and maintaining public trust.[1]

The ECB discharges its accountability obligations on both the central banking side and the supervisory side, ensuring transparency and responsibility across its dual roles. On the central banking side, the ECB is accountable for its monetary policy decisions and related tasks of the Eurosystem. On the supervisory side, the ECB's role within the Single Supervisory Mechanism (SSM) involves the direct supervision of significant banks in the banking union, and it is similarly accountable to the European Parliament, subject to distinct obligations and channels, as explained in Box 2. This dual accountability ensures that the ECB performs both its monetary policy and supervisory functions with a high level of responsibility and transparency.

During the ninth term of the European Parliament (2019-2024), the ECB took decisive measures to ensure price stability in the euro area. The economic fallout from the pandemic and the subsequent surge in inflation, exacerbated by Russia's unjustified war against Ukraine, posed challenges for both price and financial stability. The ECB responded to these developments in a decisive manner with the aim of ensuring that inflation returned to its 2% medium-term target. In

1 For a longer discussion of ECB accountability and its relevance, see section 2 in Fraccaroli, N., Giovannini, A. and Jamet, J-F., "The evolution of the ECB's accountability practices during the crisis", *Economic Bulletin*, Issue 5, ECB, 2018.

March 2020 the ECB launched large-scale asset purchases under the pandemic emergency purchase programme (PEPP) to ensure the smooth transmission of monetary policy and to support the euro area's economic recovery from the pandemic. Following the surge in inflation in the aftermath of Russia's invasion of Ukraine in February 2022, the ECB took successive steps to raise its key interest rates to their highest levels so far to ensure the timely return of euro area inflation to the ECB's target and avoid the entrenchment of price pressures.

In July 2021 the ECB concluded the review of its monetary policy strategy and initiated work on a digital euro. In its 2020-2021 strategy review, the ECB reviewed the conduct of its monetary policy against the backdrop of a changing economic landscape. The ECB clarified that price stability can best be achieved by aiming for a symmetric 2% inflation target over the medium term. As part of the outcome of the review, the Governing Council launched a climate action plan, incorporating climate change risks in its monetary policy framework.[2] It also took steps to modernise its monetary policy communication to make it more accessible to the wider public. In the same period, the Eurosystem launched its digital euro project, with the aim of ensuring that citizens would continue to have access to central bank money in the digital age. Following initial analysis on the possible issuance of a digital euro published in October 2020, the Governing Council officially launched the digital euro project in July 2021.[3] Given the importance of the project for the Eurosystem, the European economy and its citizens, the ECB has been engaging extensively with all stakeholders, and since October 2020 the ECB has held dedicated public exchanges of views on a digital euro with the European Parliament to explain its work on the project (see Box 1).

The ECB's policy responses to economic and structural changes during the ninth parliamentary term underline the importance of accountability in legitimising the ECB's actions. Central bank accountability involves a combination of transparency, explanation and justification vis-à-vis elected representatives, and is essential in order to legitimise decisions taken by an independent central bank.[4] As the elected body representing EU citizens, the European Parliament is at the heart of the ECB's efforts to explain its decisions and policies. This was reaffirmed not only by an Exchange of Letters formally signed by the Presidents of the ECB and the European Parliament in June 2023, but also by further innovations introduced by the European Parliament in its interactions with the ECB during the 2019-2024 parliamentary term.

Against this backdrop, this article reviews the ECB's accountability interactions during the ninth term of the European Parliament. First, it recalls the key elements of the ECB's accountability framework and discusses innovations in its accountability practices as well as new areas of engagement with the European Parliament that arose during the parliamentary term. Second, it analyses the content and form of accountability interactions in the ninth term and compares them with

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2 See "ECB's Governing Council approves its new monetary policy strategy", *press release*, ECB, 8 July 2021.

3 See "Report on a digital euro", ECB, October 2020.

4 See Blinder, A.S., *Central Banking in Theory and Practice*, MIT Press, 1998.

previous parliamentary terms. It provides an overview of the topics raised in questions asked by MEPs in quarterly hearings with the ECB and how these link to the changing economic environment and the ECB's policy actions. The article focuses primarily on the ECB's accountability in the area of central banking, with Box 2 providing a comparative analysis of the accountability interactions of ECB Banking Supervision.

2 The ECB's accountability framework – innovations and new areas of engagement

The ECB's accountability obligations are set out in primary EU law. The Treaty on the Functioning of the European Union (TFEU) assigns primary responsibility for holding the ECB to account to the European Parliament.[5] In accordance with the provisions of the Treaty, the ECB is obliged to address and present an annual report on its activities to, among others, the European Parliament. In addition, the Treaty also states that, at the request of the European Parliament or on their own initiative, the ECB President or an Executive Board member may be heard by the competent committee of the European Parliament.[6]

Over the years, the ECB has worked together with the European Parliament to strengthen its accountability even beyond the Treaty requirements. In addition to its obligations related to the Annual Report, the ECB is also held to account through several channels not specified in the Treaty. These include quarterly hearings before the Committee on Economic and Monetary Affairs (ECON), written questions and yearly visits to the ECB (see Table 1 for an overview of the main accountability channels).[7] These practices have evolved over the years in cooperation with the European Parliament. For example, in 2016, in response to a request from the European Parliament, the ECB began to publish its written feedback on the European Parliament's resolution on the ECB's Annual Report.[8] This practice has improved the dialogue further and shows that the ECB has

5 While the ECB also has statutory accountability obligations towards the Council, the Commission and the European Council, the primary body holding the ECB to account is the European Parliament, whose members are the elected representatives of European citizens. See Article 284(3) TFEU and Article 15.3 of the Statute of the European System of Central Banks and of the European Central Bank.

6 In accordance with Article 283 TFEU, the European Parliament is also consulted on the appointment of the members of the ECB's Executive Board, who are invited to informal hearings before the European Parliament's ECON Committee prior to their appointment by the European Council.

7 The European Parliament's preparatory bodies support the members of the ECON Committee with relevant expertise, including briefings on the ECB's policies, and with an external expert panel that prepares papers and conducts preparatory meetings on the topical issues selected for the hearings. For more information on the topics raised during the ninth parliamentary term, see "Monetary Dialogues during the 9th legislative term", *Briefing*, Economic Governance and EMU Scrutiny Unit (EGOV), June 2024. For recent papers by external experts and preparatory meetings, see the Monetary dialogue page on the European Parliament's website.

8 See also Fraccaroli, N., Giovannini, A. and Jamet, J-F., op. cit.

modified reporting practices in response to concerns raised by the European Parliament.[9]

The ECB also publishes a wide range of other documents outlining the considerations underlying its economic assessments and monetary policy decisions which elected representatives can use to scrutinise the ECB. These include first and foremost the monetary policy statement and the press conference following each Governing Council meeting at which monetary policy is discussed, and the subsequent accounts of those meetings. New staff macroeconomic projections are described in a detailed report outlining the projections and related assessments. In addition, Executive Board members give speeches and interviews on monetary policy and assessments of economic developments on an ongoing basis. The ECB also regularly publishes its Economic Bulletin after each Governing Council meeting focusing on its assessment of economic developments and on topical issues. All of these publications outline assessments and considerations that feed into monetary policy decisions and can be used by the European Parliament to hold the ECB to account in the regular interactions. On the financial stability side, the ECB publishes its Macroprudential Bulletin and the biannual Financial Stability Review. The ECB's strategy review also led to a broad overhaul of the ECB's communication practices. One important decision was to publish more detailed accounts of monetary policy meetings, thereby improving the transparency of the ECB's decision-making and aligning with previous requests from the European Parliament.

Table 1

The ECB's main accountability channels

Channel	Description
ECB Annual Report	Each year, the ECB submits an annual report on its tasks, the activities of the European System of Central Banks and the Eurosystem's monetary policy to the European Parliament, the Council of the EU, the European Commission and the European Council. The report is presented to the European Parliament by the ECB Vice-President in a dedicated session of the ECON Committee. The European Parliament then prepares a resolution on the ECB's Annual Report, which is debated in plenary in the presence of the ECB President and subsequently adopted. The ECB provides detailed feedback on the resolution in a document published together with the Annual Report for the following year.
Hearings before the European Parliament	The President of the ECB participates in quarterly hearings before the European Parliament's ECON Committee. Other Executive Board members also participate in hearings before this Committee to explain the ECB's reasoning and decisions on specific topics.
Written questions	Members of the European Parliament can address written questions to the President of the ECB at any time. The reply letters are published by the ECB and the European Parliament on their respective websites.
Ad hoc interactions with members of the ECB's Executive Board	At the request of the European Parliament or on their own initiative, the President of the ECB or other members of the Executive Board may participate in ad hoc exchanges of views before the ECON Committee, a group of ECON Committee representatives, a subgroup of ECON or ECON plus other parliamentary committees, at which MEPs can ask questions and discuss issues within the ECB's fields of competence.
Visits to the ECB	Every year, the members of the ECB's Executive Board host a delegation of the ECON Committee for informal discussions on issues within the ECB's fields of competence.

9 A recent example is the ECB's Annual Report 2023, which included a box entitled "The ECB's secondary objective in monetary policy" and elaborated further on the link between the ECB's primary objective and its secondary objective, where relevant, throughout the report in response to a request in the European Parliament resolution of 16 February 2023 on the European Central Bank – annual report 2022.

In the ninth parliamentary term, the ECB and the European Parliament took steps to formalise their accountability relationship in the form of an Exchange of Letters. In June 2023 the Presidents of the ECB and the European Parliament signed an Exchange of Letters which further specifies the above-mentioned accountability channels and constitutes a common understanding of the accountability practices developed since 1998 in the area of central banking. For example, it spells out commitments by the ECB and the European Parliament as regards the publication of written questions and answers, and the modalities of hearings. This milestone, which now provides a transparent and formalised structure for the accountability arrangements, stands testimony to the joint commitment of the two institutions to continuing their effective dialogue. It underlines the collaborative effort of both the ECB and the European Parliament to effectively shape this accountability relationship. Prior to its signing, the Exchange of Letters received broad backing from, on one side, the ECON Committee, the Committee on Constitutional Affairs and the Conference of Presidents, and, on the other side, the ECB's Governing Council, demonstrating the wider institutional importance attached to this important step.

At the same time, the ECB and the European Parliament also intensified their interactions to cater for new workstreams and activities at the ECB. The most notable area of development is the ongoing digital euro project. The ECB has engaged extensively with the ECON Committee to explain technical issues and answer questions from MEPs in public exchanges of views and written exchanges. This includes regular public exchanges of views in the ECON Committee, with ten such exchanges taking place between October 2020 and the end of the ninth parliamentary term in July 2024. Box 1 provides further details on interactions related to the digital euro project. In addition, the ECB and the European Parliament also interacted closely in the context of the ECB's strategy review and its climate action plan, including the latter's implementation. Dedicated meetings were organised to discuss the strategy review, both while it was ongoing and following its conclusion.[10] The ECB also continuously informed the European Parliament of the implementation of the climate action plan and answered numerous questions on the topic in hearings and letters and during visits to the ECB.[11] The ninth parliamentary term also saw a number of ad hoc hearings on specific economic issues. For instance, ad hoc hearings were held in March and June 2022 on the macroeconomic impact of EU sanctions against Russia and on the ECB's convergence report prior to Croatia's adoption of the euro.[12]

The ECB and the European Parliament have also further enhanced communication and improved the format of interactions. The Governing Council

10 In addition to being discussed at several regular hearings before the ECON Committee, the strategy review was discussed at a special virtual visit to the ECB in May 2021. Moreover, following the conclusion of the review in July 2021, an in-camera hearing with the ECON Committee was organised to present the outcome of the review and answer questions on the new monetary policy strategy.

11 See, for example, "Letter from the ECB President to Irene Tinagli, ECON Chair, on progress on climate-related action plan", 4 July 2022; and "Letter from the ECB President to Ms Irene Tinagli, ECON Chair, on the climate and nature plan 2024-2025", 30 January 2024.

12 See Panetta, F., "The ECB's 2022 Convergence Report", introductory statement at the Meeting of the Euro Accession Countries Working Group of the ECON Committee of the European Parliament, 1 June 2022.

set out to make communication on monetary policy decisions more accessible to the wider public, including by giving the monetary policy statement a clear narrative and making it more understandable, and complementing it with a simpler, more concise and visual version aimed at a general audience. Similar communication improvements were also introduced for the ECB President's introductory statements at the quarterly hearings before the ECON Committee, which, from 2021 onwards, was also complemented by a new two-page document with selected charts visualising the key points in the statement.[13] The ECB's revamped communication policy was welcomed by the European Parliament, which in several instances commended the ECB's efforts to make its communications explaining policy decisions to citizens more accessible.[14,15] In addition to this, the European Parliament also adjusted the format of hearings, making them more interactive and strengthening their accountability character. Starting in June 2022, MEPs were given the opportunity to ask a follow-up question to answers given to them by the ECB President in the first round of the question and answer session. Together, these changes contributed to making the hearings more effective, informative and inclusive.

Box 1

The digital euro: a case study on intensifying parliamentary communication and engagement

Prepared by Nele Nomm and Hanni Schölermann

This box illustrates how the ECB has extended its engagement with the European Parliament to explain its work on a digital euro and provide technical expertise on related developments, including EU legislation. A digital euro would make people's lives easier by providing a digital form of cash: a digital means of payment universally accepted throughout the euro area, issued by the central bank. Given the novelty of the topic, transparent communication and active engagement by the Eurosystem is crucial, including in order to address questions and concerns.[16] A digital euro is a common European project accompanied by a legislative package.[17] Therefore, engaging with the

13 See, for example, the Introductory statement in charts prepared for the ECON hearing with the ECB President on 15 February 2024.

14 In its resolutions on the ECB Annual Reports for 2022 and 2023, the European Parliament welcomed "the ECB's new communications policy, which includes more accessible ways to explain and present ECB policy decisions to citizens and stakeholders". In its resolution on the ECB Annual Report 2021, the European Parliament acknowledged "the ongoing efforts by the ECB to improve communication with Parliament" and, furthermore, agreed with President Lagarde that "the ECB has to modernise its communication to citizens on its policies and their impact".

15 For an analysis of the ECB's communication in parliamentary hearings and in press conferences following monetary policy meetings of the Governing Council, see Fraccaroli, N., Giovannini, A., Jamet, J-F. and Persson, E., "Does the European Central Bank speak differently when in parliament?", *The Journal of Legislative Studies*, Vol. 28(3), August 2022, pp. 421-447, which documents that the ECB uses parliamentary hearings mainly to further explain policy decisions first presented at press conferences but also to put them in a broader context. It also highlights a reduction in language complexity and an improvement in clarity both at press conferences and at parliamentary hearings around the time of the implementation of the ECB's strategy review.

16 For more information on the digital euro project, see the ECB's website.

17 In June 2023 the European Commission put forward two legislative proposals: Proposal for a Regulation of the European Parliament and of the Council on the legal tender of euro banknotes and coins (COM(2023) 364 final); and Proposal for a Regulation of the European Parliament and of the Council on the establishment of the digital euro (COM(2023) 369 final).

relevant stakeholders in the process is key to provide the necessary explanations and technical input to encourage progress in the discussions.[18]

The initiation of dedicated exchanges of views on a digital euro with the responsible member of the ECB's Executive Board before the ECON Committee of the European Parliament was a major innovation during the ninth parliamentary term. While Executive Board members have previously participated in ad hoc exchanges before the ECON Committee to explain the ECB's reasoning and decisions on specific topics, the dedicated exchanges on a digital euro are the first time that a more structured and regular engagement has been set up on a specific topic. The first public exchange of views on a digital euro took place in October 2020, and there were ten such exchanges during the ninth parliamentary term, keeping MEPs regularly informed on the progress of the digital euro project.[19] This approach is also unique in that it explicitly involves discussing design and operational aspects of a digital euro with the European Parliament before they are endorsed by the ECB's Governing Council.

During these exchanges, MEPs have shown a keen interest in various topics related to a digital euro. Throughout the ninth parliamentary term, MEPs were actively interested in the motivation behind the digital euro project and the ECB's intended timeline (Chart A). Initially, more questions were related to the possible impact that a digital euro could have on banks and payments. Over time, as the ECB's work on the project progressed and draft legislation was proposed by the European Commission, MEPs increasingly used the exchanges of views to inquire about other aspects of the design, distribution and cost of a digital euro. The regular, dedicated engagement with the European Parliament has thus not only provided MEPs with a general overview of the digital euro project but also served to foster understanding and dialogue on more detailed aspects of a digital euro, as also demonstrated by the questions becoming increasingly specific to a digital euro over time (Chart B).

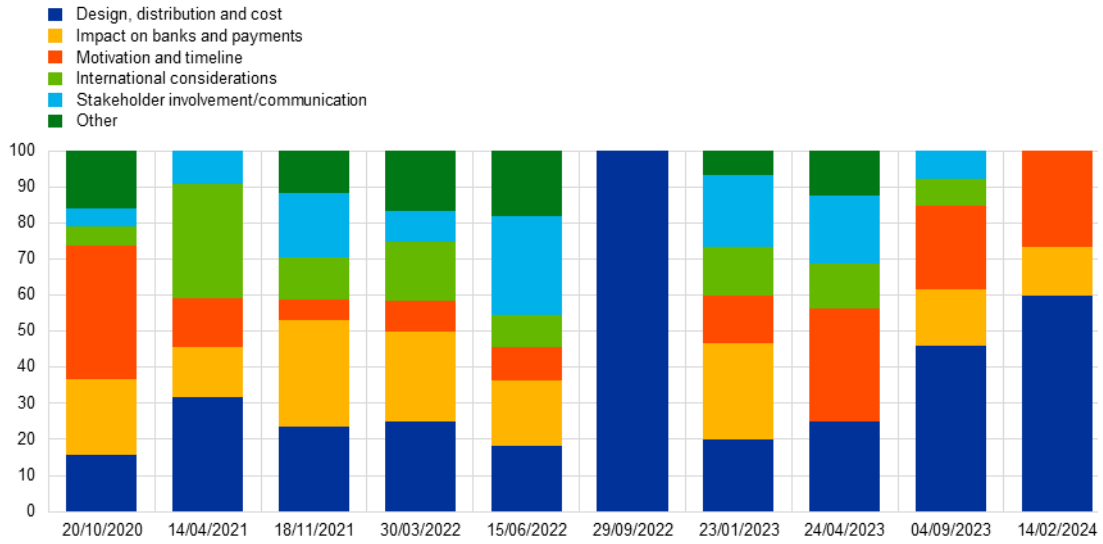
18 For more information on stakeholder engagement, see the ECB's website.

19 These exchanges are available on the ECB's website.

Chart A

Questions asked at exchanges of views on a digital euro before the ECON Committee, by topic, 2020-2024

(share of questions raised by MEPs, percentages)

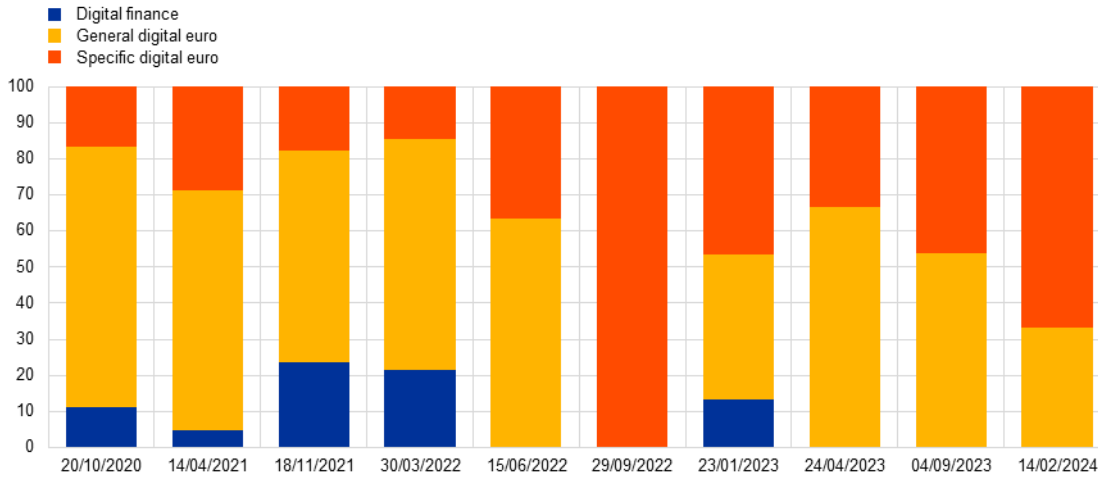


Sources: ECB calculations based on manual classification of questions raised in European Parliament public exchanges of views.
Notes: "Design, distribution and cost" refers to questions related to digital euro design aspects (e.g. privacy or technology), distribution aspects (e.g. digital euro mobile application) and costs (e.g. compensation model); "Impact on banks and payments" refers to questions that focus on how a digital euro will affect the current business models of banks (e.g. role of holding limits) and how a digital euro will co-exist with existing digital means of payments (e.g. international card schemes) or cash; "Motivation and timeline" refers to questions related to the motivation for the project (e.g. why a digital euro is needed) and the timeline for the project; "International considerations" refers to questions related to the potential use of a digital euro outside the euro area, but also other central bank digital currency (CBDC) developments around the world; "Stakeholder involvement/communication" refers to questions related to the ECB's engagement practices with all stakeholders and public communication; "Other" covers questions that fall outside the aforementioned categories.
The public exchange of views on 29 September 2022 took place only a few weeks after the publication of the selection of companies that would participate in the digital euro prototyping exercise; see "ECB selects external companies for joint prototyping of user interfaces for a digital euro", *MIP News*, ECB, 16 September 2022. This selection included Amazon, which prompted MEPs to focus all their questions on this topic.

Chart B

MEP questions over time, 2020-2024

(share of questions raised by MEPs in digital euro exchanges of views, percentages)



Sources: ECB manual calculations based on questions raised in European Parliament public exchanges of views.
Notes: "Digital finance" refers to questions targeting digital finance and digital payments in general without specifically referring to a digital euro. "General digital euro" refers to general questions on a digital euro which require basic understanding of the project. "Specific digital euro" refers to detailed questions on a digital euro which require a deeper knowledge of the project or are targeted at new aspects covered in the introductory statement by the ECB Executive Board member or in recent ECB publications.
The public exchange of views on 29 September 2022 took place only a few weeks after the publication of the selection of companies that would participate in the digital euro prototyping exercise; see "ECB selects external companies for joint prototyping of user interfaces for a digital euro", *MIP News*, ECB, 16 September 2022. This selection included Amazon, which prompted MEPs to focus all their questions on this topic.

In addition to regular ECON Committee exchanges, the ECB has further strengthened its interaction with the European Parliament by initiating additional forms of communication on a digital euro. Regular digital euro progress reports have been shared with the ECON Committee upon publication, and the ECON Chair and the Committee at large have been kept informed of all major developments via dedicated notifications.[20] The ECB has also organised multiple technical seminars with European Parliament staff to provide further technical background information on the project. Furthermore, as with other relevant legislative proposals, the ECB published two opinions on the single currency package and has engaged with MEPs working on the matter as part of the legislative deliberations.[21]

The ECB's engagement on a digital euro also extends beyond the European Parliament to other EU institutions and market stakeholders. The ECB has held regular exchanges with euro area finance ministers and has closely cooperated with the European Commission to discuss a broad range of policy, legal and technical issues arising from the possible introduction of a digital euro. In addition, given the reliance of a possible digital euro on financial intermediaries, merchants and consumers for distribution, acceptance and use respectively, the ECB is engaging extensively with all sides of the market via the Euro Retail Payments Board (ERPB).[22]

The stakeholder engagement efforts on a digital euro are tailored to the needs of the current stage of the digital euro project. The ECB is now in the preparation phase and the co-legislators are discussing the legislative proposal. The legislative proposal sets out detailed reporting requirements following the adoption of the regulation, laying the groundwork for accountability and transparency if a digital euro is launched. A digital euro is a common European project, and the ECB is committed to actively engaging with all stakeholders along the way. The ECB's Governing Council will only take a decision on the issuance of a digital euro once the legislative act has been adopted by the European Parliament and the Council.

3 Accountability interactions with the European Parliament in the period 2019-2024

The ECB interacted regularly with the European Parliament in its ninth term and even more frequently than in previous terms. The overall number of exchanges increased in the ninth parliamentary term, notably due to engagement on a digital euro, as well as other ad hoc exchanges (Chart 1, panel a). At the same time, there were 175 replies to written questions. This was lower than in the previous term, which had seen an exceptional increase, particularly in 2015 and 2016, related to the situation in Greece and the launch of quantitative easing (Chart 1, panel b).

20 See "Technical documents and research" for all experimentation, investigation and preparation work, research papers, and technical documents related to the ongoing work on a digital euro. See "All news & publications" for public letters to MEPs.

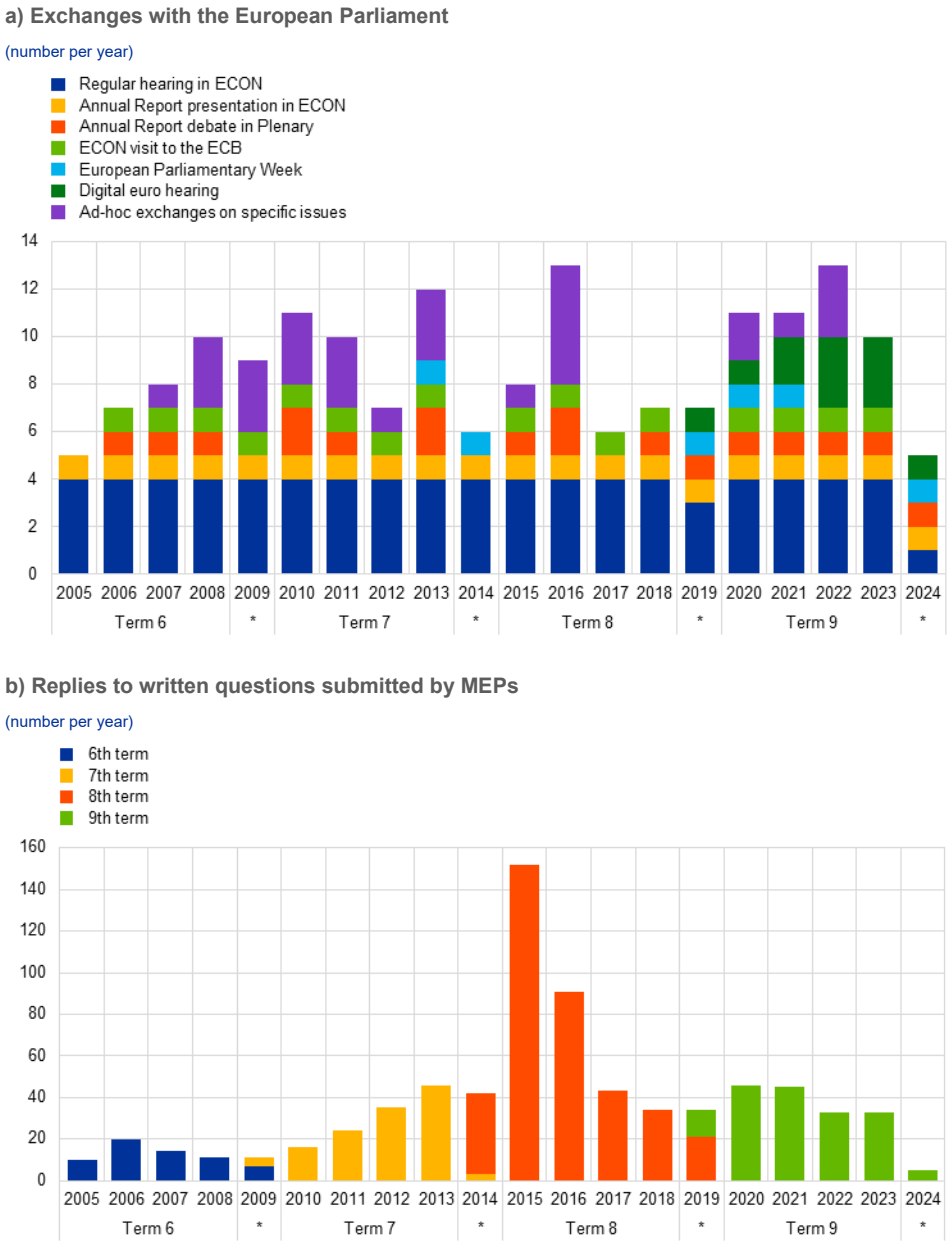
21 See Opinion of the European Central Bank of 31 October 2023 on the digital euro (CON/2023/34); and Opinion of the European Central Bank of 13 October 2023 on a proposal for a regulation on the legal tender of euro banknotes and coins (CON/2023/31).

22 The ERPB consists of high-level representatives of industry associations and represents a wide range of stakeholders. See Composition of the ERPB.

Nonetheless, MEPs made particular use of this channel in the first year of the pandemic, asking, for example, about the modalities of the PEPP.

Chart 1

Number of exchanges and replies to MEPs' written questions



Source: ECB.
Notes: Asterisks denote years in which European Parliament elections took place. Exchanges and written questions in 2024 include only those within the ninth term, with the European Parliament in recess from late April 2024 due to elections and thereafter in summer recess from the end of July to early September 2024. Each year since 2012, the European Parliament has held the European Parliamentary Week, which brings together national and EU parliamentarians to strengthen cooperation between national parliaments and the European Parliament and to contribute to ensuring legitimacy in economic governance and budgetary policy in the EU, particularly in the Economic and Monetary Union (EMU).

To understand the focus of MEPs' interactions with the ECB, we looked at the subject of their interventions in the quarterly hearings in the ECON Committee. Assessing the character of the ECB's accountability interactions with the European Parliament requires looking beyond the frequency with which these channels are

used. To understand what motivates and differentiates these interactions from each other, we looked at the topics that MEPs focused on when interacting with the ECB within the accountability framework.

With MEPs often addressing multiple questions of varying nature to the ECB in quarterly hearings, we employed a large language model to separate and classify their interventions. Our analysis is based on a full sample of 100 European Parliament transcripts from regular hearings before the ECON Committee between 1999 and 2024.[23] Within a time window allocated to them, each MEP can pose one or more questions to the ECB President, including potential follow-up questions. We used the large language model to first extract the distinct questions posed in each MEP intervention.[24] Then we used the same model to classify the topics raised in each question.[25] We allowed questions to be classified under multiple topics, owing to overlaps between related topics. MEP interventions with more than one question and/or topic were weighted such that each intervention carries the same weight overall.

MEPs use exchanges with the ECB to raise a broad set of questions touching on several issues. The range of topics raised by MEPs in quarterly hearings before the ECON Committee has typically been broad (Chart 2). The topics raised most frequently in most parliamentary terms include monetary policy, the economic situation and outlook, and economic governance. Other questions concerned ECB governance or specific issues relating to individual Member States, as well as periodic or emerging topics related to events or changes in EU or ECB policies.[26] These latter topics include banking supervision and financial stability, euro adoption, exchange rates, climate change, CBDCs and crypto-assets/stablecoins.

The prominence of different topics varies over time, with monetary policy and the economic situation and outlook taking centre stage in the ninth parliamentary term. Over time, the share of topics has fluctuated notably. Monetary policy and the economic situation and outlook were by far the most discussed topics in the ninth term. Economic governance, including issues such as the EU's fiscal

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23 We merged the datasets of Ferrara et al. and Massoc and extended the sample until 2024. We excluded Annual Report presentations before the ECON Committee and ad hoc hearings, as well as hearings on the digital euro, owing to the lack of transcripts provided, such that the sample consisted solely of quarterly hearings before the ECON Committee. See Ferrara, F.M., Masciandaro, D., Moschella, M. and Romelli, D., "Political voice on monetary policy: Evidence from the parliamentary hearings of the European Central Bank", *European Journal of Political Economy*, Vol. 74, September 2022; and Massoc, E., "How MEPs hold the ECB accountable", Inter-university Consortium for Political and Social Research, June 2022.

24 Distinct questions are ones that address different specific issues or explore different angles. Follow-up questions where MEPs raise an additional question, rather than solely clarifying a previous question, are treated as separate interventions. The classification instructions further specify that questions are to be taken as verbatim from the intervention and that rephrased questions with the same meaning (effectively duplicates) from the same MEP are to be counted only once. We provide the model (OpenAI's "GPT-4o mini") with the full intervention of each MEP, with the instruction to consider as context also the non-question parts of the intervention to determine the question split and the topic. We also specify that interventions typically include between one and three questions per intervention, although in rare cases this number can be higher, and in exceptional cases an intervention may not include any questions at all. The average number of questions in an intervention is 2.12, with over 90% of interventions including between one and three questions.

25 We provided a range of 11 topic categories.

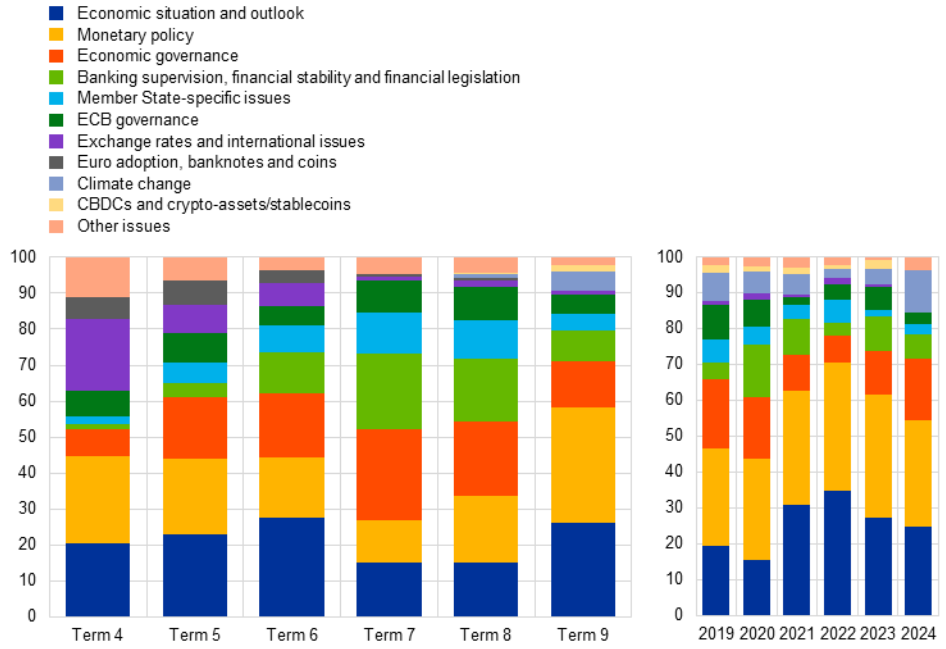
26 Member State-specific issues include topics such as financial assistance programmes, country-specific economic or financial developments, and the Brexit process.

framework, also remained a relatively popular topic of discussion, albeit less frequent than in previous terms. These three topics alone accounted for around 70% of the questions raised in the ninth term, which was a greater concentration of topics than in previous terms. By contrast, MEPs posed fewer questions on banking supervision and financial stability and Member State-specific issues in the ninth term. At the same time, the number of questions on climate change increased as climate change gained in prominence in the EU's policy agenda and the ECB took measures to incorporate climate change into its own policies.

Chart 2

Topics raised at quarterly ECON Committee hearings, by parliamentary term and by year in the ninth term

(share of questions raised by members of the European Parliament, percentages)



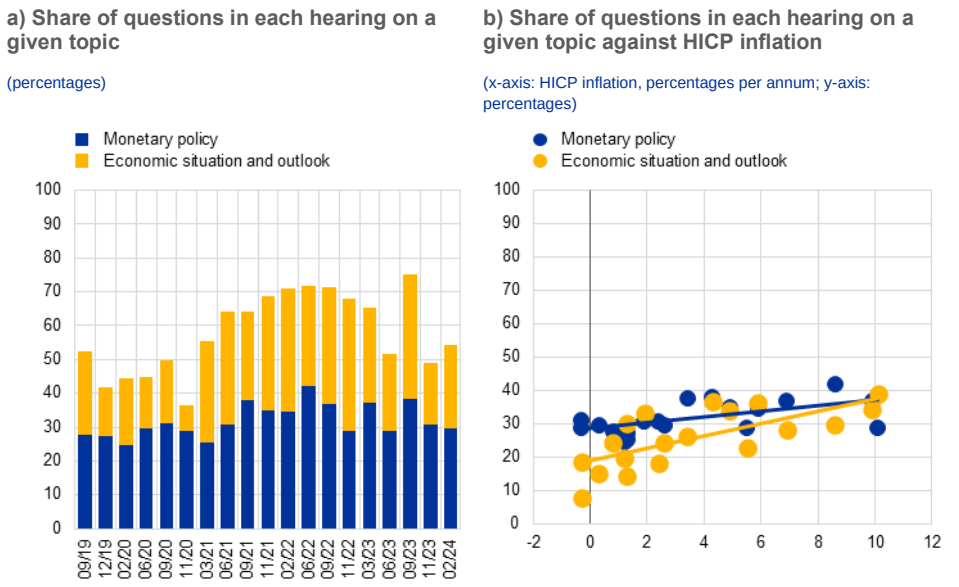
Source: ECB calculations.
Notes: Based on 100 hearings before the ECON Committee between 1999 and 2024. During the classification, the model produces a few outliers that are not automatically placed in any of the predefined topic categories. These represent less than 1% of MEP questions overall and have been placed in the relevant categories manually.

In the hearings that took place in the ninth parliamentary term, questions on monetary policy and especially the economic situation became more frequent as euro area inflation increased. The onset of the pandemic and the launch of the PEPP in March 2020 were followed by a slight increase in questions on monetary policy (Chart 3, panel a). There was another uptick at the September 2021 hearing, which was the first hearing after the announcement on the strategy review in July 2021. Then, as euro area inflation started rising to historic levels following the pandemic and Russia's invasion of Ukraine, the share of questions on monetary policy increased further – peaking at around 40% in June 2022 when the Governing Council indicated its intention to raise rates. From 2021 onwards MEPs also asked about the economic situation and outlook more frequently, particularly following the significant rise in inflation. Hearings that took place when inflation was high featured

a greater number of questions on the economic situation and, albeit to a lesser extent, on monetary policy (Chart 3, panel b).[27,28]

Chart 3

Share of questions from MEPs on monetary policy and the economic situation in individual hearings and against HICP inflation (2019-2024)



Source: ECB calculations.
Note: Based on hearings before the ECON Committee during the ninth parliamentary term. Solid lines in panel b are linear trend lines fitted on the data.

Questions often touched on both monetary policy and the economic situation. Monetary policy, like other topics, was more often mentioned in combination with another topic than on its own. In the ninth parliamentary term, around 80% of MEP questions touched upon two topics, with around 20% touching upon only one topic.[29] Looking more deeply at such multi-topic questions, those touching upon both monetary policy and the economic situation were the most common combination in the ninth term (33% of all questions; Chart 4). However, topics also cluster in several other ways, reflecting a rich accountability dialogue and the interconnectedness of policy fields. Questions touching on both monetary policy and economic governance (9%) and on monetary policy and climate change (4%) were also relatively frequent,

27 This link also largely holds over the full sample of hearings over the last 25 years. The correlation between the share of questions on monetary policy and HICP inflation for the full sample of hearings between 1999 and 2024 is 0.42. This correlation rises to 0.58 in the ninth parliamentary term. The correlation with the share of question on the economy is 0.50 for the full sample and 0.71 for the ninth parliamentary term. The difference between the share of questions on monetary policy and the share of questions on the economic situation and outlook in the ninth parliamentary term is statistically significant at the 90% confidence level.

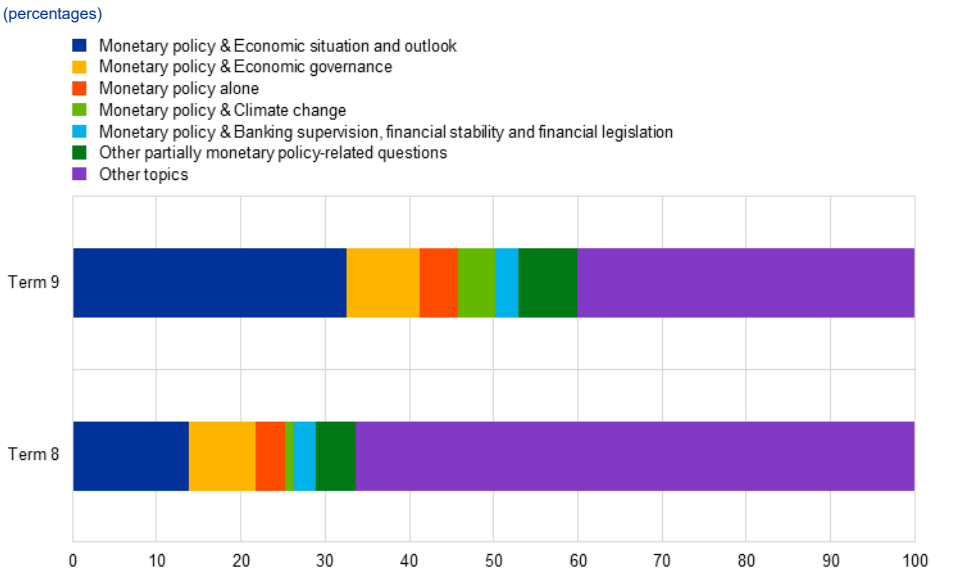
28 These findings align with findings in the literature that parliamentary hearings of the ECB, the Federal Reserve System and the Bank of England tend to focus on the statutory objective of the central bank and that this focus increases when inflation deviates from the central bank's target. Sentiment is also more negative when the distance between inflation and the central bank's inflation target increases, and more so for inflationary deviations than for deflationary deviations from target. See Fraccaroli, N., Giovannini, A., Jamet, J-F. and Persson, E., "Central Banks in Parliaments: A Text Analysis of the Parliamentary Hearings of the Bank of England, the European Central Bank, and the Federal Reserve", *International Journal of Central Banking*, Vol. 19(2), June 2023, pp. 543-600.

29 Over the course of the parliamentary terms, the share of such two-topic questions has risen steadily, while questions touching upon more than two topics have remained very rare.

underlining this interconnectedness. Compared with the eighth parliamentary term, the share of questions on both monetary policy and the economic situation rose substantially (up from 14% in the eighth term, when it was also the most frequent topic combination), reflecting the economic shocks during the ninth parliamentary term and their implications for monetary policy.[30]

Chart 4

Share of monetary policy-related questions at quarterly ECON Committee hearings in the eighth and ninth parliamentary terms



Sources: ECB calculations.
Notes: Based on 100 quarterly hearings before the ECON Committee between 1999 and 2024. Topic combinations that include both monetary policy and another topic, but which represent less than 2.5% of questions on average over the eighth and ninth parliamentary term, are grouped into "Other partially monetary policy-related questions".

Box 2
ECB accountability in banking supervision

Prepared by Laudine Goumet and Lise Handal

The establishment of the Single Supervisory Mechanism (SSM) and the subsequent establishment of ECB Banking Supervision in 2014 were accompanied by the introduction of a dedicated accountability framework.[31] The SSM Regulation[32] states that ECB Banking Supervision is accountable to the European Parliament and the Council of the EU. These provisions are further specified in the Interinstitutional Agreement between the European Parliament and the ECB and the Memorandum of Understanding with the Council of the EU. Their practical application is further explained in the ECB Annual Report on supervisory activities.[33]

30 In the eighth term, a further 11% of questions related to both economic governance and Member State-specific issues, while 8% of questions jointly related to economic governance and monetary policy.

31 See Article 127(6) TFEU.

32 Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions (OJ L 287, 29.10.2013, p. 63).

33 See ECB Annual Report on supervisory activities 2023, in particular Chapter 5 on the organisational set-up of ECB Banking Supervision.

This box provides an overview of ECB Banking Supervision's accountability to the European Parliament, which is subject to specific arrangements and distinct from the ECB's central banking accountability, and highlights trends in supervisory accountability interactions during the ninth parliamentary term. In practice, both formal and informal channels ensure ECB Banking Supervision's accountability to the European Parliament (see Table A). That accountability is distinct owing to ECB Banking Supervision's unique mandate and the structure of the banking union, in which national competent authorities supervise less significant banks. Among other considerations, the diversity of supervisory tools, the absence of a single quantifiable supervisory objective, and banking data confidentiality create distinct scrutiny challenges. Consequently, ECB Banking Supervision's accountability includes more informal, closed-door exchanges with the European Parliament than occur on the central banking side, as well as additional rights for national parliamentarians.[34]

Table A

Accountability channels between ECB Banking Supervision and the European Parliament (formal and informal)

Category	Accountability channels
Requirements under the Interinstitutional Agreement	
Section I.1	The ECB shall submit an annual report on supervisory activities to the European Parliament, the EU Council, the Commission and the Eurogroup and present it in the format of a public hearing before the ECON Committee.
Section I.2	The ECB shall participate in biannual ordinary public hearings before the ECON Committee.
Section I.2	The ECB may be invited for ad hoc exchanges and confidential meetings with the ECON Committee.
Section I.3	The ECB shall respond to written questions from MEPs.
Section I.4	The ECB shall also forward to the European Parliament a meaningful record of the Supervisory Board proceedings, including annotated decisions.
Informal practices	
Since 2015	Yearly invitation of ECON Committee members to the ECB with a session dedicated to banking supervision.
Since 2017	ECB Banking Supervision response to the European Parliament's Banking Union Annual Report resolution.
Since 2020	Transmission of a quarterly updated list of significant institutions and ECB Banking Supervision public consultation information.
Regularly	Bilateral meetings with MEPs.

Sources: Interinstitutional Agreement and ECB staff analysis.
Note: Informal practices are the informal channels of accountability between the European Parliament and the ECB, established and maintained on a voluntary basis without a legal mandate.

In the ninth parliamentary term, the Chair of the Supervisory Board received 51 letters from MEPs and attended 15 public hearings, including both regular hearings and ad hoc exchanges.[35] The Chair also participated in 12 closed-door meetings with members of the Banking Union Working Group. These closed-door meetings are not public and are excluded from this assessment.

The number and topics of MEPs' questions in letters and public hearings have varied over time and have been largely event-driven, reflecting salient political and banking sector issues. While public hearing questions have remained stable owing to regular scheduling, the volume of letter-based questions declined during the ninth term, a trend also observed on the ECB's central banking side

[34] These closed-door sessions (also called in-camera meetings) are usually held with the members of the Banking Union Working Group, a specialised subgroup of the ECON Committee that focuses on issues related to the banking union. This includes the oversight and regulation of banks within the euro area, with particular attention paid to the SSM and the Single Resolution Mechanism (SRM).

[35] Typically, the Chair is invited to three hearings per year, though only two occurred in 2020 owing to the pandemic, while one ad hoc hearing was held in March 2023 jointly with the Chair of the European Banking Authority to discuss the collapses of Silicon Valley Bank and Credit Suisse.

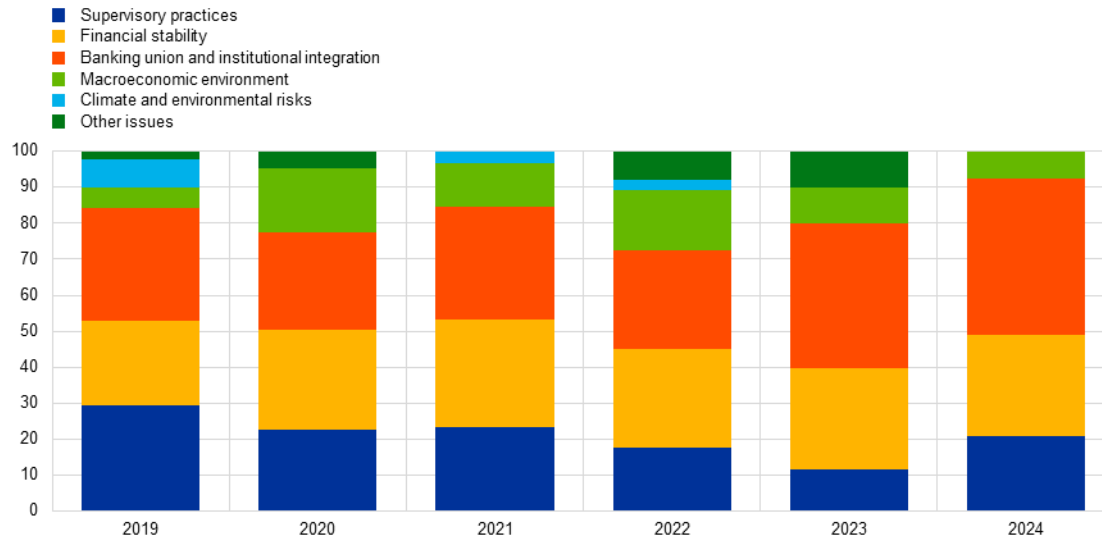
(Chart A).[36] As shown in Chart A, based on large language model classification, MEPs seem to prefer the immediacy and public nature of hearings for discussions on EU policy and key banking union matters (representing 33% of all questions in hearings), risks to financial stability (28%) and supervisory practices (21%). Questions were driven in particular by the pandemic, Russia's war on Ukraine and the 2023 market turmoil. On the other hand, MEP letters concerned more specific and less immediate matters, such as questions on ex post supervisory decisions (representing 43% of all questions in letters), risks to the financial sector and the corresponding supervisory approach (24%), and questions about specific cases concerning individual banks (17%).

Chart A

Shares of questions asked in public hearings and absolute numbers of questions asked by MEPs by letter to the Chair of the Supervisory Board each year during ninth term of the European Parliament

a) Topics of questions in public hearings before the ECON Committee

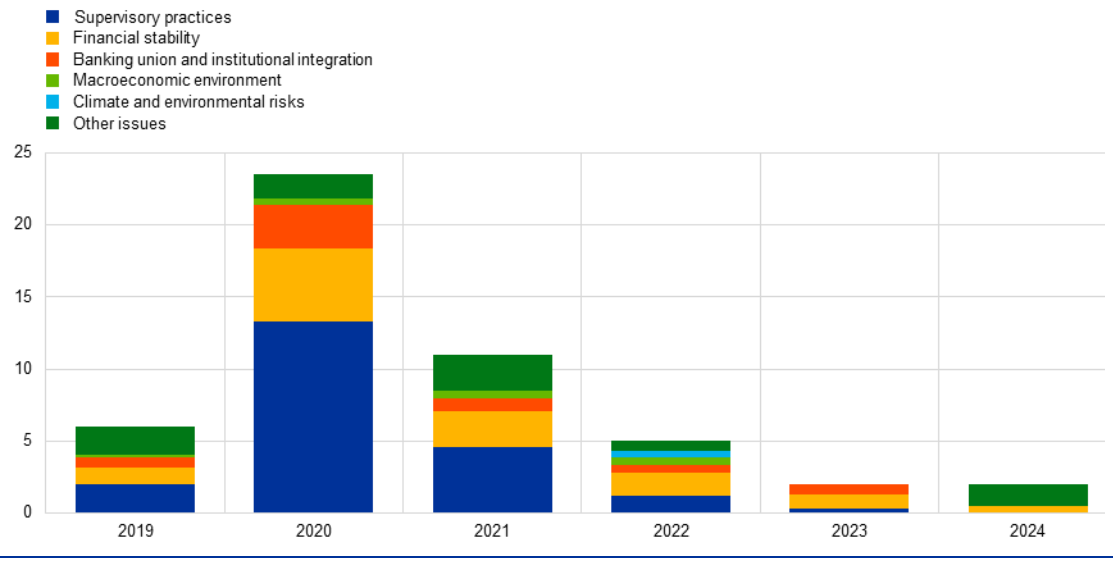
(percentages)



[36] Note that only the period from July (the beginning of the ninth term) to December has been taken into account for the year 2019.

b) Topics in written questions from MEPs

(number of letters)



Source: ECB calculations.
Notes: Panel a) shows weighted percentages of questions asked at the ordinary and ad hoc public hearings to which the Chair of the Supervisory Board was invited: three hearings in 2019, two in 2020, three in 2021, three in 2022, four in 2023 and one in 2024. Panel b) shows the overall number of written questions sent by MEPs during the ninth parliamentary term, with topic shares within that number reflecting a weighting based on the number of questions and topics in each letter. The category "Other issues" includes questions pertaining to consumer protection and individual banks.

4 Conclusion

The intensification of interactions between the ECB and the European Parliament during the ninth parliamentary term underlines the ECB's commitment to being accountable for its policies. These interactions went beyond merely fulfilling procedural requirements between the ECB and the European Parliament, enhancing the quality and depth of the two institutions' engagements. The signing of the Exchange of Letters between the Presidents of the ECB and the European Parliament in June 2023 represented a milestone in codifying the ECB's accountability arrangements vis-à-vis the European Parliament and is a testament to their mutual commitment to ensuring robust accountability of the ECB. Moreover, by addressing specific issues through flexible formats and dedicated hearings throughout the parliamentary term, the ECB remained responsive to evolving challenges and scrutiny demands. One key innovation in this regard during the ninth term was the introduction of regular public exchanges on a digital euro, but the number of other ad hoc exchanges of views also increased. Similarly, the ECB and the European Parliament sought to make the regular hearings of the ECB President more interactive. Together, these innovations also increased the transparency of the ECB's actions and improved its outreach to citizens and their representatives.

An active and flexible accountability dialogue with the European Parliament will continue to be crucial as the ECB navigates economic uncertainties and structural transformations of the euro area and the global economy. The accountability arrangements agreed in the Exchange of Letters, as well as the precedent of intensive interactions and innovations in the engagement with the European Parliament over the ninth parliamentary term, also provide a firm basis for

a robust accountability dialogue as the ECB responds and adjusts to future challenges, be they of a cyclical or more structural nature. Jointly with the European Parliament, the ECB will ensure that its accountability practices continue to meet scrutiny demands, ensuring the democratic legitimacy of all its actions.

2 The Survey on the Access to Finance of Enterprises: monetary policy, economic and financing conditions and inflation expectations

Prepared by Annalisa Ferrando, Sara Lamboglia, Judit Rariga, Nicola Benatti and Ioannis Gkrintzalis

1 Introduction

The Survey on the Access to Finance of Enterprises (SAFE) provides a comprehensive overview of the economic and financing conditions of firms across the euro area.[1] The SAFE, launched in 2009, is a euro area survey conducted jointly by the European Central Bank (ECB) and the European Commission. It gives crucial insight into the financing conditions of firms, their economic performance, and, more recently, their expectations with regard to selling prices, wages, number of employees and overall consumer price inflation in the euro area. The survey provides the ECB with highly informative data that feeds directly into the monetary policy decision-making process.

The survey provides extensive and useful coverage of euro area enterprises, with a particular focus on small and medium-sized enterprises (SMEs). In spite of the significant role played by SMEs in driving economic growth and employment, data on the financing decisions of SMEs have tended to be rather scarce. Given that SMEs depend chiefly on bank financing, this survey provides important information on the bank-based transmission of monetary policy.

Analyses based on SAFE data have consistently demonstrated that monetary policy affects firms' perceptions of current financing conditions, as well as their expectations of the future availability of external financing. These perceptions and expectations are critical given that they influence the real economic performance of firms, as reflected in their investment and employment decisions, and in overall GDP growth in the euro area.

New quantitative questions on the pricing and cost expectations of firms now provide additional information, enhancing the importance of the survey in policymaking. This survey therefore enriches existing ECB surveys on the inflation expectations of households, economists and market participants with its data on the consumer price inflation expectations of firms, as well as with its questions on firms' expected selling prices and wages.[2]

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1 This article covers the survey results from the third survey round, from April to September 2010, and until the 31st survey round, from April to June 2024.

2 The ECB collects information on inflation expectations from households through the Consumer Expectations Survey; from professional economists through the Survey of Professional Forecasters and from market participants through the Survey of Monetary Analysts.

In 2024 the frequency of survey rounds was increased from twice yearly to quarterly in response to the need for more timely data. This has enabled more recent data to be captured, which is of particular importance during periods of economic turbulence and rapid policy shifts, as well as the inclusion of ad hoc questions on highly relevant topics, such as the impact of climate change or factors influencing changes in the average hours worked.[3]

This article is structured as follows. Section 2 illustrates how monetary policy affects firms' access to finance, followed by a box examining the co-movements of SAFE-based indicators and financial market indices. Section 3 focuses on the impact of economic crises on the performance of firms, with Section 4 exploring future GDP developments. Finally, Section 5 presents the new modules on firms' expectations for selling prices, wages and inflation.

2 Evidence of transmission of monetary policy to firms' access to finance

The price- and quantity-based financing indicators derived from the survey data help measure monetary policy effects on firms' financing conditions. These indicators specify the changes perceived by firms in the pricing and terms and conditions of financing, including bank interest rates and other costs of bank financing such as charges, fees and commissions. Firms also report perceived changes in terms of the supply of and demand for bank loans, as well as the financing gap between supply and demand.[4] The expectations of firms regarding future changes in the availability of bank loans in the coming six months, as well as the availability of other sources of external financing, are also included in the survey's questionnaire.

Survey-based indicators of financing conditions at firm level provide insight into the "downstream" stages of monetary policy transmission. At the initial "upstream" stages of this mechanism, there is the pass-through of the ECB's key policy interest rates to risk-free interest rates and sovereign yields. Changes in market funding costs[5] influence, either directly or indirectly (e.g. via banks), firms' "downstream" funding costs and volumes, including financing gaps. Box 1 shows that financial market variables strongly co-move with the financing gap and contribute to its dynamics over time.

From 2010 to date, survey data show that firms' perceptions of their financing conditions can be broken down into four key phases (Charts 1 and 2). These

3 See the box entitled "Climate change and euro area firms' green investment and financing – results from the SAFE", *Economic Bulletin*, Issue 6, 2023, and the SAFE report for the second quarter of 2024.

4 For further details on the financing gap indicator introduced in 2013, see Ferrando, A. et al., "Measuring the opinion of firms on the supply and demand of external financing in the euro area", *IFC Bulletin,* No 36, Bank for International Settlements, 2013, and Box 1 of this article.

5 Firms incur these market funding costs when raising capital through financial markets, such as by issuing bonds or equities.

phases broadly reflect the ECB's monetary policy decisions over that time.[6] The first phase, from the launch of the survey until the first quarter of 2014, consisted of the introduction of several non-standard policy measures and the announcement of the Outright Monetary Transactions programme. The second phase, from the second quarter of 2014 to shortly before the outbreak of the COVID-19 pandemic, was when the ECB expanded its toolkit to ease financing conditions. The third phase began with the outbreak of the pandemic and ended before the first ECB policy rate increase in July 2022.The last phase was marked by multiple ECB interest rate increases in response to a sharp surge in inflation and expectations of sustained high inflation.

During the first phase, a high but declining net percentage of firms reported rising interest rates (Chart 1) and positive financing gaps (Chart 2). The sovereign debt crisis primarily negatively affected bank loan availability, given that banks faced difficulties obtaining liquidity from the wholesale market, resulting in diverging lending conditions across euro area countries. To address these challenges, the ECB introduced various non-standard monetary policy measures and cut its interest rates. The "whatever it takes" speech by former President Mario Draghi at the end of July 2012, and the subsequent announcement of the Outright Monetary Transactions programme, marked a turning point for the euro area, leading to an immediate contraction in sovereign bond spreads to more sustainable levels. This decline mitigated banking sector funding problems, restored bank lending dynamics and improved overall financing conditions. By the end of this phase, in net terms, firms reported declining interest rates and positive, but lower, financing gaps, indicating improved access to bank loans (i.e. the supply of loans exceeded the demand for loans).

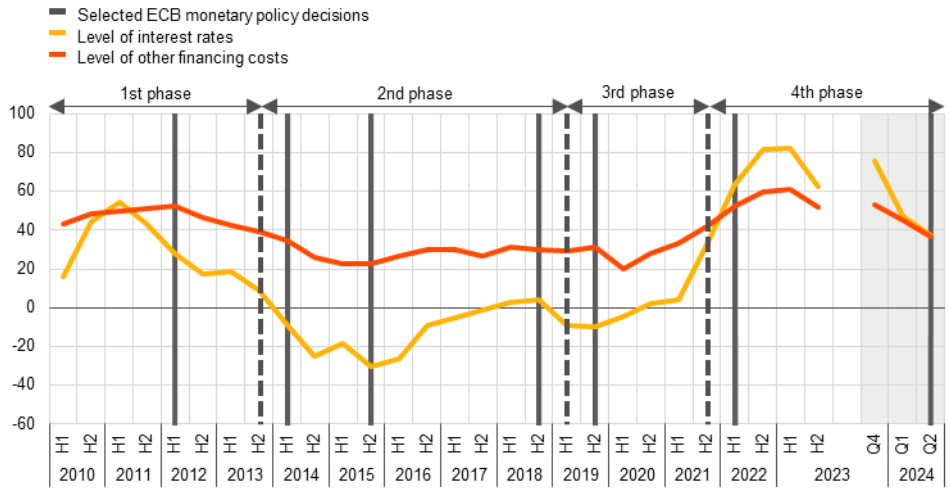
6 For a detailed discussion of the ECB's monetary policy decisions during these periods see Lane, P.R., "The 2021-2022 inflation surges and monetary policy in the euro area", *The ECB blog*, 11 March 2024, and Rostagno, M., Altavilla, C., Carboni, G., Lemke, W., Motto, R., Saint Guilhem, A. and Yiangou, J., "Monetary Policy in Times of Crisis: A Tale of Two Decades of the European Central Bank", Oxford University Press, 2021.

Chart 1

Changes in bank loan pricing and terms and conditions

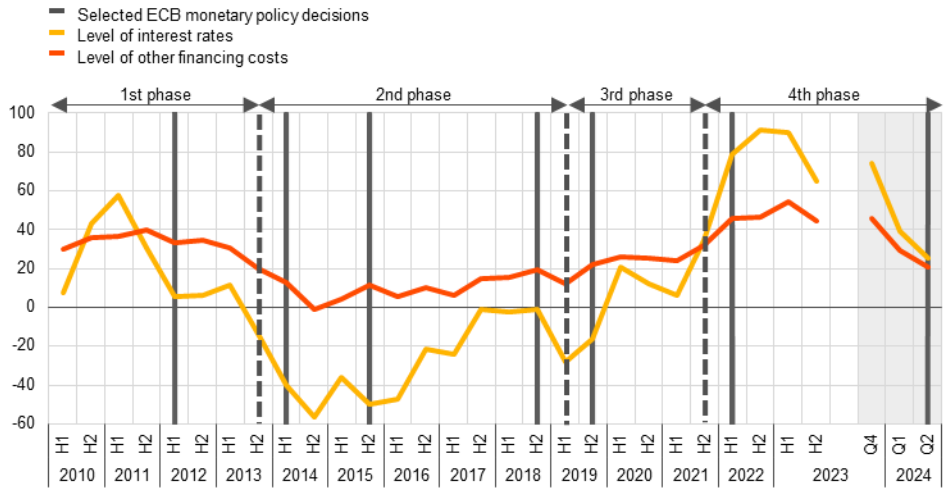
a) Small and medium-sized enterprises

(net percentages)



b) Large firms

(net percentages)



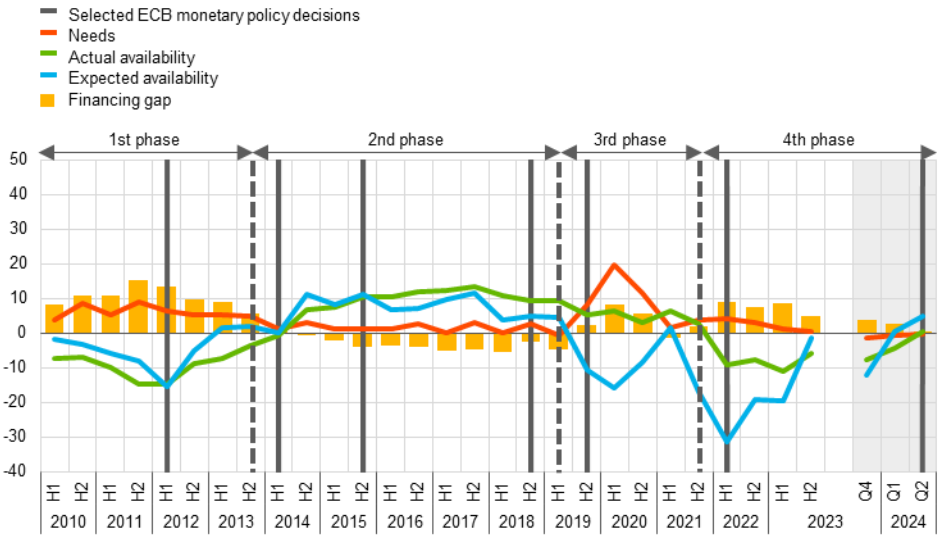
Source: Survey on the Access to Finance of Enterprises.
Notes: The figures are based on firms that applied for bank loans (including subsidised bank loans), credit lines, or bank or credit card overdrafts. Respondents who replied "not applicable" or "don't know" have been excluded. Net percentages are the difference between the percentage of firms that reported an increase for a given factor and the percentage that reported a decrease. On the x-axis, H1 stands for the reference period from the second to the third quarter and H2 for the reference period from the fourth quarter to the first quarter of the following year. The grey-shaded segments of the charts reflect responses to the same question but on a quarterly basis. The dotted vertical lines indicate different phases of financing conditions. The first phase begins with the launch of the survey and ends in the first quarter of 2014; the second phase spans from the second quarter of 2014 to shortly before the outbreak of the COVID-19 pandemic; the third phase begins with the outbreak of the pandemic and ends in the first quarter of 2022 and the last phase starts in the second quarter of 2022. The first vertical grey line denotes the announcement of the Outright Monetary Transactions programme in September 2012; the second, the start of the first series of targeted longer-term refinancing operations (TLTRO I) and the negative interest rate policy; the third, the start of TLTRO II and the corporate sector purchase programme; the fourth, the announcement of TLTRO III; the fifth, the start of the pandemic emergency purchase programme in March 2020; the sixth, the rise of the three key ECB interest rates by 50 basis points and the approval of the Transmission Protection Instrument; the last, the cut in the three key ECB interest rates by 25 basis points in June 2024. The latest observations are for the period from October 2023 to March 2024 for the biannual series and for the second quarter of 2024 for the quarterly series.

Chart 2

Changes in needs, actual and expected bank loan availability and the financing gap

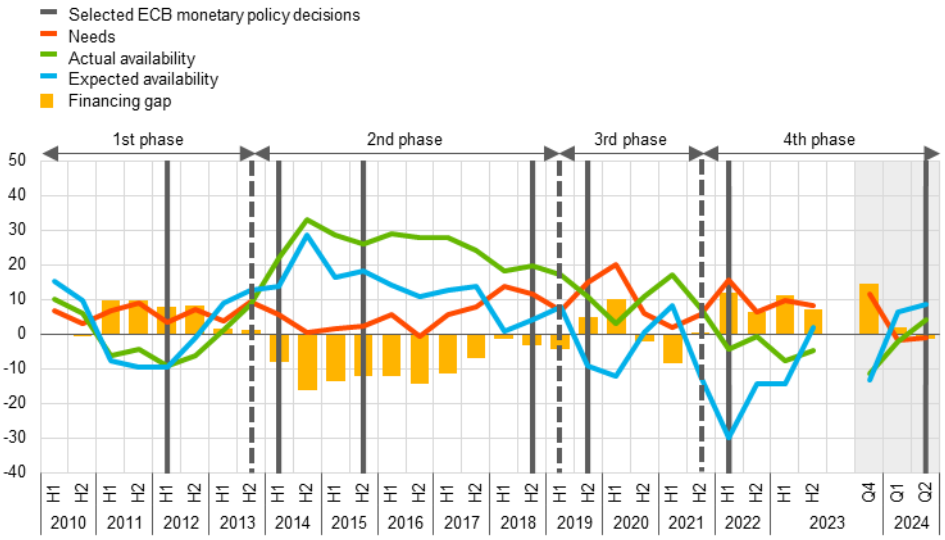
a) Small and medium-sized enterprises

(net percentages)



b) Large firms

(net percentages)



Source: Survey on the Access to Finance of Enterprises.
Note: See the Notes to Chart 1.

In the second phase, from April 2014 to shortly before the outbreak of the COVID-19 pandemic, favourable financing conditions prevailed, even though SME financing conditions had not improved as much as for large firms. During this period, the ECB expanded its monetary policy toolkit to ease financing conditions and enhance the transmission of its accommodative monetary policy stance.[7] Notwithstanding the overall loosening of financing conditions, as reflected in

[7] This phase incorporated the introduction of negative rates in June 2014, the start of the targeted longer-term refinancing operations (TLTRO I) in September 2014, the launch of TLTRO II and TLTRO III, together with the corporate sector purchase programme.

the negative financing gaps, fewer SMEs than large firms reported declining interest rates. This highlights the different risk assessments that banks applied to various firm size classes.

The third phase, from the outbreak of the pandemic until March 2022, was marked by high economic and geopolitical uncertainty, with firms signalling greater demand for external financing. At the peak of the pandemic, firms reported a noticeable spike in the demand for bank loans. Although the ECB and euro area governments intervened swiftly, there was a time lag before these actions could take effect and ultimately ease the liquidity constraints that firms faced as a result of lockdown measures.[8] Firms reported that access to bank loans had increased, but this did not prevent an increase in financing gaps. After the outbreak of the pandemic, SMEs reported declining interest rates, while large firms fairly soon began to report signs of increases. This disparity likely reflects the fact that most of the public intervention schemes announced during the early stages of the pandemic were targeted at SMEs. Overall, by the end of the third quarter of 2021 (H1 2021 in Charts 1 and 2), financing conditions had begun to improve. However, this phase ended with a slowdown in economic activity, amid heightened geopolitical uncertainty linked to the war in Ukraine, and a widespread reassessment of risk perceptions by banks. These factors led to tighter lending conditions in terms of interest rates and a fall in credit supply already in early 2022, before the first policy rate hike by the ECB in July 2022.

The fourth phase, starting in April 2022, saw high financing gaps and the largest recorded net share of firms to have reported increases in interest rates since the survey began. Already in the first quarter of 2022, hence prior to the ECB's initial interest rate hike in July 2022, 6% of euro area banks tightened their credit standards, as indicated in the ECB's euro area bank lending survey on loans to non-financial corporations. This percentage rose further in anticipation of the initial step in the ECB's tightening cycle, which was in the third quarter. By the end of 2022, the percentage of banks that tightened their credit standards had climbed to 27% and it remained at that level in the first quarter of 2023.[9] At the same time, most firms, irrespective of their size, reported in the SAFE net increases in interest rates, with the highest net percentage ever to be recorded since the survey began. The reported financing gap widened and was mainly driven by a decline in the availability of external financing, reflecting the broad-based pass-through of monetary policy tightening.

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8 At the peak of the pandemic, the ECB announced widespread measures to support the functioning of credit markets, such as the recalibration of conditions for TLTRO III operations with highly accommodative conditions for banks, the expansion of the asset purchase programme and the start of the pandemic emergency purchase programme. European governments responded to the outbreak of the pandemic by deploying large fiscal packages. For further details of these packages, see the box entitled "The impact of fiscal support measures on the liquidity needs of firms during the pandemic", *Economic Bulletin*, Issue 4, ECB, 2021.

9 See Euro area bank lending survey and the article entitled "Happy anniversary, BLS – 20 years of the euro area bank lending survey", *Economic Bulletin*, Issue 7, ECB, 2023. Additionally, see Ferrando A., Holton, S. and Parle, C., "The transmission of bank credit conditions to firms – evidence from linked surveys", *Working Paper Series*, No 2975, ECB, 2024, for insights on the impact of bank credit standards on firms' access to finance.

The new quarterly survey data indicate that since the last quarter of 2023 firms have reported slight improvements in financing conditions, albeit the conditions remaining tight.[10] This is the period when the tightening of the monetary policy stance came to an end and expectations of an easing gradually emerged. Between the last quarter of 2023 and the second quarter of 2024, the net percentage of firms that reported increases in interest rates nearly halved. At the same time, the financing gap narrowed, falling to zero for SMEs and turning from positive to slightly negative for large firms. This was primarily on account of the increased availability of bank loans across firm size classes, which was more pronounced for large firms.

The expectations by firms of future credit availability play an important role in the "bank lending channel" of monetary policy.[11] Firms are also asked about their expectations concerning the availability of credit over the next six months. As illustrated in Chart 2, changes in expected bank loan availability are a reliable indicator of the shifts in actual access to external financing in subsequent periods.

Monetary policy decisions greatly influence expectations of future credit supply and financing gaps. A tightening of monetary policy lowers firms' expectations of the availability of future bank loans, which in turn affects their real decisions, even before any actual change in credit conditions occurs.[12] Moreover, it is seen to widen firms' financing gaps and lower their expectations about future bank loan availability (Chart 3).[13] These effects can persist up to two years following a shock, demonstrating the significant impact of monetary policy on firms' financing conditions via the credit supply channel. In addition, other empirical analyses show that firms closely monitor the ECB's monetary policy when policy announcements are made but react to them differently depending on their news content.[14] When the news content is moderate or perceived as positive for the availability of bank loans, firms react less quickly and are less concerned. However, when the announcements involve significant shocks and convey negative news regarding credit availability, firms respond swiftly by adjusting their bank loan expectations.

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10 The most recent wave of survey responses available for this article covers the second quarter of 2024 and was conducted between 28th May and 20th June. Therefore, the impact of the interest rate change in June 2024 cannot be fully assessed.

11 For seminal papers on the bank lending channel, see Bernanke B. and Blinder A., "Credit, Money and Aggregate demand", *The American Economic Review*, Vol. 78, No 2, American Economic Association, May 1988, pp. 435-439, and Kashyap, A.K. and Stein, J.C., "The impact of monetary policy on bank balance sheets", *Carnegie-Rochester Conference Series on Public Policy*, Vol. 42, Elsevier, June 1995, pp. 151-195.

12 See Ferrando, A., Popov, A. and Udell, G., "Unconventional monetary policy, funding expectations, and firm decisions", *European Economic Review*, Vol.149, Elsevier, October 2022, pp.1-24.

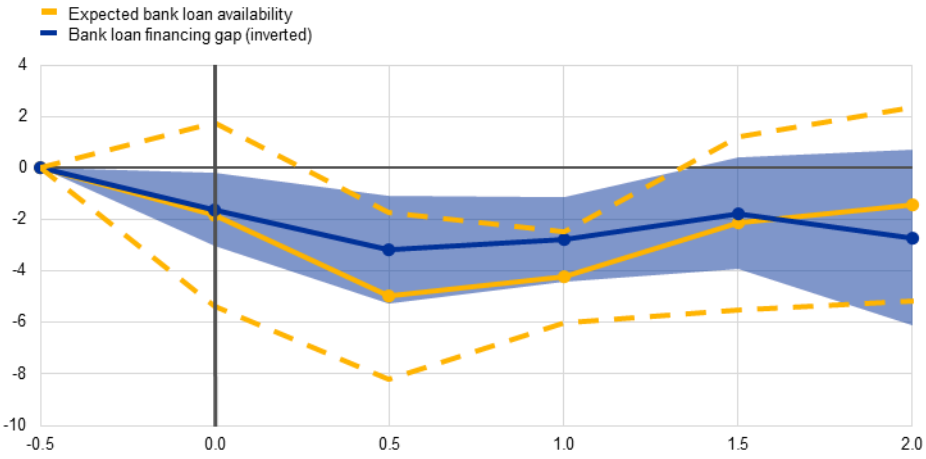
13 See the box entitled "Firms' access to finance and the business cycle: evidence from the SAFE", *Economic Bulletin*, Issue 8, ECB, 2022.

14 See Ferrando, A. and Forti-Grazzini, C., "Monetary policy shocks and firms' bank loan expectations", *Working Paper Series*, No 2838, ECB, 2023.

Chart 3

Response of financing gaps and expectations of future bank loan availability to a monetary policy shock

(x-axis: years after shock; y-axis: percentage point changes compared with period before shock)



Source: Box entitled "Firms' access to finance and the business cycle: evidence from the SAFE", *Economic Bulletin*, Issue 8, ECB, 2022.
Notes: Response of firms' financing gaps and the net percentage of firms that reported an expected increase in the availability of bank loans over the next six months after a one-standard deviation monetary policy shock. The shock used in the regression analysis is the target factor from Altavilla, C. et al., "Measuring euro area monetary policy", *Journal of Monetary Economics*, Vol. 108, Elsevier, 2019, pp.162-179. The shock captures monetary policy surprises at the very short end of the Overnight Index Swap curve in and around ECB monetary policy announcements. The effect of the monetary policy shocks on the SAFE variables are estimated using local projection methods. The shaded area and the dashed lines denote the 95% confidence intervals. The latest observations are for the period from April to September 2021.

Box 1

Linking financial market data and SAFE-based indicators of firms' financing gaps

Prepared by Sara Lamboglia

This box examines how some key financial market variables contribute to financing gap dynamics over time.

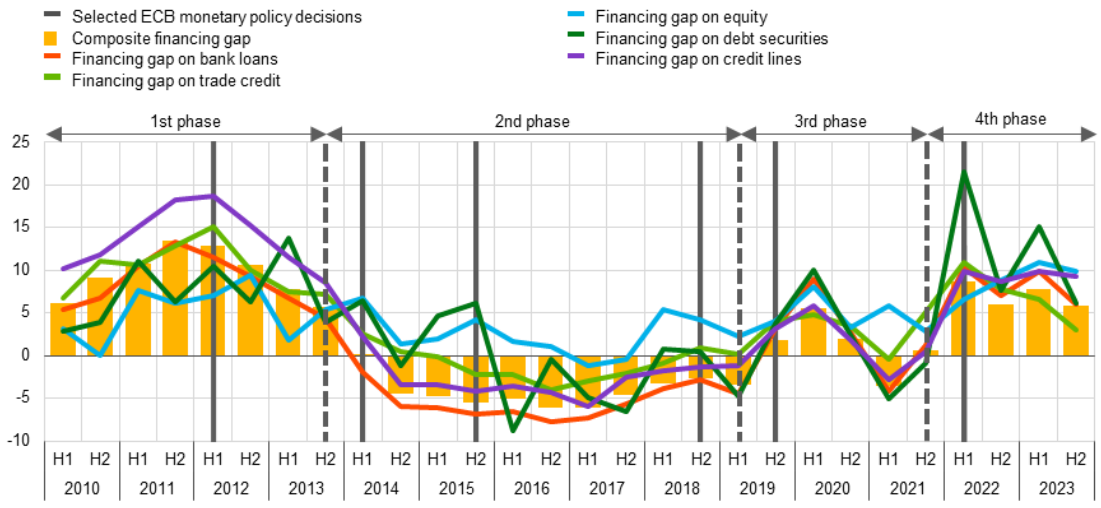
The survey provides information on changes in firms' financing gaps across various sources of external financing, such as bank loans, credit lines, trade credit, as well as equity and debt securities issuance. The composite financing gap indicator is constructed as a weighted average of the financing gaps for each individual instrument. While the composite financing gap appears to closely co-move with the financing gap for bank loans (Chart A), the discrepancy between the two measures suggests that firms may rely on various sources of external financing to support their activities.[15]

[15] See, for example, the box entitled "Substitution between debt security issuance and bank loans: evidence from the SAFE", *Economic Bulletin*, Issue 1, ECB, 2023.

Chart A

Composite financing gap of firms and its components

(net percentages)

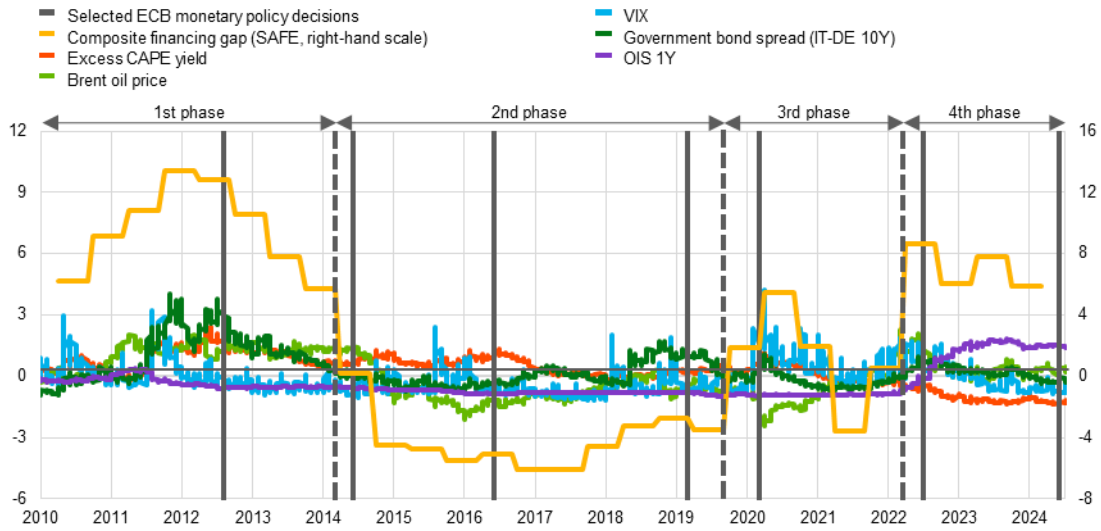


Source: Survey on the Access to Finance of Enterprises.
Notes: The financing gap indicators combine both financing needs and the availability of bank loans, trade credit, equity, securities and credit lines at firm level. For each of the five financing instruments, the indicator of the perceived change in the financing gap takes a value of 1 (-1) if the need increases (decreases) and the availability decreases (increases). If enterprises perceive only a one-sided increase (decrease) in the financing gap, the variable is assigned a value of 0.5 (-0.5). The composite financing gap is computed at firm level by adding together the financing gaps for each relevant source of financing and then dividing this total by the number of these sources. A positive value for the indicator points to an increase in the financing gap. Values are multiplied by 100 to obtain weighted net balances in percentages. See also the Notes to Chart 1. The latest observations are for the period from October 2023 to March 2024.

Chart B

Firms' composite financing gap and selected financial market variables

(left-hand scale: standard deviation; right-hand scale: net percentages)



Sources: Survey on the Access to Finance of Enterprises, Refinitiv Datastream, Bloomberg, iBoxx, ECB calculations.
Notes: The excess cyclically adjusted price-to-earnings ratio (CAPE) yield is the real excess return on European stocks relative to government bonds, the OIS1Y is the one-year Overnight Index Swap (OIS) rate, the Brent oil price is the cost per barrel of Brent crude oil, the Volatility Index (VIX) is the index that measures market expectations of future volatility based on the price of options on the S&P 500 Index, the government bond spread (IT-DE 10Y) is the difference between Italian and German 10-year bond yields. The financial market variables have daily frequencies and are shown in terms of deviations from their long-term averages. Values for the composite financing gap are those from the biannual series. For the financing gap, see the Notes to Chart A, for net percentages and for the various ECB monetary policy decisions, see the Notes to Chart 1. The latest observations are for the period from October 2023 to March 2024 for the survey and for 22 July 2024 for the financial data.

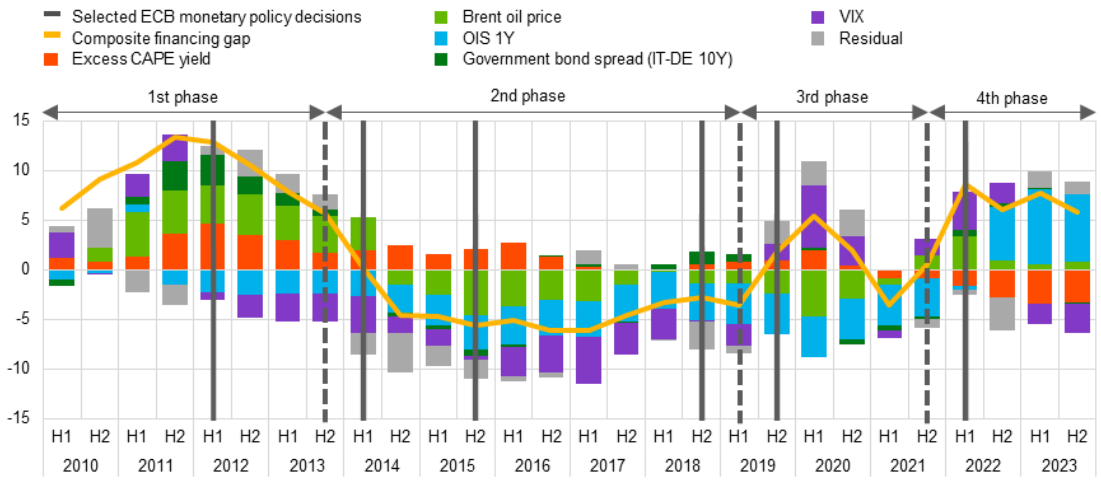
To assess the relationship between the daily financial market variables in Chart B and the composite financing gap in the SAFE, a linear model is applied to the biannual data from the SAFE.

An analysis of the estimated contributions of these variables over time provides insight into the factors that could influence changes in the composite financing gap (Chart C). Examining the four key phases of perceived financing conditions outlined in Section 2 indicates that the increase in the composite financing gap during the first phase correlates with rising oil prices and higher risk premia. In the second phase, lower uncertainty, falling oil prices and negative risk-free rates were primarily associated with a decrease in the financing gap. The third phase saw a large increase in the financing gap at the onset of the pandemic. The model attributes this change to the positive contribution of greater uncertainty. In the fourth phase, the composite financing gap reached its highest net percentage level since the sovereign debt crisis. The model ascribes the increase seen over the summer of 2022 (H1 2022 in Chart C) primarily to rising oil prices and heightened uncertainty (proxied by the Volatility Index - VIX). Thereafter, high risk-free rates were the main driver of changes in the financing gap, which shows that the ongoing transmission of monetary policy tightening had reached its “downstream” stages.

Chart C

Contribution of financial market variables to changes in composite financing gap

(net percentages)



Sources: Refinitiv Datastream, Bloomberg, iBoxx, Survey on Access to Finance of Enterprises, ECB calculations.
Notes: CAPE stands for cyclically adjusted price-to-earnings ratio, OIS IY for the one-year Overnight Index Swap rate and VIX for the Volatility Index. The chart plots the contribution of each financial market variable to the composite financing gap at each point in time. The contributions are computed using the coefficient of the regression of the composite financing gap on the financial market variables described in Chart B. The constant is omitted. The residual is the difference between the actual value of the composite financing gap and the value predicted by the model. For a description of the financial market variables, see the Notes to Chart B. The latest observations are for the period from October 2023 to March 2024. The financial market variables are aggregated to biannual frequency using averages over the same six-month periods as those of the SAFE sample.

3 Impact of economic and financial crises on firm performance

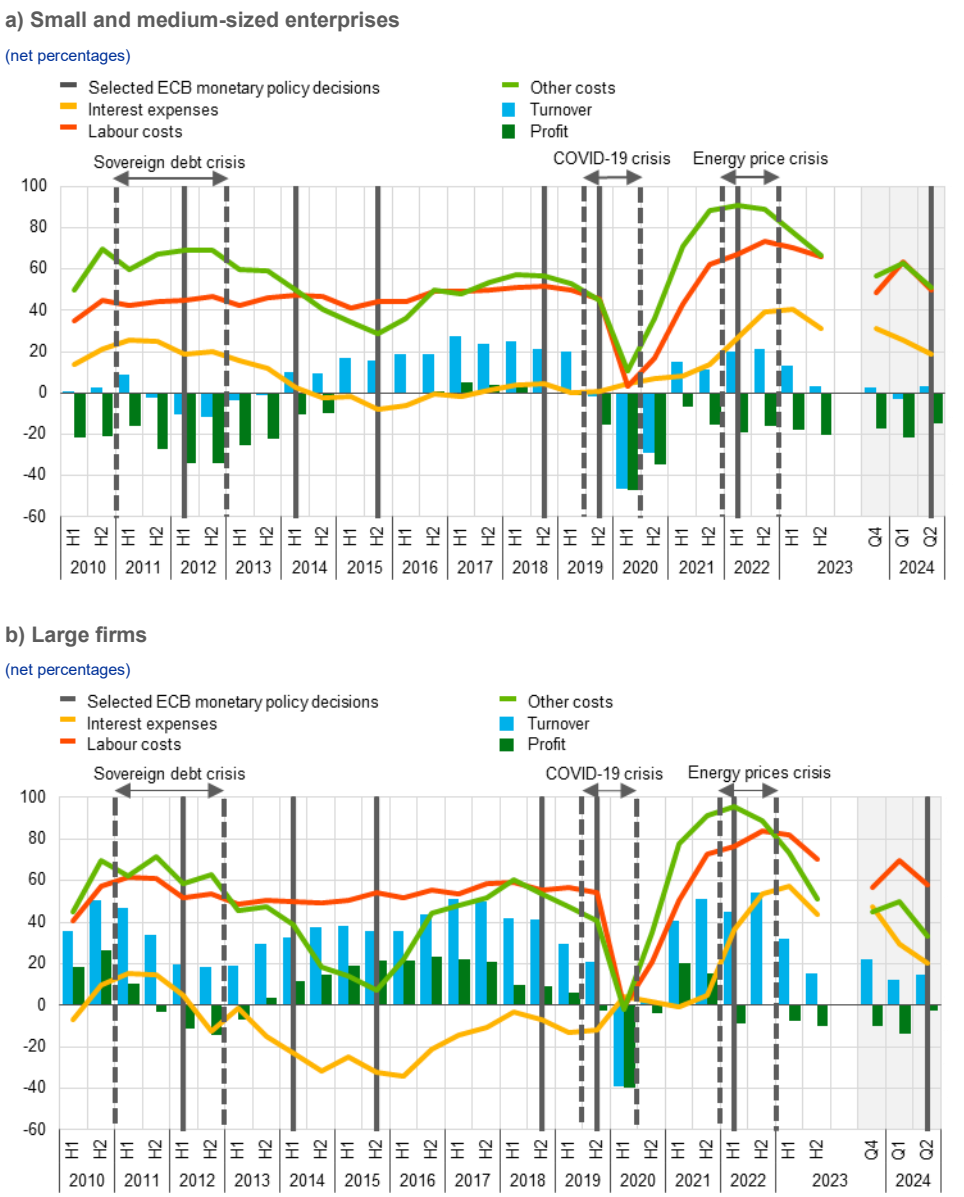
Understanding the heterogeneous effects of economic and financial crises on firms of different sizes is important for crafting effective policy responses. The impact of economic and financial crises can vary significantly between SMEs and large firms, influencing their ability to sustain operations, manage costs and recover. The SAFE provides valuable data for a granular and timely assessment of these differential effects.

The sovereign debt crisis saw a significant decline in firms' turnover and profits, while both labour and non-labour costs remained stable (Chart 4).

During this period – from the third quarter of 2011 to the first quarter of 2013 – the crisis drastically disrupted financial markets and real economic activity in the euro area. SMEs experienced a rapid decline in turnover from the onset of the crisis (Chart 4), while for large firms the economic repercussions were less severe. Throughout the crisis, the share of firms that reported higher labour, material and energy costs remained relatively stable across the two size classes. Profits declined significantly, with SMEs being the most affected by the adverse economic environment.

Chart 4

Changes in the economic situation of euro area firms



Source: Survey on the Access to Finance of Enterprises.
Notes: See the Notes to Chart 1. The latest observations are for the period from October 2023 to March 2024 for the biannual series and for the second quarter of 2024 for the quarterly series.

The outbreak of the pandemic and the subsequent economic recession had a similar negative impact on SMEs and large euro area firms, but large firms were quicker to recover (Chart 4). In spite of widespread state aid measures, firms experienced sharp declines in their turnover and profits.[16] In the first half of 2020 (H1 2020 in Chart 4), the net percentage of firms to have reported an increase in labour, raw material and energy costs also plummeted for SMEs and large firms alike, largely reflecting a fall in production-related activities. Thanks to various government guarantees for bank loans, only around 5% of firms reported an increase in interest expenses, which was similar across firm sizes. However, while large firms' economic activity stabilised between the fourth quarter of 2020 and the first quarter of 2021 (H2 2020 in Chart 4), SMEs lagged behind, still reporting a significant decrease in turnover.

In contrast to the pandemic crisis, the energy price crisis saw unprecedented increases in non-labour and labour costs, just as firms were starting to recover (Chart 4). From the second quarter of 2021, turnover broadly increased as the economy rebounded. However, euro area firms struggled to keep pace with rising input costs. Material and energy costs surged, with almost all firms reporting increases between the second and third quarter of 2022 (H1 2022 in Chart 4). Labour costs also rose considerably, as reported by a record 73% of SMEs and 84% of large firms.

Although a higher net percentage of large firms reported increases in input costs compared with SMEs, the significant rise in turnover in mid-2022 enabled large firms to offset somewhat the growing pressure on their profit margins. By contrast, SMEs reported four consecutive semesters of net decreases in profits, with the highest share of firms reporting net decreases between the second and third quarter of 2022 (H1 2022 in Chart 4).

Immediately after the energy price crisis, firms faced the steepest increase in interest expenses ever to be recorded by this survey. Following the rise in inflation and the subsequent tightening of monetary policy, the survey responses indicated that a record 58% of large firms and 40% of SMEs had experienced a rise in interest expenses.

4 Leading indicator properties for euro area activity

The composite financing gap and expectations of the availability of external financing are correlated with current and future real GDP growth in the euro area (Chart 5). An increase in euro area activities (i.e. positive real GDP growth) has usually moved in parallel with declining composite financing gaps, as well as greater optimism about the future availability of external financing. As in previous studies, it is possible to estimate average euro area real GDP growth developments following changes in the composite financing gap and in the expected availability of external

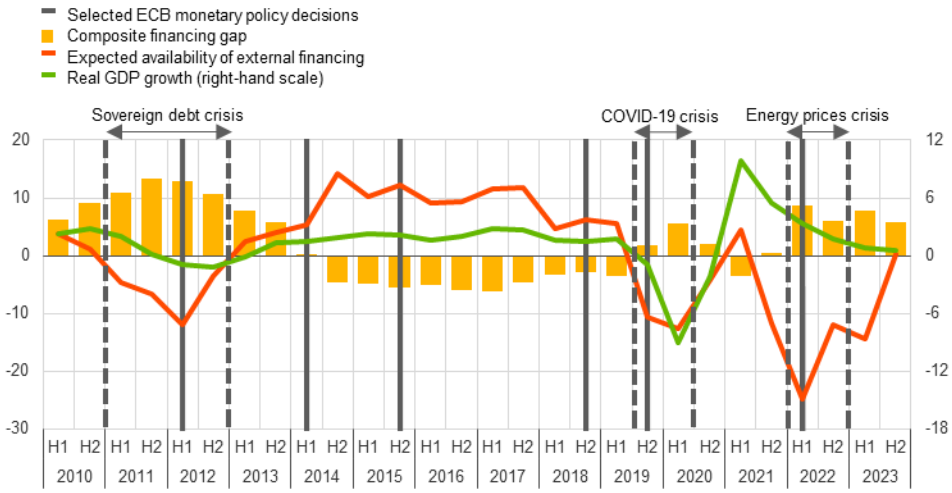
16 See also the article entitled "Assessing corporate vulnerabilities in the euro area", *Economic Bulletin*, Issue 2, ECB, 2022.

financing.[17] While these estimates do not establish causal effects, they do provide an indication of average future developments in real GDP growth following a change in the SAFE indicators of the aforementioned variables.

Chart 5

Composite financing gap of firms, expected external financing availability and euro area real GDP growth

(net percentage changes in the composite financing gap and in the expected availability of external financing; annualised percentage changes in GDP growth)



Sources: Survey on the Access to Finance of Enterprises and Eurostat.
Notes: For the composite financing gap, see the Notes to Chart A in Box 1. The indicator of the expected availability of external financing is a weighted sum of the availability of each of the five financing instruments considered in the composite financing gap. For the net percentages and the different ECB monetary policy decisions, see the Notes to Chart 1. The latest observations are for the period from October 2023 to March 2024 for the survey and for March 2024 for real GDP growth.

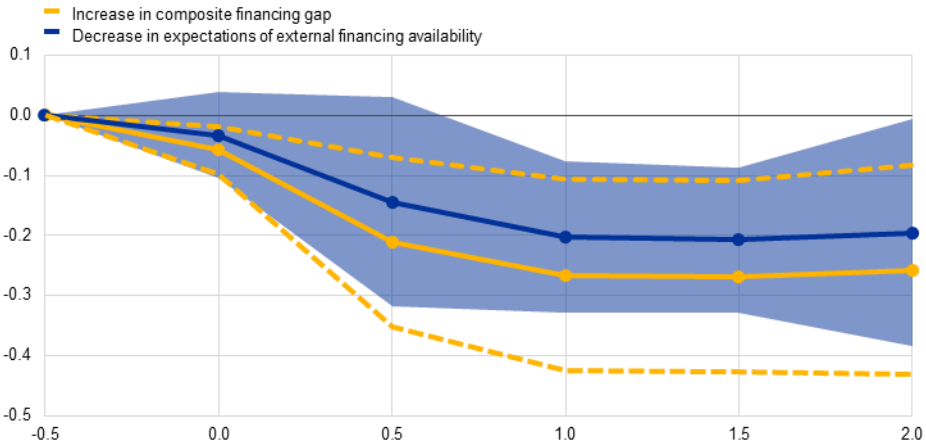
Following a 1 percentage point increase in the composite financing gap, real GDP in the euro area declines, on average, by 0.3% over the subsequent year (Chart 6). This decline is constant over the next 18 months but becomes less significant after two years. Conversely, following a decrease of 1 percentage point in the expected availability of external financing, real GDP in the euro area declines, on average, by approximately 0.2% over the subsequent year. These estimates are conditional on lagged real GDP growth, thus exploiting the information from the survey beyond past observable developments in the business cycle.

[17] See the box entitled "Firm's access to finance and the business cycle: evidence from the SAFE", *Economic Bulletin*, Issue 8, ECB, 2023.

Chart 6

Average developments in euro area real GDP growth following a deterioration in financing conditions as compared with no deterioration

(x-axis: years after shock; y-axis: cumulative growth in percentages relative to period before the shock)



Sources: Survey on the Access to Finance of Enterprises and ECB calculations.
Notes: Average developments in euro area real GDP growth in cumulative terms following changes in firms' financing gaps and the net percentage of firms that reported an expected increase in the availability of external financing (bank loans, credit lines, trade credit, equities and debt securities). The regression analysis uses local projections and includes current and past GDP growth as control variables. The shaded area and the dashed lines denote 95% confidence bands. The latest observations are for the period from October 2023 to March 2024 for the survey and for March 2024 for real GDP growth.

5 Price and inflation expectations

Since the second quarter of 2023, the SAFE has been supplemented with data on euro area firms' inflation expectations, thus addressing a significant information gap. The inflation expectations of euro area firms have so far not been measured in a consistent manner across countries. The 2020/21 ECB monetary policy strategy review brought this information gap to light.[18] From the first quarter of 2024, euro area inflation expectations for the one-year, three-year and five-year horizons, together with firms perceived uncertainty surrounding their five-year inflation expectations, have been available on a quarterly basis.[19]

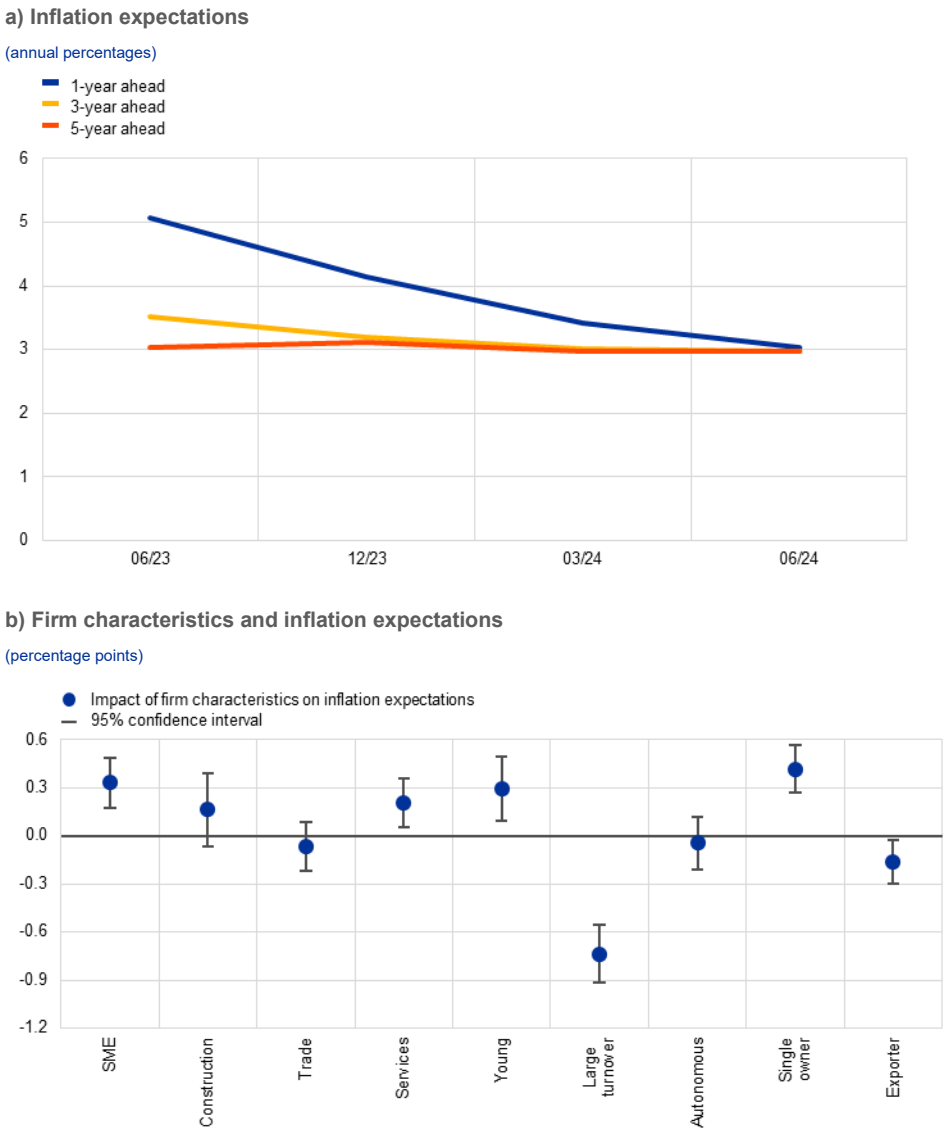
Firms' median inflation expectations have steadily declined since the second quarter of 2023 at the one-year horizon. Euro area firms' one-year ahead median inflation expectations fell to 3% in June 2024 from a peak of 5% in June 2023, in line with disinflationary developments (Chart 7, panel a). SMEs have significantly higher inflation expectations than large firms, as is the case for firms in the services sector. Age and ownership of the firm explain heterogeneity in inflation expectations (Chart 7, panel b).

18 See Baumann U. et al., "Inflation expectations and their role in Eurosystem forecasting", *Occasional Paper Series*, No 264, ECB, September 2021.

19 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, 2024, for an analysis of the properties and causal effects of firms' euro area inflation expectations.

Chart 7

Inflation expectations at different horizons and relationship between firm characteristics and inflation expectations



Sources: Survey on the Access to Finance of Enterprises.
Notes: Panel a) shows survey-weighted median firms' expectations for euro area inflation in one year, three years' and five years' time. Panel b) shows the relationship between firm characteristics and one-year ahead inflation expectations. Robust standard errors are considered for the 95% confidence intervals.

Since early 2023, the SAFE has also asked firms about their expected selling prices, wages, input costs and number of employees one-year ahead. Firms are asked in the survey to indicate the expected change over the next 12 months in: i) the average selling price of own products or services in their main markets; ii) the average price of production inputs (non-labour costs, such as materials and energy); iii) the average wage of current employees; and iv) the number of employees.

Growth rates in expected selling prices, wage costs and non-labour input costs have significantly slowed in recent periods (Chart 8, panel a). In March 2023, firms expected their selling prices to increase by 6.1%, on average, over the

next 12 months, yet this percentage decreased to 3% by June 2024. Wage growth expectations declined from 5.4% to 3.3% over the same period. Throughout the entire period, SMEs consistently anticipated higher increases in both selling prices and non-labour input costs compared with large firms.

Higher expected wage costs tend to be correlated with higher expected selling prices, albeit this relationship has weakened slightly over the past year (Chart 8, panel b). A regression which analyses firms' expected changes in non-labour input costs suggests that a 1 percentage point increase in wage expectations is, on average, associated with a 0.18 percentage point higher selling price expectation in June 2024. This relationship has become slightly weaker over the past four quarters. The results suggest that future declines in average wage cost expectations could translate into decreases in firms' selling price expectations, albeit at a slower pace.

Chart 8

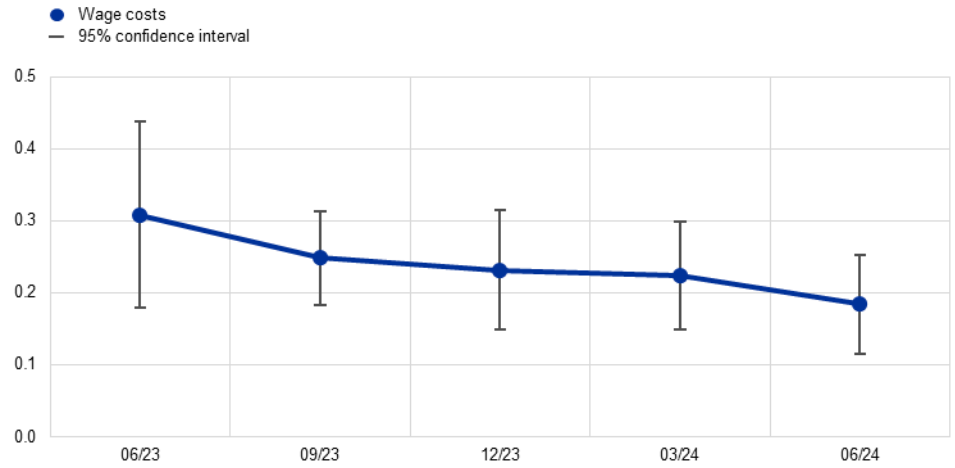
Firms' expectations for selling prices, wages, input costs and employee numbers one-year ahead

a) Firms' expectations by size

(percentage changes over the next 12 months)

b) Impact of changes in wage costs on selling prices

(percentage point change in expected selling price associated with a 1 percentage point expected change in wage costs)



Source: Survey on the Access to Finance of Enterprises.
Notes: SMEs stands for small and medium-sized enterprises. Panel a) shows average survey-weighted euro area firms' expectations of changes in selling prices, wages of current employees, non-labour input costs and the number of employees for the next 12 months across size classes. The statistics are computed after trimming the data at the country-specific 1st and 99th percentiles. Panel b) shows the estimated coefficients of wage cost expectations from regressions, computed separately for each time period, of expected price changes on expected wage changes, controlling for expected changes in other input costs. Standard errors clustered by firm size sector and country.

6 Conclusions

Over the past 15 years, the SAFE has been an important source of data for assessing the access to finance of firms in the euro area. The survey has played an important role in understanding the transmission of monetary policy to firms' financing conditions. Furthermore, the survey has shed light on how changes in financing conditions affect firms' economic performance and their business cycles.

The recent increased frequency of the survey and the introduction of questions on firms' euro area inflation expectations have made this survey even more valuable for the ECB's monetary policy transmission assessment. Together with the introduction of questions on expectations of selling prices and input costs, the survey has closed a gap in the availability of such data for firms in the euro area.

Statistics

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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
2021	6.6	6.1	8.6	2.7	8.4	6.2	4.0	3.0	4.7	2.6	-0.2	0.9	2.6
2022	3.2	2.5	4.8	1.2	3.0	3.3	9.5	6.8	8.0	9.1	2.5	2.0	8.4
2023	3.2	2.9	0.3	1.7	5.2	0.4	6.9	7.0	4.1	7.4	3.2	0.2	5.4
2023 Q4	0.7	0.8	-0.3	0.1	1.2	0.1	5.9	6.8	3.2	4.2	2.9	-0.3	2.7
2024 Q1	0.9	0.4	0.7	-0.6	1.6	0.3	5.7	6.5	3.2	3.5	2.6	0.0	2.6
Q2	.	0.7	0.5	0.7	.	0.2	5.8	6.1	3.2	2.1	2.7	0.3	2.5
Q3	.	.	.	.	.	.	.	.	2.6	2.0	.	.	2.2
2024 Apr.	-	-	-	-	-	-	5.7	6.2	3.4	2.3	2.5	0.3	2.4
May	-	-	-	-	-	-	5.9	6.1	3.3	2.0	2.8	0.3	2.6
June	-	-	-	-	-	-	5.6	5.9	3.0	2.0	2.8	0.2	2.5
July	-	-	-	-	-	-	5.4	5.5	2.9	2.2	2.8	0.5	2.6
Aug.	-	-	-	-	-	-	4.7	5.2	2.5	2.2	3.0	0.6	2.2
Sep.	-	-	-	-	-	-	.	.	2.4	1.7	.	0.4	1.7

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.

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
2021	-	-	-	-	-	-	-	-	-	11.0	9.3	12.8
2022	-	-	-	-	-	-	-	-	-	3.2	4.6	1.8
2023	52.0	51.2	51.2	51.8	52.5	49.7	49.8	52.3	47.6	-0.5	-3.9	2.8
2023 Q4	51.1	50.8	50.5	50.0	51.4	47.2	49.4	50.9	47.9	0.6	0.7	0.6
2024 Q1	52.6	52.2	52.9	51.3	52.6	49.2	51.1	52.4	49.2	-0.2	0.5	-0.7
Q2	53.2	53.5	53.1	51.5	53.2	51.6	52.1	53.3	50.1	1.5	2.0	1.0
Q3	52.9	54.3	53.1	52.5	50.9	50.3	49.9	53.4	48.4	.	.	.
2024 Apr.	52.5	51.3	54.1	52.3	52.8	51.7	51.4	52.7	50.4	1.8	2.0	1.7
May	54.0	54.5	53.0	52.6	54.1	52.2	52.7	54.0	50.4	1.2	1.4	1.1
June	53.2	54.8	52.3	49.7	52.8	50.9	52.3	53.1	49.3	1.5	2.0	1.0
July	53.0	54.3	52.8	52.5	51.2	50.2	50.2	53.3	49.3	0.6	1.3	-0.1
Aug.	53.2	54.6	53.8	52.9	51.2	51.0	50.0	53.8	48.4	.	.	.
Sep.	52.5	54.0	52.6	52.0	50.3	49.6	49.4	52.9	47.5	.	.	.

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)												
2021	12,577.5	12,070.1	6,439.2	2,777.5	2,715.2	1,396.8	773.4	538.1	138.2	494.1	6,113.5	5,606.2
2022	13,652.2	13,363.9	7,219.6	2,940.7	2,986.7	1,547.6	855.5	576.2	216.9	241.3	7,402.6	7,114.3
2023	14,499.9	13,979.2	7,721.2	3,086.3	3,130.9	1,605.3	903.4	614.6	40.9	530.8	7,388.5	6,867.8
2023 Q3	3,638.1	3,500.2	1,946.1	776.7	780.3	401.0	227.4	150.0	-3.0	141.2	1,830.1	1,692.2
Q4	3,680.5	3,544.0	1,956.7	788.8	795.0	401.5	223.5	168.2	3.5	134.3	1,843.3	1,706.8
2024 Q1	3,716.8	3,533.6	1,978.0	795.8	781.0	403.7	220.7	154.6	-21.3	182.2	1,865.1	1,681.8
Q2	3,739.6	3,541.1	1,984.3	803.2	765.3	402.5	221.1	139.7	-11.6	.	1,903.0	1,704.5
as percentage of GDP												
2023	100.0	96.4	53.2	21.3	21.6	11.1	6.2	4.2	0.3	3.7	-	-
Chain-linked volumes (prices for the previous year)												
quarter-on-quarter percentage changes												
2023 Q3	0.0	-0.1	0.3	0.7	0.0	-0.5	0.2	1.0	-	-	-1.2	-1.5
Q4	0.1	0.1	0.0	0.7	1.0	-0.6	-2.8	10.7	-	-	0.3	0.5
2024 Q1	0.3	-0.5	0.3	0.1	-1.8	0.1	-0.4	-8.0	-	-	1.1	-0.6
Q2	0.2	-0.3	-0.1	0.6	-2.2	-0.5	0.1	-9.8	-	-	1.4	0.5
annual percentage changes												
2021	6.2	5.0	4.7	4.3	3.5	5.7	8.0	-6.6	-	-	11.4	8.9
2022	3.3	3.5	4.9	1.1	1.9	0.2	4.0	3.5	-	-	7.3	8.1
2023	0.4	0.2	0.7	1.2	0.9	-1.3	2.1	4.7	-	-	-0.5	-0.9
2023 Q3	0.0	-0.3	-0.1	1.9	0.2	-0.6	1.4	0.8	-	-	-2.4	-3.1
Q4	0.2	0.2	0.9	1.9	1.3	-0.9	-1.0	10.4	-	-	-2.3	-2.4
2024 Q1	0.5	0.0	0.9	1.7	-1.0	-1.7	-3.0	4.0	-	-	-0.8	-1.9
Q2	0.6	-0.8	0.5	2.1	-3.0	-1.6	-2.9	-7.1	-	-	1.7	-1.1
contributions to quarter-on-quarter percentage changes in GDP; percentage points												
2023 Q3	0.0	-0.1	0.1	0.2	0.0	-0.1	0.0	0.0	-0.4	0.1	-	-
Q4	0.1	0.1	0.0	0.1	0.2	-0.1	-0.2	0.5	-0.3	-0.1	-	-
2024 Q1	0.3	-0.5	0.2	0.0	-0.4	0.0	0.0	-0.4	-0.3	0.8	-	-
Q2	0.2	-0.3	0.0	0.1	-0.5	-0.1	0.0	-0.4	0.0	0.5	-	-
contributions to annual percentage changes in GDP; percentage points												
2021	6.2	5.0	2.5	1.0	0.9	0.7	0.5	-0.3	0.6	1.4	-	-
2022	3.3	3.4	2.6	0.3	0.4	0.0	0.2	0.2	0.2	-0.1	-	-
2023	0.4	0.2	0.4	0.3	0.2	-0.1	0.1	0.2	-0.6	0.2	-	-
2023 Q3	0.0	-0.3	-0.1	0.4	0.0	-0.1	0.1	0.0	-0.7	0.4	-	-
Q4	0.2	0.2	0.5	0.4	0.3	-0.1	-0.1	0.4	-0.9	0.0	-	-
2024 Q1	0.5	0.0	0.5	0.4	-0.2	-0.2	-0.2	0.2	-0.6	0.5	-	-
Q2	0.6	-0.8	0.3	0.5	-0.6	-0.2	-0.2	-0.3	-0.9	1.4	-	-

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)											
	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	Taxes less subsidies on products
	1	2	3	4	5	6	7	8	9	10	11	12
Current prices (EUR billions)												
2021	11,232.0	185.8	2,173.4	589.7	2,014.9	601.8	518.3	1,267.8	1,353.6	2,195.9	330.7	1,345.5
2022	12,273.1	217.3	2,432.8	632.7	2,345.7	629.0	535.8	1,323.1	1,462.5	2,315.2	378.9	1,379.1
2023	13,117.8	224.3	2,593.3	702.2	2,445.5	676.4	602.2	1,450.0	1,570.4	2,442.2	411.3	1,382.1
2023 Q3	3,284.8	55.4	643.5	176.5	611.1	169.9	152.2	363.6	395.0	614.0	103.5	353.3
Q4	3,325.3	55.1	648.3	178.6	618.7	171.8	154.0	368.6	402.0	624.6	103.7	355.1
2024 Q1	3,350.5	56.3	636.8	181.4	624.6	173.8	159.0	373.3	406.7	632.8	105.6	366.3
Q2	3,370.5	56.5	632.3	181.1	633.4	176.0	160.9	376.7	411.6	635.8	106.1	369.1
as percentage of value added												
2023	100.0	1.7	19.8	5.4	18.6	5.2	4.6	11.1	12.0	18.6	3.1	-
Chain-linked volumes (prices for the previous year)												
quarter-on-quarter percentage changes												
2023 Q3	0.0	-1.2	-1.0	-0.3	0.0	0.6	-0.2	0.2	0.4	0.4	1.8	0.5
Q4	0.4	0.3	0.2	0.2	0.1	1.7	-0.5	0.5	1.0	0.6	-1.6	-2.9
2024 Q1	0.2	0.8	-0.6	0.4	0.6	0.2	1.1	0.5	0.4	0.1	1.0	1.2
Q2	0.2	-0.9	-0.1	-1.0	0.5	0.4	0.3	0.3	0.4	0.4	-0.2	0.5
annual percentage changes												
2021	6.1	2.1	8.3	3.5	8.0	10.1	5.5	2.2	8.7	3.4	4.8	7.3
2022	3.6	-1.2	0.4	-1.4	8.7	5.5	-2.0	2.2	5.0	2.7	15.9	1.2
2023	0.7	0.3	-1.6	1.1	0.1	4.7	0.1	1.5	1.8	1.0	4.5	-2.4
2023 Q3	0.2	-0.5	-2.2	1.7	-1.0	3.5	0.6	1.3	1.6	0.6	3.4	-1.6
Q4	0.6	-0.6	-2.4	2.1	0.0	5.0	-0.3	1.5	2.2	1.2	3.4	-3.5
2024 Q1	0.7	-0.2	-1.8	-0.2	1.0	3.6	0.7	1.1	2.4	1.3	1.8	-1.4
Q2	0.8	-1.0	-1.5	-0.7	1.2	2.8	0.6	1.5	2.3	1.4	1.0	-0.8
contributions to quarter-on-quarter percentage changes in value added; percentage points												
2023 Q3	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	-
Q4	0.4	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	-0.1	-
2024 Q1	0.2	0.0	-0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	-
Q2	0.2	0.0	0.0	-0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	-
contributions to annual percentage changes in value added; percentage points												
2021	6.1	0.0	1.6	0.2	1.4	0.5	0.3	0.3	1.0	0.7	0.2	-
2022	3.6	0.0	0.1	-0.1	1.6	0.3	-0.1	0.2	0.6	0.5	0.5	-
2023	0.7	0.0	-0.3	0.1	0.0	0.2	0.0	0.2	0.2	0.2	0.1	-
2023 Q3	0.2	0.0	-0.4	0.1	-0.2	0.2	0.0	0.1	0.2	0.1	0.1	-
Q4	0.6	0.0	-0.5	0.1	0.0	0.3	0.0	0.2	0.3	0.2	0.1	-
2024 Q1	0.7	0.0	-0.4	0.0	0.2	0.2	0.0	0.1	0.3	0.2	0.1	-
Q2	0.8	0.0	-0.3	0.0	0.2	0.1	0.0	0.2	0.3	0.3	0.0	-

Sources: Eurostat and ECB calculations.

2 Economic activity

2.3 Employment [1)]

(quarterly data seasonally adjusted; annual data unadjusted)

		By employment status		By economic activity									
	Total	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													
2021	100.0	86.2	13.8	3.0	14.3	6.4	24.0	3.2	2.4	1.0	13.9	25.1	6.7
2022	100.0	86.3	13.7	2.9	14.2	6.4	24.2	3.3	2.3	1.0	14.0	25.0	6.7
2023	100.0	86.4	13.6	2.8	14.1	6.4	24.3	3.4	2.3	1.0	14.0	25.0	6.6
annual percentage changes													
2021	1.4	1.6	0.4	0.3	0.0	3.3	0.2	4.4	0.5	0.9	2.9	2.1	1.1
2022	2.2	2.4	1.2	-1.0	1.2	3.3	3.2	5.9	-0.2	3.6	2.9	1.6	1.6
2023	1.4	1.5	1.0	-1.2	0.9	1.4	1.8	3.5	0.9	2.1	1.7	1.4	1.1
2023 Q3	1.4	1.5	0.9	-0.9	0.7	1.3	2.1	2.5	1.1	1.4	1.5	1.4	0.7
Q4	1.2	1.2	1.1	-0.5	0.4	1.6	1.2	2.7	0.9	1.3	1.2	1.5	1.3
2024 Q1	1.0	1.0	0.6	-0.5	0.1	1.2	1.2	2.2	0.7	0.0	1.0	1.5	0.3
Q2	0.9	0.9	0.7	-1.0	0.6	1.1	0.5	1.7	0.2	-1.4	0.7	1.6	1.1
Hours worked													
as a percentage of total hours worked													
2021	100.0	81.6	18.4	4.1	15.0	7.4	24.1	3.5	2.5	1.1	13.9	22.6	5.9
2022	100.0	81.6	18.4	3.9	14.6	7.4	25.1	3.5	2.4	1.1	14.0	22.0	6.0
2023	100.0	81.8	18.2	3.8	14.5	7.4	25.1	3.6	2.4	1.1	14.0	22.0	6.0
annual percentage changes													
2021	5.9	5.7	7.1	1.5	4.9	9.8	6.6	7.6	2.7	6.5	8.3	4.0	6.8
2022	3.4	3.4	3.0	-1.5	0.9	3.4	7.4	5.6	-0.5	5.5	3.9	0.5	5.7
2023	1.2	1.5	0.2	-1.7	0.5	1.0	1.6	3.1	0.5	1.7	1.6	1.4	1.5
2023 Q3	1.5	1.7	0.6	-1.5	0.6	1.5	2.0	2.1	1.0	1.6	1.7	1.9	1.6
Q4	1.2	1.5	0.3	-1.0	0.5	1.3	1.3	3.0	0.4	0.9	1.4	1.8	1.1
2024 Q1	0.7	0.8	0.3	-1.8	-0.5	0.9	1.1	2.0	-0.3	-0.6	1.3	1.2	0.3
Q2	0.8	1.0	-0.1	-1.5	0.6	0.7	0.3	1.9	-0.2	-1.4	1.1	1.6	1.6
Hours worked per person employed													
annual percentage changes													
2021	4.4	4.0	6.7	1.2	4.9	6.3	6.4	3.1	2.2	5.6	5.3	1.8	5.6
2022	1.1	1.0	1.8	-0.5	-0.3	0.2	4.1	-0.3	-0.3	1.9	0.9	-1.0	4.1
2023	-0.2	0.0	-0.7	-0.5	-0.3	-0.4	-0.2	-0.4	-0.5	-0.4	-0.1	0.0	0.4
2023 Q3	0.1	0.2	-0.2	-0.5	-0.1	0.2	-0.1	-0.4	-0.1	0.2	0.2	0.5	0.9
Q4	0.0	0.2	-0.8	-0.5	0.1	-0.3	0.0	0.3	-0.4	-0.4	0.2	0.3	-0.2
2024 Q1	-0.3	-0.2	-0.3	-1.3	-0.6	-0.3	-0.1	-0.2	-1.0	-0.6	0.3	-0.3	0.0
Q2	-0.1	0.1	-0.8	-0.5	0.0	-0.4	-0.2	0.2	-0.4	0.0	0.4	0.0	0.4

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		
	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			
2021	165.064	3.4	12.823	7.8	3.2	10.343	6.9	2.480	16.9	6.547	7.4	6.276	8.2		2.5
2022	167.948	3.1	11.401	6.8	2.7	9.147	6.0	2.254	14.6	5.732	6.4	5.670	7.2		3.2
2023	170.273	2.9	11.183	6.6	2.4	8.886	5.8	2.297	14.5	5.649	6.2	5.535	6.9		3.0
2023 Q3	170.358	2.9	11.238	6.6	2.3	8.899	5.8	2.339	14.7	5.689	6.3	5.550	7.0		3.0
Q4	171.064	2.9	11.161	6.5	2.3	8.794	5.7	2.367	14.8	5.650	6.2	5.511	6.9		2.9
2024 Q1	171.606	2.9	11.195	6.5	2.3	8.870	5.7	2.325	14.5	5.660	6.2	5.535	6.9		2.9
Q2	171.896	2.8	11.115	6.5	2.1	8.787	5.6	2.329	14.6	5.629	6.2	5.487	6.8		2.6
2024 Mar.	-	-	11.127	6.5	-	8.812	5.7	2.314	14.5	5.629	6.2	5.498	6.8		-
Apr.	-	-	11.079	6.4	-	8.762	5.6	2.317	14.5	5.623	6.2	5.455	6.8		-
May	-	-	11.117	6.5	-	8.786	5.6	2.331	14.6	5.661	6.2	5.455	6.8		-
June	-	-	11.108	6.5	-	8.818	5.6	2.290	14.4	5.684	6.2	5.423	6.7		-
July	-	-	11.019	6.4	-	8.756	5.6	2.262	14.2	5.701	6.2	5.318	6.6		-
Aug.	-	-	10.925	6.4	-	8.694	5.6	2.231	14.1	5.630	6.1	5.295	6.6		-

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	Manu-facturing	Inter-mediate goods	Capital goods	Consumer goods	Energy		Total	Food, beverages, tobacco	Non-food	Fuel		
	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												
2021	8.8	9.8	9.6	9.4	8.1	0.7	5.7	5.4	0.9	8.7	9.1	8.0	-2.9
2022	2.3	3.0	-1.5	5.1	6.3	-2.9	3.2	1.1	-2.7	3.4	4.5	10.0	-4.3
2023	-2.2	-1.7	-5.6	2.4	-1.7	-5.5	1.5	-1.9	-2.6	-0.9	-1.7	2.8	13.9
2023 Q3	-4.8	-4.3	-5.5	-2.5	-3.1	-7.4	1.7	-2.2	-1.8	-1.6	-3.8	2.0	13.3
Q4	-3.9	-4.3	-4.7	-2.5	-6.5	-0.6	1.2	-0.7	-0.5	0.1	-4.0	1.8	4.1
2024 Q1	-4.7	-4.9	-2.9	-6.0	-5.6	-1.8	-0.2	-0.2	-0.5	0.1	-0.6	3.2	4.5
Q2	-3.6	-3.9	-2.3	-7.2	0.5	-0.1	-1.6	0.3	-0.2	0.8	0.5	2.8	4.1
2024 Mar.	-1.3	-1.0	-2.8	1.6	-7.4	-2.5	-0.4	0.6	0.9	0.7	-1.0	2.2	2.0
Apr.	-3.2	-3.2	-2.2	-5.4	-0.1	-2.3	-1.3	0.8	-0.2	1.3	1.6	4.6	4.3
May	-3.5	-3.9	-3.3	-7.7	1.5	0.2	-2.4	0.5	0.5	0.8	0.3	2.6	-3.7
June	-4.2	-4.6	-1.5	-8.4	0.2	2.0	-1.3	-0.3	-0.9	0.2	-0.3	1.3	11.8
July	-2.1	-2.3	-2.9	-4.5	1.5	1.1	-2.2	-0.1	-0.8	0.3	-0.7	2.6	-8.4
Aug.	0.1	-0.4	-2.7	0.2	1.3	2.6	.	0.8	-0.2	1.4	2.5	.	-12.8
	month-on-month percentage changes (s.a.)												
2024 Mar.	0.7	0.9	-0.2	0.5	-1.9	-0.1	-0.3	0.6	1.1	-0.1	0.6	-0.3	-2.0
Apr.	-0.5	-0.5	-0.3	0.2	3.3	-0.2	-0.9	0.0	-0.9	0.7	-0.4	1.0	0.3
May	-0.8	-0.8	-0.9	-2.7	1.2	0.7	-0.8	0.1	1.0	-0.2	0.1	-0.1	-6.8
June	0.3	-0.1	0.6	1.1	-1.2	1.6	0.6	-0.4	-0.7	-0.1	-0.4	-0.8	15.2
July	-0.5	-1.0	-1.3	-1.3	1.2	-0.2	0.0	0.0	0.1	-0.1	-0.6	1.0	-12.3
Aug.	1.8	1.5	-0.3	3.7	0.3	0.4	.	0.2	0.2	0.3	1.1	.	-4.4

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	99.5	-4.3	80.1	-11.1	-12.5	-6.6	6.4	.	-	-	-	-
2021	111.2	9.6	80.9	-7.5	4.1	-1.5	8.5	87.3	-	-	-	-
2022	102.1	5.0	82.4	-21.9	5.2	-3.5	9.2	89.9	-	-	-	-
2023	96.4	-5.6	80.9	-17.4	-2.0	-4.0	6.7	90.5	45.0	45.8	51.2	49.7
2023 Q4	94.8	-9.0	79.9	-16.7	-4.3	-6.6	6.1	90.5	43.9	44.0	48.4	47.2
2024 Q1	96.0	-9.2	79.4	-15.5	-5.2	-6.2	7.0	90.1	46.4	46.7	50.0	49.2
Q2	95.9	-10.1	79.0	-14.3	-6.3	-7.2	6.5	90.0	46.2	47.6	53.1	51.6
Q3	96.2	-10.4	78.3	-13.1	-6.1	-8.5	6.1	90.3	45.5	45.4	52.1	50.3
2024 Apr.	95.6	-10.4	79.0	-14.7	-5.9	-6.9	6.1	90.0	45.7	47.3	53.3	51.7
May	96.2	-9.9	.	-14.3	-6.1	-6.8	6.8	.	47.3	49.3	53.2	52.2
June	96.0	-10.2	.	-14.0	-6.9	-7.8	6.5	.	45.8	46.1	52.8	50.9
July	96.0	-10.5	78.3	-13.0	-6.3	-9.1	5.1	90.3	45.8	45.6	51.9	50.2
Aug.	96.5	-9.9	.	-13.4	-6.3	-7.9	6.4	.	45.8	45.8	52.9	51.0
Sep.	96.2	-10.9	.	-12.9	-5.8	-8.5	6.7	.	45.0	44.9	51.4	49.6

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
2021	17.2	94.1	2.3	3.6	17.8	7.8	7.5	36.8	7.7	76.8	5.7	10.2	3.5
2022	13.6	90.9	0.4	2.3	12.8	2.5	8.2	37.7	5.4	71.9	4.3	9.9	2.8
2023	14.1	85.0	1.3	1.9	3.1	1.8	-1.5	35.9	5.4	67.5	1.8	1.8	0.8
2023 Q3	13.9	86.1	0.6	1.9	1.6	1.6	-0.6	36.6	5.6	68.3	2.2	-10.9	1.0
Q4	14.1	85.0	1.7	1.9	2.2	1.8	-1.5	35.9	5.4	67.5	1.8	0.2	0.8
2024 Q1	14.5	83.7	2.9	1.9	-3.2	2.1	-0.7	35.0	4.7	67.2	1.9	-5.8	0.8
Q2	14.9	83.1	2.2	2.1	-1.7	2.8	0.9	34.4	4.1	66.7	2.2	-7.0	1.0

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
2023 Q3	1,426.3	1,362.7	63.6	705.6	625.1	346.5	312.7	330.6	335.2	43.6	89.8	29.7	18.2
Q4	1,409.5	1,329.4	80.0	694.0	620.0	346.3	314.8	320.1	302.0	49.2	92.6	62.4	41.1
2024 Q1	1,429.2	1,324.9	104.3	704.9	600.5	368.5	336.4	309.7	308.5	46.1	79.5	18.9	31.6
Q2	1,489.5	1,357.8	131.6	716.8	613.9	390.7	339.7	335.3	313.9	46.6	90.3	25.4	22.1
2024 Feb.	480.8	448.3	32.5	234.0	202.4	126.4	113.9	105.0	106.3	15.4	25.7	4.2	8.7
Mar.	476.4	445.4	30.9	236.0	206.5	121.5	111.7	103.2	99.7	15.6	27.5	10.5	9.7
Apr.	498.0	454.9	43.1	240.3	205.8	128.9	112.8	112.6	106.6	16.3	29.6	6.9	8.7
May	493.6	458.7	34.9	237.7	205.0	129.5	110.4	112.5	113.9	13.9	29.3	8.2	7.6
June	497.8	444.3	53.5	238.8	203.1	132.4	116.5	110.2	93.3	16.4	31.4	10.3	5.8
July	493.8	454.2	39.6	238.5	203.4	126.5	107.8	113.5	114.2	15.3	28.8	6.4	6.7
12-month cumulated transactions													
2024 July	5,775.3	5,378.5	396.8	2,825.9	2,451.7	1,463.6	1,308.6	1,299.6	1,266.8	186.2	351.4	133.8	112.1
12-month cumulated transactions as a percentage of GDP													
2024 July	39.1	36.4	2.7	19.1	16.6	9.9	8.9	8.8	8.6	1.3	2.4	0.9	0.8

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)													
2023 Q3	-5.2	-22.1	703.9	331.4	141.9	215.0	586.3	678.5	390.5	111.5	158.9	489.7	82.2
Q4	-4.8	-16.6	708.4	333.3	144.2	214.7	588.7	669.4	383.3	107.7	157.8	477.2	81.1
2024 Q1	-3.0	-12.0	713.7	336.7	142.5	218.9	590.3	654.7	371.4	105.4	158.4	463.4	75.8
Q2	1.7	-4.3	717.8	337.6	136.2	223.6	592.1	670.4	383.0	108.6	161.3	475.4	78.9
2024 Feb.	0.3	-7.9	237.6	111.1	47.6	73.0	197.1	221.4	124.6	35.8	52.7	154.7	24.8
Mar.	-9.2	-11.5	237.9	112.5	46.7	74.1	195.9	221.5	125.6	35.8	54.5	158.3	25.8
Apr.	13.8	1.9	244.1	114.3	46.5	76.4	199.7	225.3	130.0	36.2	54.7	159.0	28.0
May	-0.7	-6.3	236.6	112.7	44.6	73.6	197.0	225.0	128.4	36.4	53.2	158.9	27.2
June	-6.3	-8.4	237.1	110.6	45.2	73.6	195.4	220.1	124.6	35.9	53.4	157.5	23.7
July	10.2	4.0	239.0	.	.	.	196.9	223.5	.	.	.	157.7	.
Volume indices (2000 = 100; annual percentage changes for columns 1 and 2)													
2023 Q3	-4.2	-10.1	96.3	93.9	96.0	102.4	96.0	106.7	104.7	111.4	109.5	108.6	171.7
Q4	-3.6	-8.7	96.3	93.1	96.1	103.0	95.5	104.5	101.9	104.8	108.3	105.6	164.4
2024 Q1	-4.0	-7.1	96.7	94.0	93.4	104.2	95.6	103.5	100.9	101.5	107.7	103.0	164.3
Q2	-0.9	-4.4	95.6	93.0	88.6	105.4	94.5	103.7	101.0	104.2	107.6	104.1	168.8
2024 Jan.	0.7	-9.6	97.7	96.0	95.4	102.4	96.7	101.5	99.8	97.3	104.7	100.7	161.0
Feb.	-0.8	-3.4	96.4	92.6	92.3	105.0	95.0	103.7	101.2	103.2	107.2	103.1	166.6
Mar.	-10.6	-8.0	96.0	93.4	92.4	105.2	95.0	105.2	101.7	104.1	111.1	105.1	165.4
Apr.	11.3	3.0	97.1	94.2	90.6	107.3	95.9	105.0	102.6	104.1	108.9	105.5	172.7
May	-3.5	-6.9	95.0	93.0	87.3	104.4	93.9	103.1	100.9	104.3	106.5	103.2	172.2
June	-8.7	-8.8	94.7	91.7	88.0	104.5	93.6	103.0	99.4	104.2	107.5	103.7	161.6

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
2021	107.8	2.6	1.5	3.4	1.5	-	-	-	-	-	-	2.5	3.1
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
2023 Q4	124.1	2.7	3.7	1.7	4.2	0.3	0.6	0.8	0.0	-1.1	0.7	3.0	1.3
2024 Q1	124.4	2.6	3.1	1.5	4.0	0.7	0.7	0.1	0.2	0.2	1.1	2.7	2.3
Q2	126.3	2.5	2.8	1.3	4.0	0.5	0.5	-0.5	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	0.7	0.3	-1.4	1.0	1.9	4.0
2024 Apr.	126.0	2.4	2.7	1.3	3.7	0.1	0.1	0.0	0.0	0.3	0.3	2.4	2.1
May	126.3	2.6	2.9	1.3	4.1	0.1	0.1	0.0	0.0	-1.2	0.6	2.5	2.8
June	126.6	2.5	2.9	1.2	4.1	0.1	0.3	0.2	0.1	-0.8	0.3	2.4	3.4
July	126.5	2.6	2.9	1.4	4.0	0.3	0.3	0.3	0.2	0.8	0.3	2.4	4.1
Aug.	126.7	2.2	2.8	0.5	4.1	0.1	0.3	0.1	0.0	-1.1	0.4	1.9	4.0
Sep.	126.6	1.7	2.7	0.0	3.9	0.0	0.3	0.6	0.0	-1.7	0.1	1.5	3.9

	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
2021	1.5	1.5	1.6	4.5	1.5	13.0	1.4	1.2	2.1	0.3	1.5	1.6
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
2023 Q4	6.8	7.1	5.9	-1.1	2.9	-9.8	3.5	2.7	3.2	0.4	5.9	4.0
2024 Q1	4.0	4.4	2.8	0.1	1.6	-3.9	3.4	2.8	3.6	-0.2	5.3	3.8
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
2024 Apr.	2.8	3.2	1.2	0.5	0.9	-0.6	3.4	2.8	2.7	-0.5	4.8	3.9
May	2.6	2.8	1.8	0.6	0.7	0.3	3.3	2.8	4.2	-0.7	5.3	4.0
June	2.4	2.7	1.3	0.6	0.7	0.2	3.3	2.8	4.3	-0.4	5.1	4.1
July	2.3	2.7	1.0	0.9	0.7	1.2	3.4	3.0	4.0	-0.4	4.8	4.0
Aug.	2.3	2.7	1.1	-0.5	0.4	-3.0	3.3	2.9	5.0	-0.6	4.8	4.0
Sep.	2.4	2.6	1.6	-1.4	0.4	-6.1	3.3	3.0	4.3	-1.7	4.7	4.0

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 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		Industry excluding construction and energy						Energy			
							Consumer goods						
	Total (index: 2021 = 100)	Total	Manufacturing	Total	Intermediate goods	Capital 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			
2021	100.0	12.2	7.5	5.7	10.9	2.6	2.2	3.3	1.7	30.3	5.8	7.9	0.6
2022	132.8	32.8	17.0	13.8	19.8	7.1	12.2	16.5	6.8	81.1	11.9	7.1	0.6
2023	130.0	-2.1	1.9	3.8	-0.2	5.2	8.3	8.3	5.6	-13.3	6.9	-1.2	-8.2
2023 Q3	127.8	-8.6	-0.3	1.5	-3.9	4.5	6.4	5.4	4.9	-25.1	5.1	-2.2	-9.3
Q4	128.1	-8.4	-1.1	-0.1	-4.8	3.3	3.6	2.1	3.1	-22.9	4.5	-1.2	-9.1
2024 Q1	124.9	-8.0	-1.6	-1.3	-5.3	2.0	1.5	-0.3	1.4	-20.5	3.6	-0.3	.
Q2	122.9	-4.4	-0.2	-0.6	-3.1	1.6	1.1	-0.4	1.0	-12.2	2.4	1.3	.
2024 Mar.	124.0	-7.7	-1.2	-1.3	-4.9	1.9	1.2	-0.7	1.1	-20.4	-	-	-
Apr.	122.9	-5.6	-0.6	-1.0	-3.9	1.5	1.1	-0.9	1.1	-15.0	-	-	-
May	122.6	-4.2	-0.1	-0.5	-3.1	1.7	1.1	-0.5	1.1	-11.8	-	-	-
June	123.3	-3.3	0.1	-0.2	-2.3	1.6	1.2	0.2	0.9	-9.8	-	-	-
July	124.2	-2.2	0.3	0.3	-1.1	1.4	1.3	0.1	0.9	-7.3	-	-	-
Aug.	124.9	-2.3	-0.8	0.3	-0.8	1.4	1.4	0.4	0.8	-7.7	-	-	-

Sources: Eurostat, ECB calculations, and ECB calculations based on MSCI data and national sources (col. 13).
1) Domestic sales only.
2) Input 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)					
			Domestic demand				Exports [1]	Imports [1]		Import-weighted [2]			Use-weighted [2]		
	Total (s.a.; index: 2020 = 100)	Total	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
2021	102.1	2.1	2.8	2.2	1.9	4.0	5.9	8.0	59.8	29.5	21.4	37.1	29.0	22.0	37.0
2022	107.3	5.1	7.0	6.9	4.7	7.9	12.9	17.5	95.0	18.3	28.8	9.6	19.4	27.7	10.9
2023	113.5	5.8	4.4	6.2	3.7	4.0	0.4	-2.5	76.4	-12.8	-11.6	-14.0	-13.7	-12.5	-15.0
2023 Q4	115.2	4.9	3.7	4.0	2.7	2.5	-1.9	-4.5	78.5	-8.8	-9.3	-8.3	-9.8	-10.4	-9.0
2024 Q1	116.0	3.6	2.7	3.2	3.5	2.2	-0.6	-2.8	76.5	-2.3	3.1	-7.5	-2.7	1.8	-7.8
Q2	116.5	3.0	2.8	2.7	2.7	1.7	0.6	0.0	85.0	13.0	16.5	9.4	11.4	13.1	9.4
Q3	.	.	.	.	.	.	.	.	.	9.6	10.9	8.2	10.7	12.0	9.1
2024 Apr.	-	-	-	-	-	-	-	-	85.0	12.7	20.3	5.0	10.5	15.1	5.0
May	-	-	-	-	-	-	-	-	.	13.1	13.5	12.6	11.8	11.4	12.2
June	-	-	-	-	-	-	-	-	.	13.2	15.6	10.7	12.0	12.7	11.2
July	-	-	-	-	-	-	-	-	.	12.0	14.0	10.0	12.2	13.4	10.8
Aug.	-	-	-	-	-	-	-	-	.	9.8	10.3	9.2	11.2	12.1	10.1
Sep.	-	-	-	-	-	-	-	-	.	7.0	8.4	5.6	8.7	10.5	6.5

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	5.7	4.0	-3.4	28.9	-	-	-	-
2021	31.7	23.9	10.3	19.7	30.4	-	-	-	-
2022	48.5	52.9	27.4	42.4	71.6	-	-	-	-
2023	9.5	28.5	19.2	13.9	74.5	43.7	64.6	50.0	57.4
2023 Q4	3.7	18.8	17.6	9.8	69.5	42.8	62.0	47.5	54.8
2024 Q1	4.7	16.7	17.5	5.1	64.5	44.9	62.3	48.2	56.0
Q2	6.1	13.8	13.7	3.4	56.7	49.9	60.5	48.6	54.6
Q3	6.4	12.5	12.3	1.9	50.1	52.0	57.9	50.1	53.0
2024 Apr.	5.6	14.1	13.9	2.4	58.3	49.0	61.7	47.9	55.9
May	6.5	13.8	13.3	3.4	56.9	49.2	60.5	48.3	54.2
June	6.1	13.5	13.9	4.3	54.7	51.4	59.3	49.5	53.5
July	6.7	14.4	12.3	1.9	53.0	53.6	60.0	49.9	52.9
Aug.	6.2	12.4	12.4	1.6	50.6	53.4	57.8	51.1	53.7
Sep.	6.2	10.7	12.2	2.3	46.8	49.1	56.0	49.2	52.4

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)

			By component		For selected economic activities		
	Total (index: 2020=100)	Total	Wages and salaries	Employers' social contributions	Business economy	Mainly non-business economy	Memo item: Indicator of negotiated wages [1]
	1	2	3	4	5	6	7
% of total in 2020	100.0	100.0	75.3	24.7	69.0	31.0	
2021	101.1	1.1	1.2	0.8	1.0	1.2	1.4
2022	105.8	4.7	3.9	7.2	5.0	4.0	2.9
2023	110.7	4.6	4.5	4.8	4.9	3.7	4.5
2023 Q3	107.2	4.9	5.0	4.6	5.4	3.9	4.7
Q4	118.4	3.7	3.6	4.0	4.2	2.7	4.5
2024 Q1	108.2	5.0	5.2	4.6	4.8	5.7	4.8
Q2	119.4	4.7	4.5	5.2	4.6	4.9	3.5

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)

			By economic activity									
	Total (index: 2020 =100)	Total	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												
2021	99.6	-0.4	0.8	-3.2	5.0	-2.2	0.4	-1.3	5.3	-0.9	1.2	-0.4
2022	103.0	3.5	4.6	4.7	9.0	0.8	3.2	5.5	5.8	3.5	2.7	-5.9
2023	109.6	6.4	4.0	8.0	5.1	7.7	3.9	6.1	4.6	6.0	4.9	1.9
2023 Q3	110.1	6.7	5.0	8.9	4.3	8.5	4.3	5.3	3.5	6.1	5.4	2.9
Q4	111.7	6.0	5.0	8.6	4.4	6.7	2.7	6.8	4.7	4.2	4.5	3.2
2024 Q1	113.0	5.2	3.1	6.7	5.8	4.1	3.2	4.9	3.3	3.6	5.4	4.8
Q2	113.5	4.6	3.7	6.8	5.6	3.9	2.7	4.6	0.9	3.0	4.3	4.7
Compensation per employee												
2021	104.3	4.3	2.6	4.8	5.2	5.4	5.8	3.6	6.7	4.7	2.5	3.3
2022	109.1	4.6	4.5	3.8	4.1	6.1	2.7	3.5	4.3	5.5	3.8	7.4
2023	114.8	5.3	5.6	5.4	4.8	5.9	5.1	5.2	3.9	6.1	4.5	5.4
2023 Q3	115.5	5.3	5.5	5.7	4.8	5.3	5.4	4.8	3.3	6.2	4.7	5.6
Q4	117.0	5.0	4.9	5.5	4.8	5.4	5.0	5.5	4.9	5.3	4.1	5.3
2024 Q1	118.4	4.8	3.4	4.7	4.4	3.9	4.6	4.9	4.5	5.0	5.3	6.4
Q2	118.9	4.3	3.7	4.5	3.6	4.6	3.8	5.1	3.9	4.6	4.0	4.5
Labour productivity per person employed												
2021	104.7	4.7	1.8	8.3	0.2	7.7	5.4	5.0	1.4	5.6	1.3	3.7
2022	105.8	1.1	-0.1	-0.8	-4.5	5.3	-0.4	-1.8	-1.4	2.0	1.1	14.1
2023	104.8	-1.0	1.6	-2.4	-0.3	-1.7	1.2	-0.8	-0.6	0.1	-0.4	3.4
2023 Q3	104.8	-1.3	0.5	-2.9	0.4	-3.0	1.0	-0.4	-0.2	0.1	-0.7	2.7
Q4	104.7	-1.0	-0.1	-2.9	0.5	-1.2	2.3	-1.1	0.2	1.0	-0.3	2.0
2024 Q1	104.7	-0.4	0.3	-1.9	-1.3	-0.2	1.3	-0.1	1.1	1.4	-0.2	1.5
Q2	104.7	-0.3	0.0	-2.1	-1.8	0.7	1.1	0.4	3.0	1.6	-0.2	-0.2
Compensation per hour worked												
2021	100.3	0.3	0.2	0.2	-0.4	-0.7	2.9	1.7	2.1	0.2	1.0	-1.3
2022	103.8	3.5	5.6	4.2	4.3	1.6	3.3	3.8	3.1	4.3	4.9	4.0
2023	109.3	5.3	5.4	5.7	5.0	5.9	5.4	5.8	4.5	6.1	4.4	4.6
2023 Q3	109.4	5.0	5.1	5.8	4.7	5.3	5.5	5.1	4.4	6.0	4.1	4.2
Q4	110.9	4.7	4.9	5.4	4.7	5.1	4.5	5.8	4.2	4.8	3.8	5.1
2024 Q1	112.2	5.0	3.8	5.1	4.6	4.1	4.9	5.8	4.7	4.8	5.6	6.5
Q2	112.4	4.2	2.6	4.5	4.0	4.5	3.6	5.4	4.1	4.1	4.1	3.8
Hourly labour productivity												
2021	100.3	0.3	0.6	3.2	-5.7	1.3	2.3	2.7	-4.0	0.3	-0.5	-1.8
2022	100.2	0.0	0.4	-0.5	-4.6	1.2	-0.1	-1.6	-3.2	1.1	2.1	9.6
2023	99.4	-0.8	2.1	-2.1	0.1	-1.5	1.6	-0.3	-0.2	0.2	-0.4	2.9
2023 Q3	99.1	-1.5	1.0	-2.8	0.3	-2.9	1.4	-0.3	-0.4	-0.1	-1.2	1.8
Q4	98.9	-1.0	0.4	-2.9	0.8	-1.3	2.0	-0.7	0.6	0.7	-0.6	2.2
2024 Q1	99.0	-0.2	1.6	-1.4	-1.0	-0.1	1.6	0.9	1.7	1.1	0.1	1.5
Q2	98.9	-0.2	0.5	-2.1	-1.4	0.9	0.9	0.8	2.9	1.1	-0.2	-0.6

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
2021	-0.57	-0.56	-0.55	-0.52	-0.49	0.04	-0.02
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 Apr.	3.91	3.85	3.89	3.84	3.70	5.32	0.08
May	3.91	3.82	3.81	3.79	3.68	5.31	0.08
June	3.75	3.63	3.72	3.71	3.65	5.33	0.08
July	3.66	3.62	3.68	3.64	3.53	5.34	0.08
Aug.	3.66	3.60	3.55	3.42	3.17	5.33	0.23
Sep.	3.56	3.44	3.43	3.26	2.94	5.15	0.23

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]					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
2021	-0.73	-0.72	-0.68	-0.48	-0.19	0.53	1.12	0.45	-0.69	-0.58	-0.12	0.24
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 Apr.	3.74	3.35	3.00	2.58	2.64	-0.72	-0.57	-0.42	2.91	2.44	2.37	2.96
May	3.67	3.33	3.02	2.64	2.70	-0.63	-0.69	-0.47	2.95	2.52	2.45	3.03
June	3.41	3.10	2.80	2.42	2.50	-0.60	-0.73	-0.51	2.74	2.31	2.22	2.91
July	3.29	2.92	2.58	2.19	2.33	-0.59	-0.72	-0.49	2.50	2.04	2.03	2.86
Aug.	3.26	2.74	2.36	2.14	2.39	-0.35	-0.51	-0.46	2.21	1.85	2.27	2.87
Sep.	3.12	2.43	2.03	1.93	2.24	-0.20	-0.23	-0.39	1.81	1.58	2.19	2.78

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
2021	448.3	4,023.6	962.9	289.8	183.0	95.4	164.4	819.0	874.3	377.7	279.6	886.3	4,277.6	28,836.5
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 Apr.	511.2	4,981.4	1,049.5	325.4	160.1	132.7	232.6	960.6	1,086.7	361.3	281.0	757.2	5,112.5	38,750.5
May	519.5	5,022.6	1,031.6	318.8	165.9	131.8	239.2	987.8	1,105.0	382.4	286.9	779.5	5,235.2	38,557.9
June	510.0	4,952.0	997.7	309.2	160.7	125.2	231.2	951.1	1,159.0	377.0	288.9	772.9	5,415.1	38,858.9
July	506.3	4,913.9	978.1	296.9	159.0	125.6	235.8	943.7	1,138.0	374.7	295.7	780.5	5,538.0	40,102.9
Aug.	494.1	4,788.5	958.1	283.8	159.7	122.8	229.2	922.6	1,055.6	380.0	303.8	819.4	5,478.2	36,873.3
Sep.	505.0	4,877.0	987.6	281.9	165.0	121.6	241.8	950.5	1,029.0	402.8	320.1	843.4	5,621.3	37,307.4

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				By initial period of rate fixation					
	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	APRC [3)]		Floating rate and up to 1 year	Over 1 and up to 5 years	Over 5 and up to 10 years	Over 10 years	APRC [3)]	Composite cost-of-borrowing indicator
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2023 Sep.	0.33	1.54	3.08	3.13	7.78	16.55	8.52	7.83	8.56	5.40	4.77	4.25	3.86	3.58	4.25	3.90
Oct.	0.35	1.60	3.27	3.31	7.98	16.55	8.26	7.87	8.54	5.58	4.85	4.29	3.78	3.61	4.27	3.92
Nov.	0.36	1.62	3.32	3.41	7.98	16.66	7.29	7.91	8.54	5.56	4.93	4.32	3.90	3.70	4.35	4.02
Dec.	0.37	1.66	3.28	3.46	8.04	16.79	7.55	7.71	8.43	5.38	4.91	4.24	3.81	3.63	4.33	3.98
2024 Jan.	0.39	1.69	3.20	3.15	8.14	16.93	7.99	8.02	8.73	5.38	4.88	4.08	3.67	3.52	4.15	3.88
Feb.	0.38	1.70	3.17	3.07	8.18	16.89	7.66	7.94	8.63	5.31	4.86	4.01	3.64	3.49	4.11	3.85
Mar.	0.39	1.72	3.18	2.91	8.19	16.99	8.08	7.79	8.54	5.15	4.82	4.00	3.57	3.44	4.04	3.80
Apr.	0.39	1.73	3.13	2.89	8.14	17.00	8.09	7.85	8.58	5.20	4.84	3.99	3.59	3.42	4.04	3.81
May	0.39	1.73	3.10	2.81	8.20	17.07	7.63	7.95	8.69	5.26	4.81	3.97	3.62	3.42	4.03	3.80
June	0.38	1.74	3.03	2.84	8.19	17.04	7.38	7.72	8.45	5.15	4.82	3.96	3.64	3.39	4.03	3.78
July	0.38	1.74	3.01	2.77	8.16	17.03	7.60	7.79	8.49	5.03	4.76	3.93	3.64	3.38	4.00	3.75
Aug.	0.38	1.75	2.97	2.69	8.17	17.02	7.91	7.75	8.55	5.01	4.70	3.87	3.61	3.36	3.99	3.72

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
2023 Sep.	0.75	3.59	3.79	5.20	5.66	5.75	5.64	5.41	5.23	4.40	5.04	5.00	4.21	5.10
Oct.	0.80	3.70	3.80	5.31	5.73	5.89	5.73	5.51	5.29	4.52	5.23	5.08	4.53	5.28
Nov.	0.83	3.71	3.92	5.33	5.77	5.93	5.79	5.51	5.30	4.55	5.12	5.18	4.40	5.25
Dec.	0.84	3.71	4.08	5.38	5.56	5.74	5.68	5.43	5.11	4.52	5.26	5.09	4.37	5.24
2024 Jan.	0.89	3.69	3.37	5.38	5.38	5.71	5.65	5.46	5.24	4.43	5.15	5.00	4.21	5.19
Feb.	0.89	3.63	3.50	5.37	5.52	5.75	5.60	5.48	5.14	4.38	5.10	4.84	4.00	5.16
Mar.	0.91	3.68	3.60	5.37	5.47	5.72	5.53	5.43	5.18	4.34	5.18	5.17	4.16	5.20
Apr.	0.91	3.66	3.34	5.37	5.30	5.63	5.63	5.36	5.10	4.31	5.19	5.00	4.15	5.19
May	0.91	3.64	3.61	5.33	5.37	5.77	5.68	5.39	5.08	4.29	4.99	4.95	4.18	5.12
June	0.87	3.54	3.54	5.25	5.33	5.70	5.67	5.24	4.99	4.23	5.02	5.05	4.14	5.08
July	0.87	3.48	3.28	5.20	5.13	5.45	5.51	5.27	4.93	4.18	5.08	5.00	4.13	5.07
Aug.	0.87	3.42	3.04	5.18	5.13	5.40	5.47	5.17	4.84	4.10	5.03	4.77	4.06	5.01

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														
2021	1,413.7	431.0	128.4	52.5	89.6	764.7	674.9	386.6	137.9	79.0	26.4	32.1	137.6	104.8
2022	1,382.2	477.9	142.8	52.0	94.5	667.0	621.7	480.4	182.5	115.9	48.3	48.1	133.9	97.1
2023	1,553.8	613.2	152.6	63.8	86.2	701.8	659.1	502.7	212.8	113.6	39.4	48.8	127.5	103.8
2024 Apr.	1,541.9	581.8	170.3	63.0	91.8	697.9	648.1	455.7	171.0	101.5	38.7	49.1	134.0	106.2
May	1,514.3	559.9	166.5	57.3	94.0	693.9	639.8	451.0	171.8	104.5	39.6	41.7	132.9	101.9
June	1,530.2	565.7	163.0	57.0	89.7	711.8	658.2	425.9	161.6	93.8	40.0	39.8	130.7	94.2
July	1,544.2	562.9	175.7	58.3	95.2	710.4	651.1	493.2	181.2	120.6	45.6	49.1	142.3	114.7
Aug.	1,553.8	561.5	174.5	54.1	95.1	722.6	659.5	446.0	190.9	101.6	40.5	30.6	123.0	101.3
Sep.	1,532.3	586.6	164.1	51.9	77.8	703.9	643.8	455.8	195.0	87.1	37.5	31.6	142.1	114.5
Long-term														
2021	19,913.8	4,166.9	3,365.9	1,377.3	1,617.3	10,763.7	9,942.7	316.8	68.6	83.4	34.1	23.2	141.5	128.0
2022	17,865.4	3,953.8	3,227.2	1,372.6	1,413.9	9,270.6	8,558.6	296.2	77.6	71.3	29.8	16.9	130.4	120.9
2023	19,513.9	4,493.2	3,394.8	1,380.6	1,524.9	10,100.9	9,361.2	326.5	94.7	72.5	28.3	21.2	138.2	129.7
2024 Apr.	19,778.2	4,651.0	3,489.9	1,376.3	1,532.6	10,104.7	9,355.0	347.1	100.4	69.3	13.0	33.8	143.5	137.7
May	19,823.6	4,664.4	3,522.4	1,375.1	1,545.6	10,091.2	9,341.0	400.9	76.8	107.6	21.3	35.1	181.5	163.3
June	19,955.2	4,664.8	3,549.2	1,387.5	1,560.8	10,180.2	9,425.6	319.3	70.8	80.4	28.6	28.8	139.2	130.8
July	20,195.9	4,709.4	3,571.4	1,374.3	1,563.3	10,351.8	9,588.2	318.0	84.0	96.8	17.8	16.0	121.2	116.9
Aug.	20,291.3	4,727.6	3,572.6	1,367.0	1,565.9	10,425.1	9,657.4	214.4	48.0	53.6	12.3	11.0	101.7	97.0
Sep.	20,610.1	4,798.4	3,612.3	1,370.8	1,599.4	10,599.9	9,824.0	382.6	100.3	90.5	24.7	39.3	152.4	145.2

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											
2021	21,327.5	4,597.9	3,494.4	1,429.8	1,706.9	11,528.4	10,617.5	10,357.6	600.3	1,484.9	8,271.4
2022	19,247.6	4,431.7	3,370.0	1,424.6	1,508.4	9,937.6	9,180.3	8,701.9	525.2	1,286.3	6,889.8
2023	21,067.6	5,106.3	3,547.4	1,444.4	1,611.2	10,802.7	10,020.3	9,675.2	621.8	1,411.3	7,641.6
2024 Apr.	21,320.1	5,232.9	3,660.2	1,439.3	1,624.4	10,802.6	10,003.1	10,232.1	729.5	1,532.7	7,969.5
May	21,337.8	5,224.3	3,688.9	1,432.4	1,639.6	10,785.1	9,980.9	10,365.6	750.6	1,560.1	8,054.5
June	21,485.3	5,230.5	3,712.3	1,444.5	1,650.5	10,892.0	10,083.7	10,057.0	697.9	1,506.2	7,852.4
July	21,740.1	5,272.3	3,747.1	1,432.6	1,658.5	11,062.2	10,239.4	10,112.7	734.9	1,524.8	7,852.5
Aug.	21,845.0	5,289.1	3,747.1	1,421.1	1,661.1	11,147.7	10,316.9	10,247.1	734.9	1,548.6	7,963.1
Sep.	22,142.3	5,385.0	3,776.4	1,422.7	1,677.2	11,303.8	10,467.8	10,413.8	748.7	1,562.9	8,101.8
Growth rate [1]											
2024 Feb.	5.8	10.6	4.7	2.6	2.1	4.5	4.9	-1.5	-3.0	0.6	-1.7
Mar.	5.9	11.4	4.9	2.9	2.4	4.3	4.6	-1.4	-3.0	0.9	-1.6
Apr.	5.7	10.2	4.5	1.1	2.9	4.4	4.6	-1.4	-3.1	0.5	-1.6
May	5.4	8.7	3.8	-2.1	2.9	4.8	4.8	-1.2	-3.2	0.4	-1.3
June	4.7	7.2	3.5	-2.7	3.2	4.2	4.2	-0.6	-3.3	-1.1	-0.3
July	4.3	5.4	3.9	-3.5	2.3	4.2	4.2	-0.4	-3.5	-0.8	0.0
Aug.	4.5	5.2	4.1	-3.5	2.9	4.5	4.4	-0.3	-3.4	-0.8	0.0
Sep.	4.5	6.3	4.0	-3.5	2.5	4.2	4.1	-0.2	-2.1	-0.6	0.1

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-19						EER-42	
	Nominal	Real CPI	Real PPI	Real GDP deflator	Real ULCM	Real ULCT	Nominal	Real CPI
	1	2	3	4	5	6	7	8
2021	99.6	93.7	93.7	89.0	68.1	87.6	120.5	94.3
2022	95.3	90.8	93.6	84.3	63.2	83.0	116.1	90.9
2023	98.1	94.0	98.1	88.6	65.1	86.7	121.8	94.7
2023 Q4	98.3	94.2	98.4	89.3	65.2	87.5	123.0	95.1
2024 Q1	98.4	94.4	98.4	89.6	65.8	87.8	123.7	95.2
Q2	98.7	94.6	98.5	89.4	65.3	87.7	124.1	95.2
Q3	99.0	95.0	98.9	.	.	.	125.1	95.6
2024 Apr.	98.6	94.5	98.5	-	-	-	124.0	95.2
May	98.9	94.8	98.6	-	-	-	124.4	95.3
June	98.5	94.5	98.3	-	-	-	124.0	95.0
July	99.0	95.1	98.8	-	-	-	124.8	95.5
Aug.	99.0	95.0	99.0	-	-	-	125.2	95.7
Sep.	98.8	94.8	99.0	-	-	-	125.2	95.6
Percentage change versus previous month								
2024 Sep.	-0.2	-0.3	0.0	-	-	-	0.0	-0.1
Percentage change versus previous year								
2024 Sep.	0.3	0.1	0.1	-	-	-	1.8	0.1

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	Croatian kuna	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	12
2021	7.628	7.528	25.640	7.437	358.516	129.877	4.565	0.860	4.9215	10.146	1.081	1.183
2022	7.079	7.535	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
2023 Q4	7.771	.	24.517	7.458	382.125	159.118	4.420	0.867	4.9697	11.478	0.955	1.075
2024 Q1	7.805	.	25.071	7.456	388.182	161.150	4.333	0.856	4.9735	11.279	0.949	1.086
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
2024 Apr.	7.766	.	25.278	7.460	392.411	165.030	4.303	0.857	4.9730	11.591	0.976	1.073
May	7.821	.	24.818	7.461	387.183	168.536	4.280	0.856	4.9754	11.619	0.983	1.081
June	7.805	.	24.779	7.459	394.763	169.813	4.321	0.846	4.9767	11.285	0.962	1.076
July	7.875	.	25.299	7.461	392.836	171.171	4.282	0.843	4.9730	11.532	0.968	1.084
Aug.	7.874	.	25.179	7.461	394.695	161.055	4.292	0.852	4.9766	11.456	0.945	1.101
Sep.	7.861	.	25.099	7.460	394.863	159.081	4.276	0.840	4.9744	11.358	0.941	1.111
Percentage change versus previous month												
2024 Sep.	-0.2	0.0	-0.3	0.0	0.0	-1.2	-0.4	-1.3	0.0	-0.9	-0.4	0.9
Percentage change versus previous year												
2024 Sep.	0.8	.	2.9	0.0	2.2	0.8	-7.0	-2.5	0.2	-4.1	-1.9	4.0

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)												
2023 Q3	32,466.9	31,989.4	477.6	12,501.5	10,279.5	12,034.1	13,942.1	-21.3	6,839.1	7,767.8	1,113.6	16,437.1
Q4	32,517.9	31,962.8	555.1	12,169.4	9,931.2	12,483.1	14,515.4	-9.1	6,726.6	7,516.1	1,147.8	16,156.2
2024 Q1	33,809.1	33,053.6	755.4	12,421.8	10,017.0	13,153.5	15,254.1	-6.1	7,024.8	7,782.6	1,215.1	16,598.4
Q2	34,349.2	33,170.4	1,178.8	12,409.6	9,894.1	13,582.5	15,549.1	-3.2	7,092.6	7,727.1	1,267.6	16,520.4
Outstanding amounts as percentage of GDP												
2024 Q2	232.5	224.5	8.0	84.0	67.0	91.9	105.3	0.0	48.0	52.3	8.6	111.8
Transactions												
2023 Q3	149.3	63.6	85.7	6.2	21.8	121.2	138.8	-0.7	24.7	-96.9	-2.1	-
Q4	-324.6	-441.7	117.1	-324.1	-301.1	46.9	90.6	21.9	-75.8	-231.2	6.4	-
2024 Q1	579.4	465.8	113.6	142.9	52.2	169.2	189.3	13.0	253.1	224.4	1.2	-
Q2	166.7	32.9	133.8	-49.3	-116.2	182.1	261.3	12.2	17.9	-112.1	3.7	-
2024 Feb.	209.0	187.9	21.1	52.6	-3.2	53.3	69.2	11.6	90.6	121.9	0.9	-
Mar.	182.8	107.2	75.6	81.0	42.7	48.6	31.5	-12.0	65.7	33.0	-0.5	-
Apr.	71.5	49.9	21.5	-2.9	-29.0	28.5	42.6	12.7	32.2	36.3	0.8	-
May	101.2	80.3	20.9	-31.2	-39.4	77.1	75.2	-1.5	55.3	44.6	1.6	-
June	-6.0	-97.3	91.3	-15.2	-47.8	76.4	143.5	1.0	-69.6	-193.0	1.3	-
July	120.8	66.2	54.6	19.6	-1.0	54.5	32.6	-2.7	52.6	34.6	-3.2	-
12-month cumulated transactions												
2024 July	552.6	81.4	471.2	-194.1	-370.8	513.9	706.7	51.5	175.8	-254.5	5.5	-
12-month cumulated transactions as percentage of GDP												
2024 July	3.7	0.6	3.2	-1.3	-2.5	3.5	4.8	0.3	1.2	-1.7	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												
2021	1,469.3	9,822.6	11,291.8	918.8	2,504.9	3,423.7	14,715.5	118.7	644.1	25.3	788.1	15,503.7
2022	1,539.5	9,763.0	11,302.6	1,382.1	2,563.9	3,946.1	15,248.7	124.2	646.1	49.5	819.7	16,068.4
2023	1,536.0	8,834.3	10,370.3	2,309.8	2,458.5	4,768.3	15,138.6	186.8	739.5	70.1	996.4	16,135.0
2023 Q3	1,535.7	8,985.8	10,521.5	2,085.9	2,465.8	4,551.6	15,073.1	131.0	714.4	75.7	921.1	15,994.2
Q4	1,536.0	8,834.3	10,370.3	2,309.8	2,458.5	4,768.3	15,138.6	186.8	739.5	70.1	996.4	16,135.0
2024 Q1	1,522.8	8,735.8	10,258.6	2,447.5	2,431.0	4,878.5	15,137.1	192.7	787.1	72.5	1,052.3	16,189.5
Q2 (p)	1,533.6	8,809.0	10,342.6	2,530.1	2,428.7	4,958.8	15,301.3	206.7	815.8	58.4	1,080.9	16,382.3
2024 Mar.	1,522.8	8,735.8	10,258.6	2,447.5	2,431.0	4,878.5	15,137.1	192.7	787.1	72.5	1,052.3	16,189.5
Apr.	1,531.8	8,722.6	10,254.4	2,460.1	2,431.5	4,891.6	15,146.0	205.1	797.2	73.1	1,075.4	16,221.4
May	1,529.0	8,725.9	10,254.9	2,505.8	2,430.8	4,936.6	15,191.5	205.2	791.0	67.1	1,063.3	16,254.8
June	1,533.6	8,809.0	10,342.6	2,530.1	2,428.7	4,958.8	15,301.3	206.7	815.8	58.4	1,080.9	16,382.3
July	1,536.7	8,748.4	10,285.1	2,528.8	2,423.8	4,952.6	15,237.7	225.1	823.2	60.0	1,108.3	16,346.0
Aug. (p)	1,538.9	8,800.2	10,339.0	2,542.5	2,429.4	4,971.9	15,310.9	240.6	833.3	50.3	1,124.2	16,435.2
Transactions												
2021	106.6	908.1	1,014.7	-121.0	65.7	-55.3	959.4	12.3	20.3	13.2	45.7	1,005.1
2022	70.3	-47.4	23.0	429.5	54.9	484.4	507.4	3.9	2.4	76.6	82.8	590.2
2023	-5.0	-954.4	-959.3	925.5	-100.1	825.4	-133.9	40.9	93.8	23.3	158.0	24.1
2023 Q3	0.3	-202.7	-202.4	224.0	-52.1	171.9	-30.5	16.4	18.2	-8.8	25.8	-4.7
Q4	0.3	-129.5	-129.2	228.9	-6.8	222.1	92.9	35.0	26.0	-6.2	54.8	147.7
2024 Q1	-12.6	-104.1	-116.6	135.8	-27.0	108.9	-7.8	8.3	47.4	7.6	63.3	55.5
Q2 (p)	10.7	72.4	83.2	58.3	-2.3	56.0	139.1	13.6	25.7	-13.8	25.5	164.7
2024 Mar.	-10.2	24.0	13.8	23.5	-2.7	20.8	34.6	14.2	17.9	1.6	33.7	68.3
Apr.	9.0	-14.8	-5.8	10.8	0.5	11.3	5.5	12.2	9.9	1.6	23.7	29.2
May	-2.8	6.4	3.6	35.8	-0.6	35.2	38.8	0.3	-7.6	-5.1	-12.4	26.4
June	4.5	80.8	85.4	11.7	-2.2	9.5	94.9	1.1	23.5	-10.3	14.2	109.1
July	3.1	-58.6	-55.5	-0.6	-4.9	-5.6	-61.1	18.6	6.0	0.9	25.5	-35.5
Aug. (p)	2.2	25.1	27.4	16.6	5.7	22.3	49.6	16.3	8.9	-8.6	16.6	66.2
Growth rates												
2021	7.8	10.2	9.9	-11.7	2.7	-1.6	7.0	12.1	3.2	158.5	6.2	6.9
2022	4.8	-0.5	0.2	45.8	2.2	14.1	3.4	3.1	0.4	458.1	11.1	3.8
2023	-0.3	-9.7	-8.5	66.6	-3.9	20.9	-0.9	32.9	14.5	43.7	19.3	0.2
2023 Q3	-0.2	-11.4	-9.9	76.3	-3.3	21.9	-2.2	10.3	18.4	65.0	19.9	-1.2
Q4	-0.3	-9.7	-8.5	66.6	-3.9	20.9	-0.9	32.9	14.5	43.7	19.3	0.2
2024 Q1	-1.2	-7.5	-6.6	49.8	-4.6	16.7	-0.2	68.6	18.1	-16.9	20.7	0.9
Q2 (p)	-0.1	-4.0	-3.4	34.8	-3.5	12.8	1.3	62.1	16.9	-28.8	18.8	2.3
2024 Mar.	-1.2	-7.5	-6.6	49.8	-4.6	16.7	-0.2	68.6	18.1	-16.9	20.7	0.9
Apr.	-0.3	-6.8	-5.9	45.4	-4.2	15.6	0.1	78.5	17.8	-9.9	22.7	1.3
May	-0.5	-5.8	-5.0	41.3	-3.8	14.7	0.6	64.6	14.4	-20.8	17.6	1.5
June	-0.1	-4.0	-3.4	34.8	-3.5	12.8	1.3	62.1	16.9	-28.8	18.8	2.3
July	0.2	-3.6	-3.1	30.6	-3.3	11.4	1.2	65.6	18.0	-22.8	21.4	2.3
Aug. (p)	0.4	-2.5	-2.1	26.5	-2.2	10.6	1.7	77.6	18.4	-37.5	22.0	2.9

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)]							
	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	Financial corporations other than MFIs and ICPFs [2)]	Insurance corporations and pension funds	Other general government [4)]
	1	2	3	4	5	6	7	8	9	10	11	12	13
Outstanding amounts													
2021	3,228.3	2,802.7	289.7	128.4	7.4	8,088.0	5,380.9	374.1	2,332.3	0.7	1,272.7	229.0	546.9
2022	3,360.4	2,721.4	497.6	135.0	6.4	8,373.4	5,536.6	444.9	2,391.1	0.9	1,302.3	236.3	560.8
2023	3,335.4	2,424.0	767.7	131.6	12.1	8,425.1	5,111.0	1,021.7	2,290.9	1.4	1,252.4	234.8	541.7
2023 Q3	3,322.7	2,438.8	737.1	131.9	14.8	8,350.5	5,205.0	847.5	2,297.1	0.8	1,217.0	212.6	565.7
Q4	3,335.4	2,424.0	767.7	131.6	12.1	8,425.1	5,111.0	1,021.7	2,290.9	1.4	1,252.4	234.8	541.7
2024 Q1	3,332.7	2,380.0	814.3	127.6	10.8	8,460.1	5,056.1	1,135.9	2,267.0	1.0	1,244.0	227.2	543.1
Q2 [p]	3,394.9	2,421.6	836.8	127.5	9.1	8,530.0	5,063.6	1,198.4	2,266.7	1.3	1,286.0	226.0	537.5
2024 Mar.	3,332.7	2,380.0	814.3	127.6	10.8	8,460.1	5,056.1	1,135.9	2,267.0	1.0	1,244.0	227.2	543.1
Apr.	3,346.3	2,384.2	824.6	126.8	10.7	8,487.9	5,058.9	1,160.6	2,267.4	1.0	1,248.8	209.9	526.4
May	3,371.8	2,389.1	847.0	127.0	8.7	8,496.2	5,047.0	1,180.4	2,267.7	1.0	1,262.2	214.8	522.8
June	3,394.9	2,421.6	836.8	127.5	9.1	8,530.0	5,063.6	1,198.4	2,266.7	1.3	1,286.0	226.0	537.5
July	3,365.2	2,399.8	828.6	127.0	9.9	8,542.8	5,056.8	1,222.0	2,263.1	0.9	1,269.1	211.0	538.0
Aug. [p]	3,368.3	2,399.9	831.3	126.4	10.7	8,579.6	5,086.4	1,223.2	2,269.1	1.0	1,306.8	214.9	543.0
Transactions													
2021	248.2	272.8	-21.3	-6.9	3.6	422.0	411.1	-65.0	76.1	-0.2	159.2	-10.4	46.0
2022	121.9	-89.2	206.5	5.9	-1.4	296.1	167.5	75.2	53.3	0.1	1.2	7.7	14.0
2023	-29.1	-302.9	269.3	-1.4	5.9	22.5	-458.3	575.4	-95.1	0.6	-55.5	0.0	-25.9
2023 Q3	-13.7	-65.7	48.3	-0.1	3.7	-14.2	-110.6	149.3	-52.9	0.0	30.2	-17.3	0.6
Q4	21.2	-8.7	32.4	-0.1	-2.5	76.6	-93.0	175.0	-6.0	0.6	30.9	23.0	-24.1
2024 Q1	-4.0	-46.0	45.7	-3.5	-0.2	32.1	-55.7	112.2	-24.0	-0.4	-8.2	-8.0	1.3
Q2 [p]	59.9	41.6	20.1	0.0	-1.8	69.3	7.2	62.1	-0.2	0.2	21.2	-1.5	-6.8
2024 Mar.	16.0	12.9	4.1	-0.3	-0.7	7.7	-9.4	21.9	-4.9	0.1	29.9	3.9	1.5
Apr.	13.2	3.7	10.3	-0.7	-0.2	27.5	2.6	24.6	0.4	-0.1	3.2	-17.6	-17.7
May	28.1	6.4	23.3	0.2	-1.9	8.9	-11.5	20.0	0.3	0.0	3.6	5.1	-3.7
June	18.6	31.4	-13.6	0.5	0.3	32.8	16.1	17.5	-1.0	0.2	14.4	11.0	14.6
July	-28.3	-20.8	-7.8	-0.6	0.9	13.2	-6.7	23.8	-3.6	-0.3	-16.0	-14.9	0.4
Aug. [p]	6.8	2.3	4.1	-0.6	0.9	6.1	-1.8	1.7	6.1	0.1	41.5	4.3	5.0
Growth rates													
2021	8.4	10.8	-6.9	-5.0	103.4	5.5	8.3	-14.8	3.4	-18.4	14.2	-4.3	9.3
2022	3.8	-3.2	70.1	4.6	-16.4	3.7	3.1	20.3	2.3	19.9	0.4	3.4	2.6
2023	-0.9	-11.1	54.0	-1.0	91.8	0.3	-8.2	128.2	-4.0	67.4	-4.1	0.0	-4.6
2023 Q3	-1.2	-14.0	90.6	0.2	83.5	-0.3	-7.4	127.8	-3.4	-14.5	-16.4	-12.3	1.8
Q4	-0.9	-11.1	54.0	-1.0	91.8	0.3	-8.2	128.2	-4.0	67.4	-4.1	0.0	-4.6
2024 Q1	0.1	-8.2	36.4	-3.2	39.0	0.9	-7.1	101.2	-4.6	12.1	1.4	-1.6	-5.7
Q2 [p]	1.9	-3.2	21.3	-2.8	-9.2	2.0	-4.7	71.3	-3.5	47.9	6.4	-1.7	-5.1
2024 Mar.	0.1	-8.2	36.4	-3.2	39.0	0.9	-7.1	101.2	-4.6	12.1	1.4	-1.6	-5.7
Apr.	0.6	-7.0	32.6	-3.2	16.1	1.4	-6.2	91.8	-4.3	9.0	2.0	-8.6	-6.8
May	1.9	-5.4	31.8	-3.1	-11.9	1.6	-5.7	81.1	-3.9	11.2	2.7	-5.7	-6.9
June	1.9	-3.2	21.3	-2.8	-9.2	2.0	-4.7	71.3	-3.5	47.9	6.4	-1.7	-5.1
July	1.7	-2.7	17.9	-3.0	2.2	2.1	-4.1	62.3	-3.2	10.2	5.1	-2.9	-5.0
Aug. [p]	1.8	-1.9	15.4	-3.8	11.3	2.3	-3.4	51.8	-2.0	16.4	10.7	-1.2	-3.4

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												
2021	6,531.5	994.3	5,535.4	14,805.5	12,340.5	12,722.7	4,864.8	6,372.6	941.9	161.1	1,576.9	888.1
2022	6,362.0	1,004.7	5,332.2	15,390.5	12,990.1	13,177.9	5,129.8	6,632.2	1,080.6	147.6	1,564.4	836.0
2023	6,316.9	994.7	5,296.9	15,493.9	13,037.0	13,256.8	5,126.7	6,648.6	1,122.8	139.0	1,559.2	897.7
2023 Q3	6,212.5	989.2	5,198.3	15,435.5	12,984.0	13,192.8	5,114.7	6,635.7	1,096.5	137.2	1,576.9	874.6
Q4	6,316.9	994.7	5,296.9	15,493.9	13,037.0	13,256.8	5,126.7	6,648.6	1,122.8	139.0	1,559.2	897.7
2024 Q1	6,218.1	976.8	5,215.7	15,547.5	13,044.7	13,275.8	5,115.6	6,644.2	1,145.1	139.8	1,571.4	931.4
Q2	6,194.3	978.8	5,189.7	15,572.7	13,101.9	13,341.0	5,128.6	6,644.0	1,199.1	130.1	1,554.1	916.7
2024 Mar.	6,218.1	976.8	5,215.7	15,547.5	13,044.7	13,275.8	5,115.6	6,644.2	1,145.1	139.8	1,571.4	931.4
Apr.	6,210.8	972.8	5,212.4	15,534.2	13,058.4	13,292.5	5,111.5	6,642.2	1,167.6	137.0	1,556.0	919.8
May	6,177.7	972.8	5,179.2	15,530.7	13,066.5	13,299.9	5,115.9	6,641.0	1,179.7	129.9	1,542.2	922.1
June	6,194.3	978.8	5,189.7	15,572.7	13,101.9	13,341.0	5,128.6	6,644.0	1,199.1	130.1	1,554.1	916.7
July	6,216.8	972.1	5,219.0	15,600.3	13,129.2	13,361.6	5,123.9	6,643.1	1,230.4	131.8	1,546.1	924.9
Aug.	6,234.9	977.3	5,231.9	15,619.0	13,138.1	13,370.6	5,129.4	6,654.1	1,221.5	133.1	1,556.9	923.9
Transactions												
2021	663.1	-0.9	673.6	562.7	475.8	509.2	176.9	261.7	47.4	-10.1	77.7	9.2
2022	175.9	9.6	165.0	636.0	624.1	680.7	269.4	241.9	126.1	-13.4	18.2	-6.3
2023	-159.5	-16.8	-142.9	55.5	25.1	72.6	-5.4	7.8	30.7	-8.1	-15.3	45.7
2023 Q3	-18.1	1.6	-19.4	10.1	2.2	-9.3	-8.6	2.1	14.0	-5.3	2.1	5.8
Q4	6.8	7.8	-1.3	39.1	46.6	69.4	10.0	17.6	16.7	2.2	-23.8	16.3
2024 Q1	-75.6	-16.4	-59.4	60.7	24.8	37.4	-5.5	-0.8	30.4	0.8	12.2	23.7
Q2	-3.0	2.4	-5.7	18.6	40.9	52.1	15.2	2.5	33.0	-9.8	-16.3	-6.1
2024 Mar.	-9.3	-5.6	-3.7	17.2	20.0	15.9	3.0	7.6	5.8	3.6	-13.4	10.6
Apr.	14.6	-3.3	17.9	-7.4	13.4	16.8	-4.3	-1.2	21.6	-2.8	-14.7	-6.1
May	-29.0	-0.1	-28.9	-9.0	2.3	2.3	6.9	-1.0	3.5	-7.1	-13.3	2.0
June	11.3	5.9	5.3	34.9	25.2	32.9	12.7	4.6	7.8	0.1	11.6	-2.0
July	-12.9	-6.5	-6.2	26.9	32.4	25.8	-2.0	-0.1	32.7	1.7	-10.2	4.8
Aug.	14.3	5.2	9.2	25.8	16.3	16.4	9.5	12.1	-6.6	1.3	12.2	-2.7
Growth rates												
2021	11.3	-0.1	13.8	3.9	4.0	4.2	3.8	4.3	5.2	-4.6	5.1	1.0
2022	2.7	1.0	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	0.4	0.2	0.6	-0.1	0.1	2.8	-5.4	-1.0	5.4
2023 Q3	-2.1	-2.1	-2.1	0.2	-0.2	0.3	-0.4	0.3	-0.2	-13.9	1.6	5.0
Q4	-2.5	-1.7	-2.7	0.4	0.2	0.6	-0.1	0.1	2.8	-5.4	-1.0	5.4
2024 Q1	-2.5	-1.6	-2.8	0.8	0.4	0.8	-0.2	-0.1	6.3	-1.2	0.5	7.2
Q2	-1.4	-0.5	-1.6	0.8	0.9	1.1	0.2	0.3	8.7	-8.6	-1.6	4.6
2024 Mar.	-2.5	-1.6	-2.8	0.8	0.4	0.8	-0.2	-0.1	6.3	-1.2	0.5	7.2
Apr.	-1.9	-0.7	-2.1	0.7	0.5	0.9	-0.2	-0.2	8.7	-4.5	-0.6	5.7
May	-1.4	-1.4	-1.5	0.6	0.6	0.8	-0.1	0.3	7.0	-7.7	-2.5	5.2
June	-1.4	-0.5	-1.6	0.8	0.9	1.1	0.2	0.3	8.7	-8.6	-1.6	4.6
July	-1.1	-0.9	-1.1	0.9	1.0	1.3	0.2	0.4	9.4	-2.5	-2.1	4.3
Aug.	-1.1	-0.6	-1.2	1.2	1.4	1.6	0.4	0.5	10.8	1.5	-1.4	4.0

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										
2021	4,864.8	4,995.5	885.0	1,005.2	2,974.6	6,372.6	6,637.5	698.3	4,970.8	703.5
2022	5,129.8	5,130.8	962.6	1,077.6	3,089.6	6,632.2	6,832.8	717.3	5,214.6	700.2
2023	5,126.7	5,143.4	910.2	1,091.1	3,125.5	6,648.6	6,865.8	733.5	5,229.2	685.9
2023 Q3	5,114.7	5,123.3	911.5	1,085.4	3,117.8	6,635.7	6,867.1	731.6	5,212.7	691.3
Q4	5,126.7	5,143.4	910.2	1,091.1	3,125.5	6,648.6	6,865.8	733.5	5,229.2	685.9
2024 Q1	5,115.6	5,132.7	888.0	1,088.5	3,139.1	6,644.2	6,873.5	742.0	5,222.6	679.6
Q2	5,128.6	5,146.7	901.5	1,087.5	3,139.7	6,644.0	6,879.8	740.4	5,226.1	677.5
2024 Mar.	5,115.6	5,132.7	888.0	1,088.5	3,139.1	6,644.2	6,873.5	742.0	5,222.6	679.6
Apr.	5,111.5	5,127.4	877.3	1,087.4	3,146.8	6,642.2	6,876.2	741.4	5,223.9	676.9
May	5,115.9	5,128.9	886.8	1,086.4	3,142.7	6,641.0	6,877.9	742.0	5,222.2	676.7
June	5,128.6	5,146.7	901.5	1,087.5	3,139.7	6,644.0	6,879.8	740.4	5,226.1	677.5
July	5,123.9	5,140.1	899.9	1,086.0	3,138.0	6,643.1	6,882.8	741.3	5,228.6	673.3
Aug.	5,129.4	5,132.9	901.5	1,085.3	3,142.6	6,654.1	6,891.0	744.1	5,238.0	672.0
Transactions										
2021	176.9	208.3	0.2	2.3	174.4	261.7	267.3	10.7	254.9	-3.9
2022	269.4	309.2	77.9	77.5	114.1	241.9	250.3	23.3	217.7	0.9
2023	-5.4	24.9	-43.6	10.3	27.8	7.8	25.7	18.9	10.0	-21.1
2023 Q3	-8.6	-10.3	-10.8	-3.3	5.6	2.1	0.6	6.7	3.1	-7.6
Q4	10.0	30.3	4.1	5.2	0.7	17.6	3.4	3.8	17.6	-3.8
2024 Q1	-5.5	-3.3	-20.1	-1.4	16.0	-0.8	9.8	9.4	-5.3	-5.0
Q2	15.2	17.7	17.4	-1.8	-0.4	2.5	10.3	0.2	4.0	-1.7
2024 Mar.	3.0	3.4	-3.3	-0.9	7.2	7.6	2.3	5.7	2.7	-0.8
Apr.	-4.3	-5.1	-7.0	-2.7	5.3	-1.2	3.3	-0.2	1.4	-2.3
May	6.9	3.7	10.4	-0.4	-3.2	-1.0	3.0	1.1	-1.4	-0.6
June	12.7	19.1	14.0	1.2	-2.5	4.6	4.0	-0.6	4.0	1.2
July	-2.0	-3.9	-0.6	-1.2	-0.3	-0.1	3.8	1.8	2.0	-3.9
Aug.	9.5	-3.7	3.3	0.4	5.7	12.1	9.0	3.2	9.7	-0.9
Growth rates										
2021	3.8	4.3	0.0	0.2	6.2	4.3	4.2	1.5	5.4	-0.6
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	-4.5	1.0	0.9	0.1	0.4	2.6	0.2	-3.0
2023 Q3	-0.4	0.2	-8.8	2.2	1.4	0.3	0.8	2.8	0.3	-2.5
Q4	-0.1	0.5	-4.5	1.0	0.9	0.1	0.4	2.6	0.2	-3.0
2024 Q1	-0.2	0.3	-3.9	-0.2	1.0	-0.1	0.2	3.3	-0.2	-3.0
Q2	0.2	0.7	-1.0	-0.1	0.7	0.3	0.3	2.8	0.4	-2.6
2024 Mar.	-0.2	0.3	-3.9	-0.2	1.0	-0.1	0.2	3.3	-0.2	-3.0
Apr.	-0.2	0.2	-3.7	-0.7	1.1	-0.2	0.2	3.0	-0.2	-3.1
May	-0.1	0.3	-2.5	-0.8	0.9	0.3	0.3	2.9	0.4	-2.9
June	0.2	0.7	-1.0	-0.1	0.7	0.3	0.3	2.8	0.4	-2.6
July	0.2	0.6	-0.8	-0.3	0.6	0.4	0.5	2.8	0.5	-2.7
Aug.	0.4	0.8	0.0	0.1	0.7	0.5	0.6	2.9	0.6	-2.5

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			
		Longer-term financial liabilities vis-à-vis other euro area residents						Other		
	Central government holdings [2)]	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	Net external assets	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										
2021	736.1	6,884.3	1,838.9	37.1	1,999.0	3,009.3	1,376.4	410.6	128.5	136.8
2022	648.6	6,744.4	1,783.1	45.9	2,110.6	2,804.8	1,333.6	375.4	137.2	147.2
2023	461.3	7,319.8	1,826.4	90.5	2,416.6	2,986.2	1,859.3	246.0	155.0	152.6
2023 Q3	455.9	7,123.0	1,824.6	72.9	2,355.9	2,869.6	1,633.6	291.6	153.8	163.3
Q4	461.3	7,319.8	1,826.4	90.5	2,416.6	2,986.2	1,859.3	246.0	155.0	152.6
2024 Q1	399.4	7,454.3	1,828.5	105.2	2,496.5	3,024.1	2,044.8	232.8	178.0	174.2
Q2 (p)	413.7	7,534.2	1,830.7	109.8	2,528.9	3,064.9	2,230.8	332.3	182.6	176.5
2024 Mar.	399.4	7,454.3	1,828.5	105.2	2,496.5	3,024.1	2,044.8	232.8	178.0	174.2
Apr.	438.2	7,490.3	1,826.4	107.9	2,524.7	3,031.3	2,174.0	231.0	163.6	177.4
May	445.1	7,490.7	1,824.7	109.0	2,520.9	3,036.1	2,233.6	248.5	159.1	165.0
June	413.7	7,534.2	1,830.7	109.8	2,528.9	3,064.9	2,230.8	332.3	182.6	176.5
July	394.0	7,578.6	1,821.7	111.0	2,526.7	3,119.3	2,339.6	161.9	166.9	154.9
Aug. (p)	426.3	7,604.8	1,820.9	111.0	2,535.9	3,136.9	2,392.4	220.0	193.2	170.7
Transactions										
2021	25.4	-38.7	-74.9	-5.0	-39.7	81.0	-112.2	-121.7	-8.3	-4.3
2022	-83.4	46.8	-89.0	-4.4	0.5	139.8	-68.3	-190.1	10.4	18.0
2023	-193.6	323.1	24.7	40.1	231.1	27.1	459.2	-201.8	19.7	9.0
2023 Q3	-29.1	91.4	16.9	11.4	44.5	18.7	130.5	-64.9	-13.3	-6.0
Q4	5.4	62.5	-11.3	17.6	65.7	-9.4	176.2	-6.5	1.2	-10.7
2024 Q1	-61.5	117.0	4.9	14.7	93.7	3.7	132.7	-6.9	25.6	21.5
Q2 (p)	14.9	54.9	2.1	4.6	27.2	21.0	142.9	76.0	4.6	2.3
2024 Mar.	-39.2	34.3	0.4	3.5	42.0	-11.7	39.1	16.4	12.5	0.8
Apr.	39.5	16.6	-2.1	2.6	22.4	-6.3	102.1	-24.0	-14.4	3.2
May	6.8	11.4	-1.1	1.2	3.2	8.1	61.6	21.1	-4.5	-12.4
June	-31.5	26.8	5.2	0.8	1.6	19.2	-20.8	78.9	23.5	11.4
July	-19.7	0.9	-8.3	1.2	5.3	2.7	74.9	-143.4	-15.7	-21.6
Aug. (p)	32.3	21.8	0.5	0.0	20.7	0.6	44.4	35.8	26.4	15.8
Growth rates										
2021	3.6	-0.6	-3.9	-11.9	-2.0	2.7	-	-	-6.0	-3.0
2022	-11.4	0.7	-4.8	-13.0	-0.1	4.9	-	-	7.8	12.7
2023	-29.7	4.7	1.4	80.2	10.8	0.9	-	-	14.3	6.0
2023 Q3	-30.2	4.7	1.4	48.8	10.5	1.9	-	-	5.6	14.2
Q4	-29.7	4.7	1.4	80.2	10.8	0.9	-	-	14.3	6.0
2024 Q1	-30.3	5.2	1.3	89.9	12.0	0.8	-	-	20.3	7.1
Q2 (p)	-14.5	4.6	0.7	78.4	10.1	1.1	-	-	11.1	4.3
2024 Mar.	-30.3	5.2	1.3	89.9	12.0	0.8	-	-	20.3	7.1
Apr.	-23.2	5.0	0.4	89.7	12.6	0.4	-	-	9.6	11.8
May	-10.4	4.7	0.6	85.0	11.2	0.5	-	-	-6.1	-8.6
June	-14.5	4.6	0.7	78.4	10.1	1.1	-	-	11.1	4.3
July	-14.9	4.2	0.2	72.1	9.3	1.1	-	-	11.3	1.0
Aug. (p)	-2.8	4.1	0.2	63.2	9.5	0.8	-	-	19.5	7.6

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
2020	-7.0	-5.7	-0.4	0.0	-0.9	-5.5
2021	-5.2	-5.2	0.0	0.1	0.0	-3.8
2022	-3.6	-3.9	0.0	0.0	0.3	-2.0
2023	-3.6	-3.6	-0.2	-0.2	0.4	-1.8
2023 Q2	-4.0	.	.	.	.	-2.3
Q3	-3.9	.	.	.	.	-2.1
Q4	-3.6	.	.	.	.	-1.8
2024 Q1	-3.5	.	.	.	.	-1.7

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						
		Current revenue						Current expenditure					
	Total	Total	Direct taxes	Indirect taxes	Net social contribu-tions	Capital revenue	Total	Total	Compen-sation of employ-ees	Inter-mediate consump-tion	Interest	Social benefits	Capital expenditure
	1	2	3	4	5	6	7	8	9	10	11	12	13
2020	46.5	46.0	12.8	12.7	15.5	0.5	53.5	48.8	10.7	6.0	1.5	25.3	4.7
2021	47.1	46.3	13.1	13.1	15.1	0.8	52.3	47.1	10.2	6.0	1.5	24.0	5.2
2022	46.9	46.1	13.5	12.9	14.8	0.8	50.5	45.2	9.9	5.9	1.7	22.7	5.3
2023	46.4	45.6	13.3	12.5	14.7	0.8	50.0	44.5	9.8	5.9	1.8	22.6	5.4
2023 Q2	46.3	45.6	13.3	12.7	14.7	0.8	50.3	44.9	9.8	5.9	1.7	22.6	5.4
Q3	46.3	45.5	13.3	12.6	14.7	0.8	50.1	44.7	9.8	5.9	1.8	22.5	5.4
Q4	46.4	45.6	13.3	12.5	14.7	0.8	50.0	44.5	9.8	5.9	1.8	22.6	5.4
2024 Q1	46.4	45.6	13.3	12.5	14.7	0.8	49.9	44.6	9.9	6.0	1.8	22.7	5.3

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 de-posits	Loans	Debt securi-ties	Resident creditors		Non-resident credi-tors	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 curren-cies
					Total	MFIs								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2020	97.0	3.2	14.5	79.4	54.2	39.0	42.8	11.1	85.9	18.7	30.9	47.4	95.4	1.7
2021	94.6	2.9	13.8	77.8	54.8	41.2	39.8	9.8	84.7	17.3	30.2	47.1	93.1	1.4
2022	90.5	2.7	13.2	74.6	52.9	40.1	37.6	8.7	81.7	16.2	28.7	45.6	89.5	1.0
2023	88.2	2.4	12.2	73.6	49.7	36.5	38.5	8.0	80.3	15.4	28.3	44.6	87.4	0.8
2023 Q2	89.7	2.5	12.4	74.8	.	.	.	.	.	.	.	.	.	.
Q3	89.2	2.5	12.1	74.6	.	.	.	.	.	.	.	.	.	.
Q4	88.2	2.4	12.2	73.6	.	.	.	.	.	.	.	.	.	.
2024 Q1	88.7	2.3	12.0	74.4	.	.	.	.	.	.	.	.	.	.

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
2020	13.0	5.5	2.2	2.5	2.1	0.4	-0.1	0.1	-0.3	0.1	5.3	9.5
2021	-2.5	3.8	-0.2	0.6	0.4	0.1	0.0	0.1	-0.1	-0.7	-6.0	5.1
2022	-4.1	2.0	-0.3	-0.2	-0.7	0.2	0.1	0.1	0.6	-0.7	-5.7	2.7
2023	-2.2	1.8	-0.3	-0.5	-0.5	-0.2	0.1	0.1	0.6	-0.4	-3.7	2.7
2023 Q2	-3.4	2.3	-0.9	-1.1	-1.5	0.1	0.1	0.1	0.7	-0.5	-4.7	2.3
Q3	-2.5	2.1	-0.4	-0.6	-0.8	-0.2	0.2	0.1	0.7	-0.5	-4.2	2.8
Q4	-2.2	1.8	-0.3	-0.5	-0.5	-0.2	0.1	0.1	0.6	-0.5	-3.6	2.7
2024 Q1	-1.4	1.7	-0.4	-0.7	-0.8	-0.1	0.1	0.1	0.4	-0.1	-2.7	2.7

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	
										Fixed rate			
		Total	Maturities of up to 3 months	Total	Maturities of up to 3 months		Total	Floating rate	Zero coupon	Total	Maturities of up to 1 year	Issuance	Redemption
	1	2	3	4	5	6	7	8	9	10	11	12	13
2021	13.9	12.6	4.2	1.2	0.3	7.9	1.6	1.1	-0.4	1.9	1.9	-0.1	0.5
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	13.0	11.6	4.2	1.4	0.3	8.1	2.0	1.2	1.9	2.0	1.6	3.6	1.9
2023 Q3	12.9	11.6	3.5	1.3	0.3	8.1	1.9	1.1	1.8	2.0	1.7	3.3	1.5
Q4	13.0	11.6	4.2	1.4	0.3	8.1	2.0	1.2	1.9	2.0	1.6	3.6	1.9
2024 Q1	12.9	11.5	3.8	1.4	0.3	8.3	2.1	1.3	2.3	2.0	1.6	3.7	2.5
Q2	13.1	11.7	3.6	1.4	0.4	8.3	2.1	1.3	2.1	2.1	1.6	3.7	2.7
2024 Mar.	12.9	11.5	3.8	1.4	0.3	8.3	2.1	1.3	2.3	2.0	1.6	3.7	2.5
Apr.	12.9	11.5	3.9	1.4	0.4	8.3	2.1	1.3	2.1	2.1	1.4	3.7	2.6
May	12.8	11.4	3.2	1.4	0.4	8.3	2.1	1.3	2.1	2.1	1.4	3.7	2.6
June	13.1	11.7	3.6	1.4	0.4	8.3	2.1	1.3	2.1	2.1	1.6	3.7	2.7
July	13.0	11.6	3.7	1.4	0.4	8.3	2.1	1.4	2.1	2.1	1.6	3.7	2.8
Aug.	13.1	11.7	4.1	1.4	0.4	8.2	2.1	1.3	2.2	2.1	1.6	3.7	2.8

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 (+)									
2020	-9.0	-4.3	-5.4	-5.0	-9.8	-10.1	-8.9	-7.2	-9.4	-5.7
2021	-5.4	-3.6	-2.5	-1.5	-7.0	-6.7	-6.6	-2.5	-8.7	-1.8
2022	-3.6	-2.5	-1.0	1.7	-2.5	-4.7	-4.8	0.1	-8.6	2.7
2023	-4.4	-2.5	-3.4	1.7	-1.6	-3.6	-5.5	-0.7	-7.4	3.1
2023 Q2	-3.8	-3.3	-1.8	1.8	-2.7	-4.6	-5.1	-0.5	-8.3	3.0
Q3	-3.9	-3.1	-2.3	1.4	-1.4	-4.5	-5.4	-0.3	-7.7	3.1
Q4	-4.4	-2.4	-3.5	1.5	-1.6	-3.6	-5.5	-0.8	-7.4	3.1
2024 Q1	-4.8	-2.5	-3.5	1.5	-0.5	-3.8	-5.6	-0.8	-6.7	3.8
	Government debt									
2020	111.9	68.8	18.6	58.1	207.0	120.3	114.9	86.1	155.0	114.9
2021	107.9	69.0	17.8	54.4	195.0	116.8	113.0	77.5	147.1	99.3
2022	104.3	66.1	18.5	44.4	172.7	111.6	111.9	67.8	140.5	85.6
2023	105.2	63.6	19.6	43.7	161.9	107.7	110.6	63.0	137.3	77.3
2023 Q2	105.6	64.6	18.5	42.4	167.2	111.2	111.2	65.9	140.1	84.9
Q3	107.6	64.6	18.2	43.0	165.6	109.8	111.3	64.0	137.9	79.0
Q4	105.2	63.6	19.6	43.3	161.9	107.7	109.9	63.1	137.3	77.3
2024 Q1	108.2	63.4	23.6	42.5	159.8	108.9	110.8	63.3	137.7	76.1

	Latvia	Lithuania	Luxembourg	Malta	Netherlands	Austria	Portugal	Slovenia	Slovakia	Finland
	11	12	13	14	15	16	17	18	19	20
	Government deficit (-)/surplus (+)									
2020	-4.4	-6.5	-3.4	-9.4	-3.7	-8.0	-5.8	-7.6	-5.3	-5.6
2021	-7.2	-1.1	0.5	-7.6	-2.2	-5.8	-2.9	-4.6	-5.2	-2.8
2022	-4.6	-0.6	-0.3	-5.5	-0.1	-3.3	-0.3	-3.0	-1.7	-0.4
2023	-2.2	-0.8	-1.3	-4.9	-0.3	-2.7	1.2	-2.5	-4.9	-2.7
2023 Q2	-3.0	-1.1	-1.1	-4.3	-0.7	-3.3	0.0	-2.8	-2.8	-1.4
Q3	-3.3	-0.9	-1.2	-3.7	-0.6	-3.1	0.4	-2.8	-3.4	-2.1
Q4	-2.2	-0.8	-1.2	-4.9	-0.4	-2.6	1.2	-2.5	-4.9	-2.9
2024 Q1	-1.9	-0.6	-0.9	-3.9	-0.3	-2.9	0.9	-2.2	-5.0	-3.4
	Government debt									
2020	42.7	46.2	24.6	52.2	54.7	82.9	134.9	79.6	58.8	74.7
2021	44.4	43.4	24.5	53.9	51.7	82.5	124.5	74.4	61.1	72.6
2022	41.8	38.1	24.7	51.6	50.1	78.4	112.4	72.5	57.7	73.5
2023	43.6	38.3	25.7	50.4	46.5	77.8	99.1	69.2	56.0	75.8
2023 Q2	40.1	38.1	28.3	49.8	45.4	78.4	110.1	70.7	59.5	74.5
Q3	42.0	37.4	25.8	49.5	44.4	78.1	107.6	71.8	58.4	74.3
Q4	43.6	38.3	25.7	50.3	45.1	77.6	99.1	69.2	56.0	76.6
2024 Q1	44.5	40.1	27.2	50.4	43.9	79.7	100.4	70.7	60.7	77.5

Source: Eurostat.

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

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