

## MONETARY POLICY REVIEW

# Will euro area inflation subside without a recession and excessive tightening of financing conditions?

International economy, Monetary policy | 25.10.2023

Inflationary pressures have proven persistent, but have eased as a result of tighter monetary policy and a fall in energy prices. The crucial question now is whether inflation can be brought down without disruption to the financial markets and an economic recession. Excessive tightening of financing conditions could reduce investment sharply and weaken demand. On the other hand, there is the obvious risk of prolonged inflation. The external environment has not supported economic growth in the euro area: growth has slowed on account of the difficulties affecting global demand and international trade. Higher growth in the economy would require productivity growth to increase following a protracted weak period.



## Euro area monetary policy tightening at historic levels in response to surge in inflation

Monetary policy has been tightened substantially since the first half of 2022 in various economic regions of the world in response to rising inflation (Chart 1). This includes the euro area, and the

monetary policy stance is considered to have become restrictive.<sup>1</sup> The current tightening cycle is exceptional from three perspectives.<sup>2</sup>

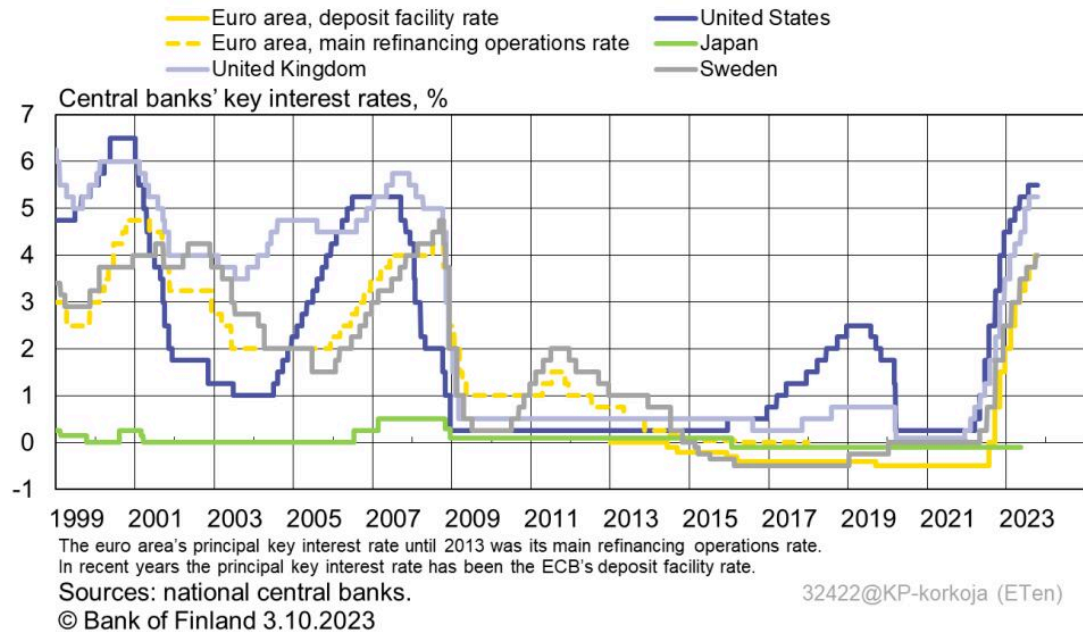
The rise in key ECB interest rates (policy rates) in the euro area has been more dramatic than at any time since the euro area was established. The principal key interest rate has been raised by 4.5 percentage points since July 2022. During the previous monetary policy tightening cycles in the euro area in the periods 1999–2000 and 2005–2007, interest rates were increased considerably less, by around 2 percentage points, though from a higher initial level.

The present tightening cycle has taken place concurrently and in a similar manner in a number of developed economies. Policy interest rates have been raised considerably in the United States as well, where short-term rates have seen their biggest increase since the early 1980s. Among the largest economic regions, only Japan and China have not raised short-term interest rates. Globally, monetary policy tightening has had a major impact on world trade, also reducing aggregate demand in the euro area, which has been partly attributable to the subdued export markets.

The third factor that makes the current tightening cycle exceptional is the discontinuation of non-standard monetary policy measures in parallel with the implementation of interest rate rises. The euro area has dispensed with forward guidance on interest rates and is reducing its asset purchase programme portfolio. Additionally, long-term bank financing granted earlier has been allowed to mature and its terms and conditions have been made more stringent. These measures have been in evidence along the entire yield curve, i.e. also as a rise in long-term, risk-free interest rates. The Federal Reserve System, the central bank of the United States, ended net purchases of securities in March 2022 and the full reinvestments of maturing securities on its balance sheet in June 2022. Its balance sheet has now shrunk from its peak total by about USD 900 billion (approximately 6 percentage points relative to gross domestic product, GDP), while the Eurosystem's balance sheet total has been reduced by almost EUR 1,700 billion (about 17 percentage points relative to GDP). The larger contraction in the Eurosystem's balance sheet is mainly explained by the repayments of longer-term refinancing operations since the end of 2022.

Chart 1.

## Policy rate increases have been exceptionally rapid and simultaneous worldwide



At its meeting in September, the Governing Council of the European Central Bank (ECB) increased its key interest rates by 0.25 percentage points. The deposit facility rate, the principal policy rate, is now 4.00%. The Governing Council is of the view that the key interest rates have reached levels that, maintained for a sufficiently long duration, will make a substantial contribution to the timely return of inflation to its target.

It has indicated that future decisions on interest rates will be based on incoming statistical data and will ensure that monetary policy is sufficiently tight long enough for inflation to return to the 2% target over the medium term. The Governing Council has announced that it will continue to follow a data-dependent approach to determining the appropriate level and duration of restriction. In particular, 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. Forward guidance, which was adopted during the period of low inflation, has been abandoned for the time being.

The ECB's Governing Council discontinued net purchases under the Asset Purchase Programme (APP) in June 2022. The securities portfolio acquired under the APP began to shrink in March 2023, when the ECB stopped fully reinvesting maturing securities. APP reinvestments were discontinued completely in July 2023. The contraction of the ECB's net asset purchase

programmes is a quantitative tightening (QT) measure forming part of the ECB's intended monetary policy stance. The economic impact of these measures is discussed in greater detail in the feature article [‘Quantitative tightening will curb price pressures’](#) (in Finnish).

The intention is to reinvest bonds maturing under the PEPP programme right up to the end of 2024, in accordance with the Governing Council's December 2021 notification. These reinvestments may be undertaken flexibly in order to secure the transmission of monetary policy. Additionally, the ECB has at its disposal the Transmission Protection Instrument (TPI)<sup>3</sup>, which can be activated to counter unwarranted, disorderly market dynamics in the euro area bond market.

The stock of loans from long-term central bank financing facilities provided under the targeted longer-term refinancing operations (TLTROs) is just over EUR 500 billion. These loans are to be repaid in stages, with the last repayment date agreed for December 2024. The ECB's Governing Council has stated that it would monitor the effect of the targeted operations and the repayment of borrowed assets on the calibration of monetary policy. The repayments up until now have not led to disruptions in the financial markets. The repayment schedules have been known for quite some time, and the banks have been able to prepare for them in advance. Furthermore, financing is available, if necessary, through the one-week main refinancing operations (MROs) and the three-month longer-term refinancing operations (LTROs).

## Monetary policy is slowing inflation

The tightening of monetary policy in the euro area and in other major economic regions has been in response to surging inflation. Headline inflation in the euro area has remained above 2% since July 2021, peaking at 10.6% in October 2022, measured in terms of the Harmonised Index of Consumer Prices (HICP).

The reasons for the surge in inflation were, above all, the supply-side disruptions caused by the pandemic and the changes in aggregate demand.<sup>4</sup> Inflation was also driven up by the rising prices of raw materials, and especially energy raw materials, as a result of Russia's unjustified war in Ukraine. The impact of energy price inflation on businesses and households has been mitigated by fiscal policy measures, though these have also strengthened aggregate demand. The effects of fiscal policy measures on inflation and their other broader economic effects are evaluated in the feature article [‘Fiscal policy stance and impact of energy support measures on euro area price pressures’](#) (in Finnish).

Increased price pressures were reflected in the euro area in the exceptional rise in producer prices, particularly in 2022 and 2023. Energy price inflation drove up the headline rate of inflation directly by almost 5 percentage points. The rise in costs gradually also made itself felt in the prices

for other products, especially food. At the same time, the supply-side disruptions that had been associated with global supply chains hampered the availability of intermediate goods and goods generally. These, together with the demand spike that resulted when the restrictions on movement during the pandemic were lifted, created upward price pressures even as late as the end of 2022 and the early part of 2023.

The inflation rate this current year has gradually slowed. This has been due mainly to the fall in energy prices compared to a year ago, as energy price inflation has even turned negative. By contrast, in the other main components of inflation, there is only discernible an easing of the inflation rate. Recently though, there have been initial and growing signs in cost pressures that inflation is slowing more generally.

Producer prices have fallen considerably in the euro area since their peak last autumn. Producer prices excluding energy have no longer risen either, but have even decreased slightly. The companies included in business surveys conducted by the European Commission are reporting that pressures to raise prices have moderated. In addition, the prices for many raw materials have now been falling for a considerable time and significant disruptions to supply chains have all but ended. These factors are curbing cost pressures, which may foreshadow a gradual slowdown in inflation.

The changes seen in cost pressures are in line with the picture of the economy presented in key inflation forecasts. In the forecasts, inflation is projected to reach around 5.5% this year, slowing considerably over the next few years. The crucial point with these forecasts, however, is that inflation is projected to remain at an average rate of more than 2% in the immediate years ahead, and there are upside risks to inflation.

Inflation is forecast to stabilise at just over 2% in the immediate years ahead					
HICP, euro area, % change	Date	2022	2023	2024	2025
ECB	09/2023 (06/2023)	8.4 (8.4)	5.6 (5.4)	3.2 (3.0)	2.1 (2.2)
European Commission	09/2023 (05/2023)	8.4 (8.4)	5.6 (5.8)	2.9 (2.8)	-
IMF	04/2023 (10/2022)	8.4 (8.3)	5.3 (5.7)	2.9 (2.7)	2.2 (2.2)

Sources: European Central Bank/Eurosystem, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, Consensus Economics

Inflation is forecast to stabilise at just over 2% in the immediate years ahead					
OECD	09/2023 (06/2023)	8.4 (8.4)	5.5 (5.8)	3.0 (3.2)	-
SPF	07/2023 (04/2023)	8.3 (7.3)	5.5 (5.6)	2.7 (2.6)	2.2 (2.2)
Consensus	09/2023 (08/2023)	8.4 (8.4)	5.5 (5.5)	2.5 (2.5)	-
HICP = Harmonised Index of Consumer Prices SPF = ECB Survey of Professional Forecasters Previous forecast in brackets.					

*Sources: European Central Bank/Eurosystem, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, Consensus Economics*

The rate at which wages increase is central to services inflation and to broader and longer lasting inflation pressures. Expectations of rapid inflation could be triggered by a self-perpetuating wage-price spiral, making it difficult to achieve the inflation target. Wage growth has risen as inflationary pressures have increased, but the rate at which wages are rising, according to the relevant wage indicators, is gradually levelling off in the euro area. Wage growth too has generally been in line with the ECB's forecasts, and it looks as if a widespread wage-price spiral will be avoided. According to the latest ECB projections, employee wages will rise by 5.3% in 2023, 4.3% in 2024 and 3.8% in 2025.

During the period of high inflation, inflation expectations have also increased. Owing to the monetary policy response, however, they have kept in line with the 2% inflation target, although the risks of a rise in inflation expectations have increased. Recent developments in inflation expectations and their significance in price setting and inflation dynamics are analysed more closely in the feature article '[Monetary policy measures have strengthened the anchoring of inflation expectations](#)'.

It has been beyond the scope of monetary policy to fully prevent surges in inflation that arise from exceptional factors and, in part, from supply-side factors of the kind in evidence today. The delays in taking effect mean that it would not have been possible either. Instead, the strong monetary policy tightening aims to affect aggregate demand, slowing economic growth, so that price and cost pressures do not grow further and inflation returns to a level that reflects the price stability objective in the medium term. Robust policy measures and communication about the ECB's inflation target will help keep inflation expectations and wage pressures at the level required by

the inflation target.

## Monetary policy has been transmitted forcefully to financing conditions

The tighter monetary policy has pushed euro area short-term real interest rates slightly into positive territory. The expected 1-year real interest rate 1 year forward, for example, has in the past 12 months remained at its highest level since the beginning of 2009.<sup>5</sup> Bank lending rates play a key role in the transmission of monetary policy in the euro area, and they have risen in parallel with the key ECB interest rates. Tighter monetary policy has also led to stricter credit standards and weaker demand for credit. The risk premia on euro area government and corporate bonds have also risen, but the rise is in line with the ECB's targeted tighter financing conditions and there have been no significant disruptions in financial intermediation in the euro area.

The strong tightening of monetary policy nevertheless increases the risks of disruptions in the financial markets. For example, the market stress that started in the US banking sector in March was also reflected in the euro area risk indicators, and risk premia on corporate bonds rose in the second week of March. In addition, the prices of hedging against credit risk (CDS prices) rose temporarily for many euro area banks. The impacts of the banking turbulence were temporary, however.<sup>6</sup>

Chart 2 compares the current monetary policy tightening cycle to previous euro area cycles and the current US tightening cycle, based on key indicators related to financial intermediation. The zero moment in the chart is the time of the first rate increase.

The reason for the monetary policy tightening in the current cycle in the euro area has been the highly exceptional growth in underlying inflation. In contrast to the United States or the previous rate increase cycles in the euro area, underlying inflation – the annual rate of change in the Consumer Price Index (CPI), excl. energy and food prices – has continued to rise even after the rate increases. Underlying inflation rose for as much as ten months and by nearly 2 percentage points after the first rate rise.

The higher rate of underlying inflation increases the risks of prolonged inflation<sup>7</sup> and of inflation expectations becoming de-anchored from the central bank's target. These risks have been managed by raising the key interest rates. Financing conditions have indeed tightened notably, which will help accelerate the pace at which underlying inflation is brought down and stabilised.

Monetary policy tightening is also reflected in both the United States and the euro area as a strong rise in longer term rates, such as the yield on 10-year sovereign bonds (Chart 2). Long-term rates

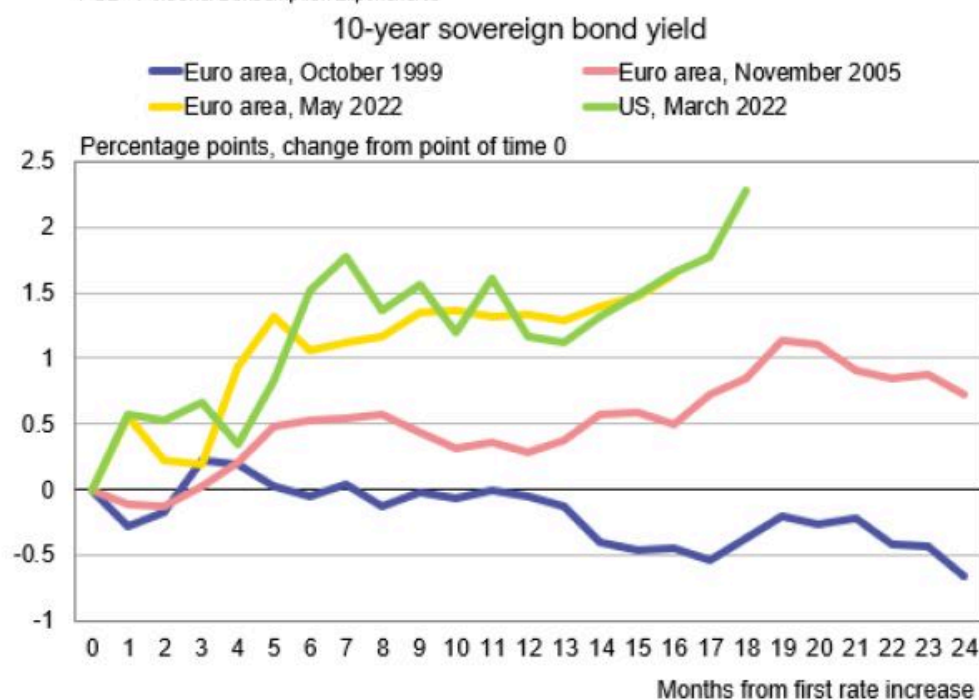
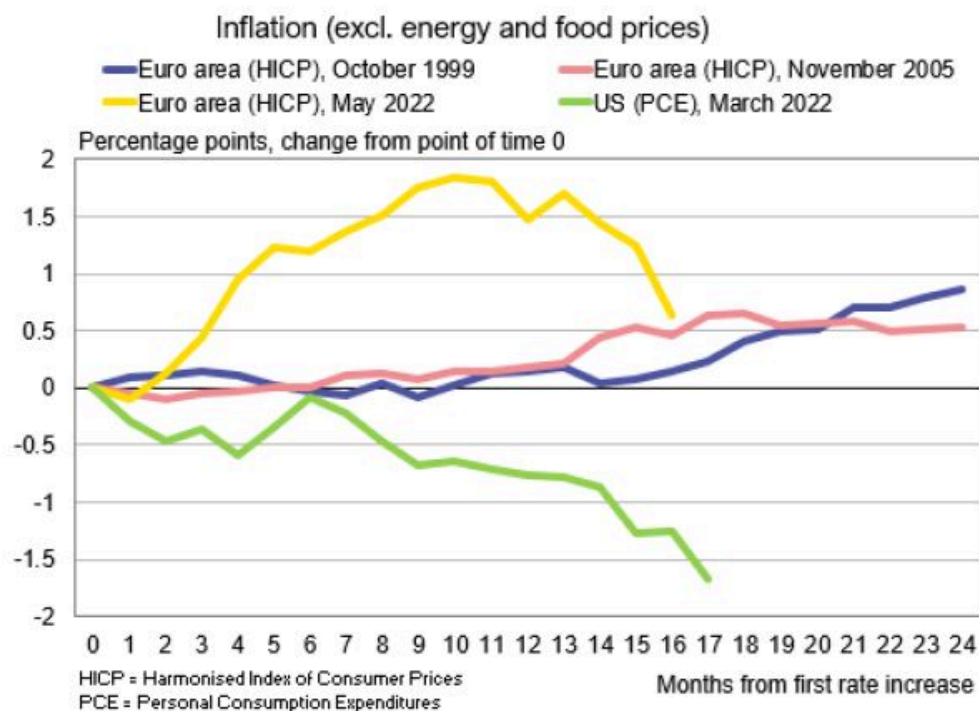
were already starting to rise in the euro area several months before the ECB's first rate increase, and for example the yield on 10-year sovereign bonds has risen by a total of about 3 percentage points. This is considerably more than in previous rate increase cycles in the euro area. The rise in long-term interest rates reflects both structural changes in the economy and the tightening of monetary policy in response to higher inflation. The phasing out of unconventional monetary policy measures, in particular, may have affected long-term interest rates. Moreover, the long-term equilibrium interest rate seems to have risen.

In her speech at the annual Jackson Hole Symposium for central bankers, ECB President Christine Lagarde<sup>8</sup> identified tight labour markets, digitalisation, the green transition and geopolitical fragmentation as the key structural shifts in the global economy (see information box). Tight labour markets are causing direct upward pressure on wages. The green transition and geopolitical changes could increase investment needs and in the longer term, inflationary pressures. This would be reflected in higher interest rate expectations and would thus explain the rise in long-term interest rates in the current cycle. The persistence of these changes and the magnitude of the effects in the immediate years ahead are, however, subject to considerable uncertainty.

The strong transmission of monetary policy in the euro area is also evident in the fading demand for loans by households and companies (Chart 2). In contrast to the United States or the 2005 rate increase cycle, growth in the loan stock in the euro area has now come to a standstill or even turned slightly negative.

Chart 2.

## Current rate increase cycle in the euro area is exceptional compared with previous cycles



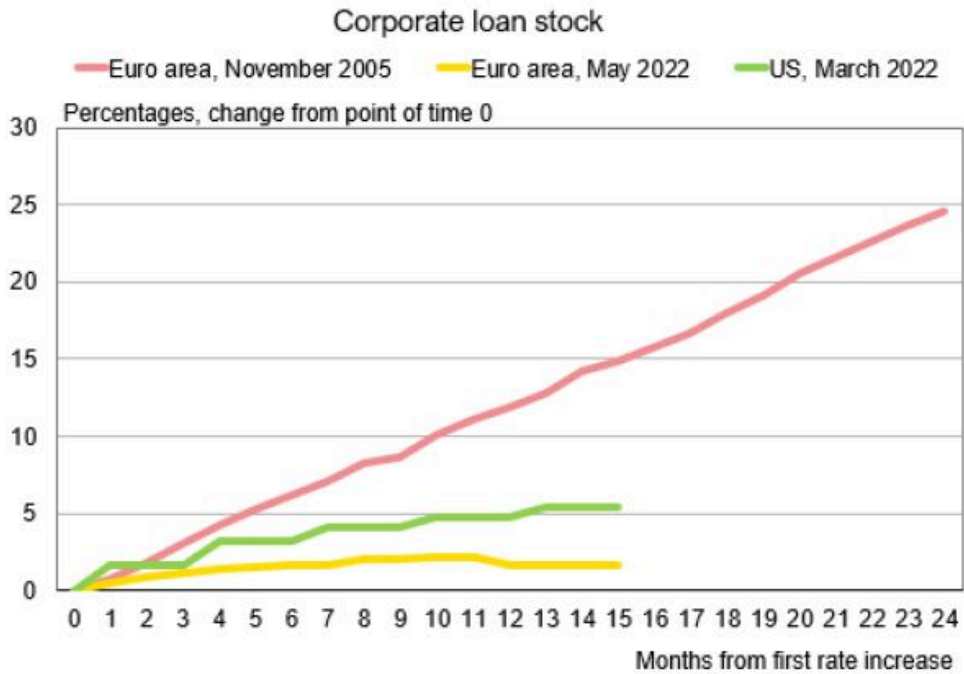
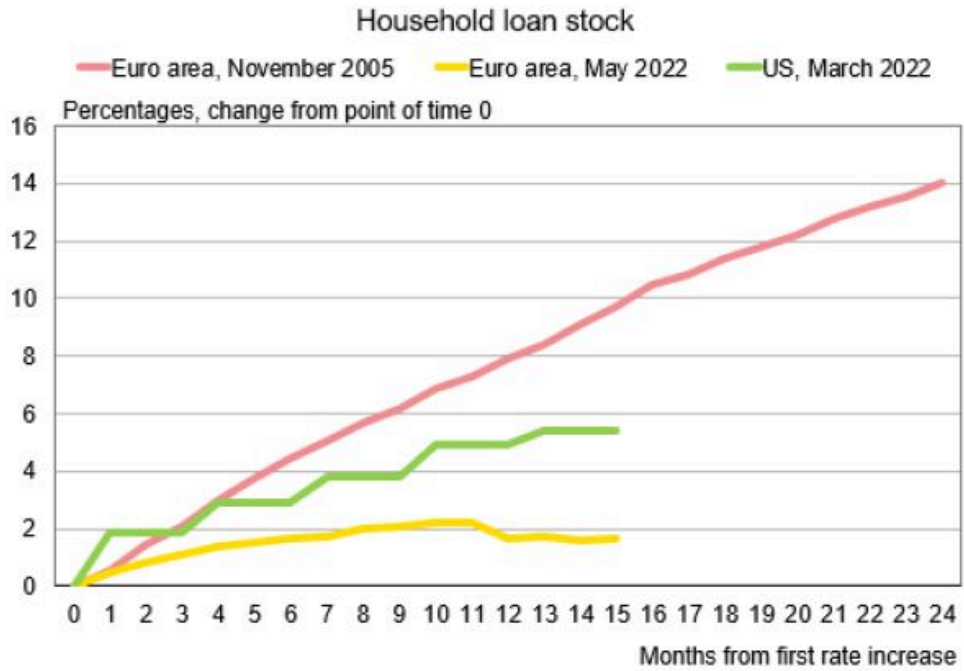
Sources: U.S. Bureau of Economic Analysis, European Central Bank, Federal Reserve System and calculations by the Bank of Finland.

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Chart 3.

### Growth in loan stock at a standstill



Sources: European Central Bank, Federal Reserve System and calculations by the Bank of Finland.  
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## Global growth remains subdued – energy crisis is slowly easing

The growth outlook for the world economy is still subdued overall, despite the growth projections for 2023 having been revised slightly upwards during the year, driven by stronger-than-expected growth in the US economy. According to the IMF, global growth is projected to be 3% both in 2023 and 2024. World trade has contracted compared to last year and global manufacturing output has been languishing for over a year. Industrial confidence has weakened, pointing to further weakness and even contraction in manufacturing activity. The services sector has recovered well from the pandemic, but now confidence is starting to decline in this sector as well – which may be due to the weakening of purchasing power as a result of high inflation.

Forecasts for global economic growth					
World real GDP growth, %	Date	2022	2023	2024	2025
ECB*	09/2023 (06/2023)	3.3 (3.3)	3.2 (3.1)	3.0 (3.1)	3.2 (3.3)
IMF	07/2023 (04/2023)	3.5 (3.4)	3.0 (2.8)	3.0 (3.0)	(3.2)
OECD	09/2023 (06/2023)	3.3 (3.3)	3.0 (2.7)	2.7 (2.9)	-
European Commission**	09/2023 (05/2023)	3.2 (3.2)	3.2 (3.1)	3.2 (3.3)	-
Consensus	09/2023 (08/2023)	2.9 (2.9)	2.4 (2.4)	2.1 (2.1)	-
*World GDP excl. euro area **World GDP excl. EU Previous forecast in brackets.					

Sources: Consensus Economics, International Monetary Fund, Organisation for Economic Co-operation and Development, European Central Bank/Eurosysteem and European Commission.

This year, the bright spot in the world economy has been the strong growth in the US economy. The strong employment situation and the use of savings accumulated during the pandemic have sustained the growth in consumption, despite the decline in real wages. Consumption has also been supported by the fact that the rise in wages has been strongest in the low-wage group – for

the first time in 40 years. The savings rate in the low-income group is usually below that of high earners, and therefore the rise in wages has rapidly filtered through to consumption. Despite the higher interest rates, housing prices in the United States have started to rise again. Residential construction starts, too, have increased slightly from their lowest level witnessed at the turn of the year.

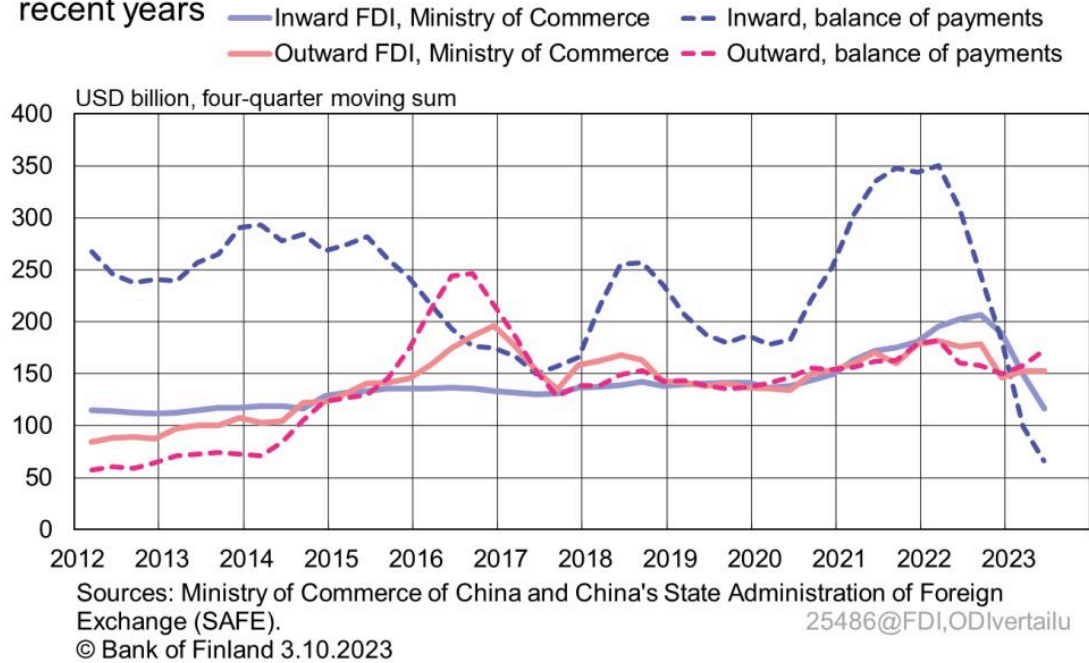
In the United States, inflation has slowed notably since the peak levels in autumn 2022 and has become less broad-based. In July, as much as 2.6 percentage points of the annual inflation (3.3%) was attributable to the rise in housing costs, and the impact of this in the figures will fade more slowly than the other inflation components, due to the survey method. Nominal average hourly earnings in the United States are rising at an annual rate of about 4.4%, which is clearly below the equivalent figure of more than 5% a year ago. Labour shortages are, however, maintaining the risk of continued wage inflation.

GDP growth in the United States is now of great importance for the global economy, as growth is sluggish in many other economic regions. For example, the slowness of the Chinese economy has been a disappointment, and the growth forecast for this year of 6% made by the Bank of Finland Institute for Emerging Economies (BOFIT) in the spring will probably have to be revised to close to 5%. This growth figure, though strong, is largely due to the weak reference year 2022, and according to BOFIT, China's growth will slow to around 3% in the coming years. Problems in the Chinese real estate sector continue, and China seems unable to come up with adequate measures to stimulate the indebted private sector. At the same time, the tightening grip of central government and the shrinking of the working-age population are weakening the country's long-term growth outlook.

In developed economies, decoupling from China has become a key objective. Global dependencies became a focus of increasing attention in Europe after Russia's attack on Ukraine revealed the continent's dependency on Russian energy. So far though, there are at least no clear signs that countries have reduced their dependency on China. Nevertheless, the China dependency of the United States has decreased in the case of products that are subject to specific trade restrictions. At the end of 2022, US goods imports from China decreased notably, though this was partly attributable to the logistics bottlenecks hampering world trade at that time and the impact of the lockdowns on production in China. Foreign direct investment in China decreased substantially in the first half of 2023. For the time being, however, it is difficult to estimate how permanent this will be. It may be just temporary or the result of China's strict COVID19 lockdown measures of the past few years.

Chart 4.

### Foreign direct investment (FDI) in China has decreased significantly in recent years

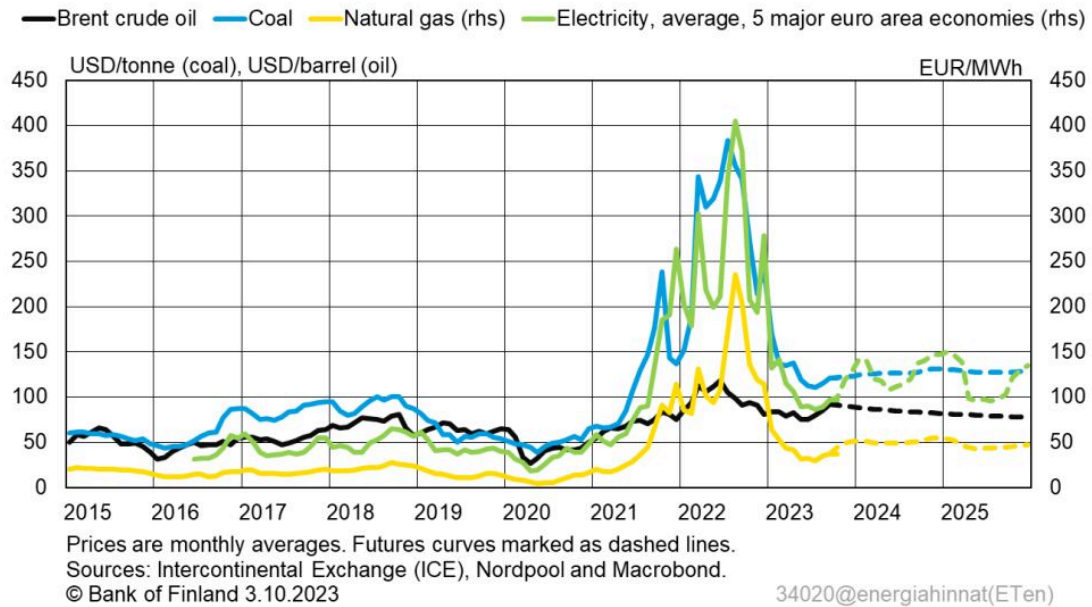


### Raw material prices have declined

The prices of energy raw materials have declined significantly compared to a year ago. Crude oil prices are nevertheless still one third higher, and prices of coal and natural gas even twice as high, compared with the situation before the pandemic and Russia's war in Ukraine. The price of electricity has also fallen in 2023, following the drop in natural gas prices and particularly because France has resolved its electricity production problems. The differences between countries in the price of electricity are still large, however.

Chart 5.

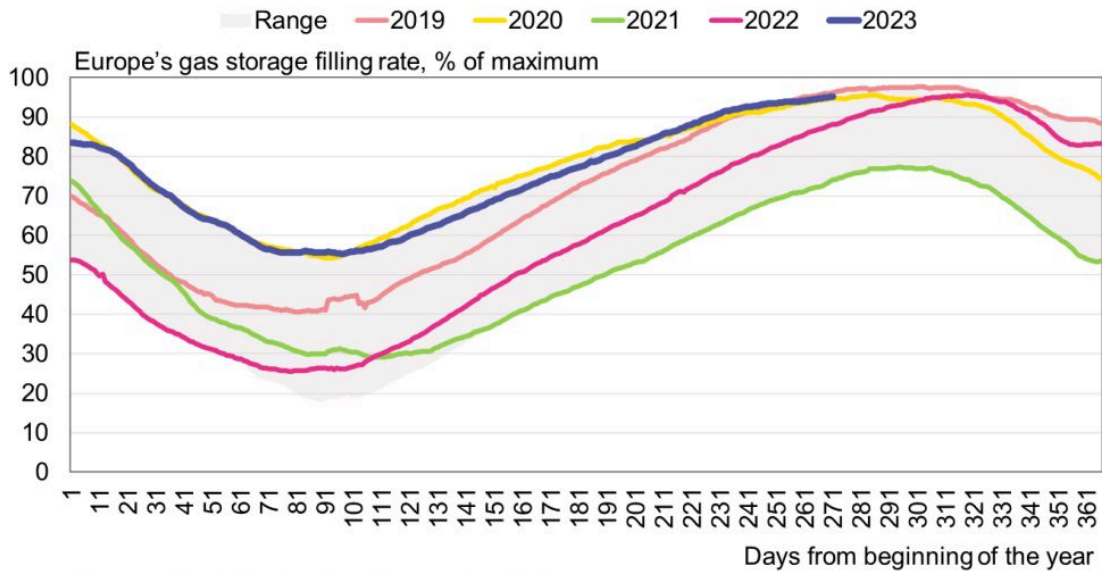
## Energy prices have declined substantially from crisis levels but remain above normal



Russia's natural gas deliveries to Europe have shrunk to a fraction of the pre-war level. However, the shortage of gas has not turned out as bad as feared. Last winter was mild, which decreased demand for gas in Europe and, moreover, countries succeeded in replacing Russian gas with gas imported from other countries. This autumn, Europe is considerably better prepared for the coming winter than last year. Europe's natural gas storage facilities were already filled to over 90% of their capacity by mid-August, whereas in mid-August 2022, the equivalent figure was about 75%. When at full capacity, the reserves will cover the demand for natural gas in Europe for about three months – assuming that the gas can be transferred to where the demand is. Developments in the prices of natural gas and other energy raw materials are unpredictable, however, and large price movements are possible. For example, the threat of a strike in a major liquefied natural gas-producing country, Australia, pushed up the prices of natural gas considerably in late summer 2023.

Chart 6.

## Europe's natural gas reserves are larger than in 2022, supporting ability to cope with the coming winter



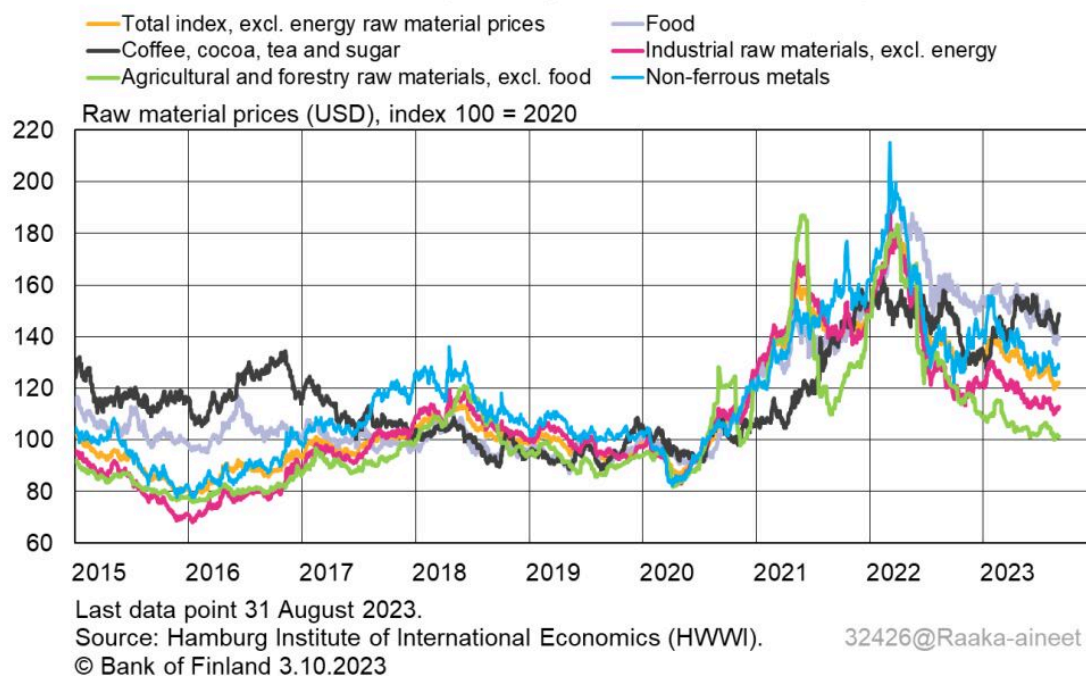
Source: Gas Infrastructure Europe / agsi.gie.eu  
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Days from beginning of the year  
39869@kaasuvarastot\_Eurooppa\_vrt

The Brent benchmark price used for international crude oil trading has averaged USD 80 per barrel<sup>9</sup> in 2023, following the strong growth in the demand for crude oil<sup>10</sup>. In addition, the OPEC+ countries, headed by Saudi Arabia, have agreed on output cuts that correspond to approximately one million barrels per day. This has kept the prices of oil products above pre-pandemic levels. The upward price impact of the output cuts has been weakened significantly by the growth in crude oil production in the United States, after a long period of virtually no growth. Compared to a year earlier, oil output in the United States has increased by some 0.8 million barrels, to a total of about 12.8 million barrels per day. In Russia, contrary to expectations, crude oil output has remained close to the level prevailing before the invasion of Ukraine. The weaker growth outlook for the world economy is already expected to slow the growth in demand for oil next year. The prices of other raw materials have started to decline too as a result of slower economic growth. The fall in prices has been broad-based, from metals to manufacturing and agriculture and forestry. Raw material prices have returned close to their early 2021 levels, but, as with the prices of energy raw materials, they are still above pre-pandemic levels.

Chart 7.

### Weaker economic outlook is pushing down raw material prices



## Monetary policy transmission to the euro area real economy and the near-term economic outlook

Euro area GDP growth came to a halt in the fourth quarter of 2022. In the first half of 2023, GDP continued to grow again, though at a slow pace. The resumption of growth is partly explained by the decrease in large negative supply shocks, the fading of uncertainty over energy availability, and the easing of supply bottlenecks. This has enabled companies to increase production and to respond to the significant order backlogs. Growth has also been underpinned by the public financial support for household energy costs given in many euro area countries, as this has alleviated the adverse impacts of high energy prices on consumption.<sup>11</sup>

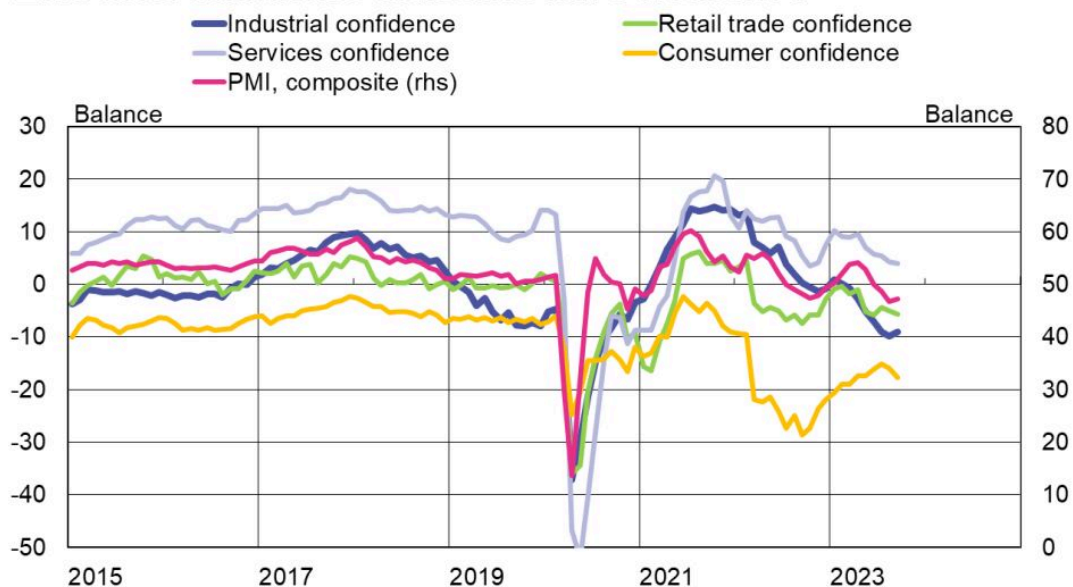
### Confidence indicators point to slower growth

New statistical data that became available in the summer indicates that the economic recovery is more fragile than was expected in the ECB's June projections. The view that demand and economic growth are dwindling is also supported by a weakening in confidence indicators (Chart 8). In addition to manufacturing, the outlook for services has also deteriorated and expectations for services demand are lowering. The euro area purchasing managers' composite index dropped

in June below the 50-point threshold, which reflects the respondents' views of the worsening situation. The purchasing managers' indices for manufacturing and services continued to weaken in July. In August, the downward trend in the index for manufacturing came to halt, but the services index continued to decline. The weakness of manufacturing production and industrial confidence is explained by the decline in domestic demand as a result of higher interest rates, and the subdued growth in the world economy.

Chart 8.

### Euro area confidence indicators have weakened

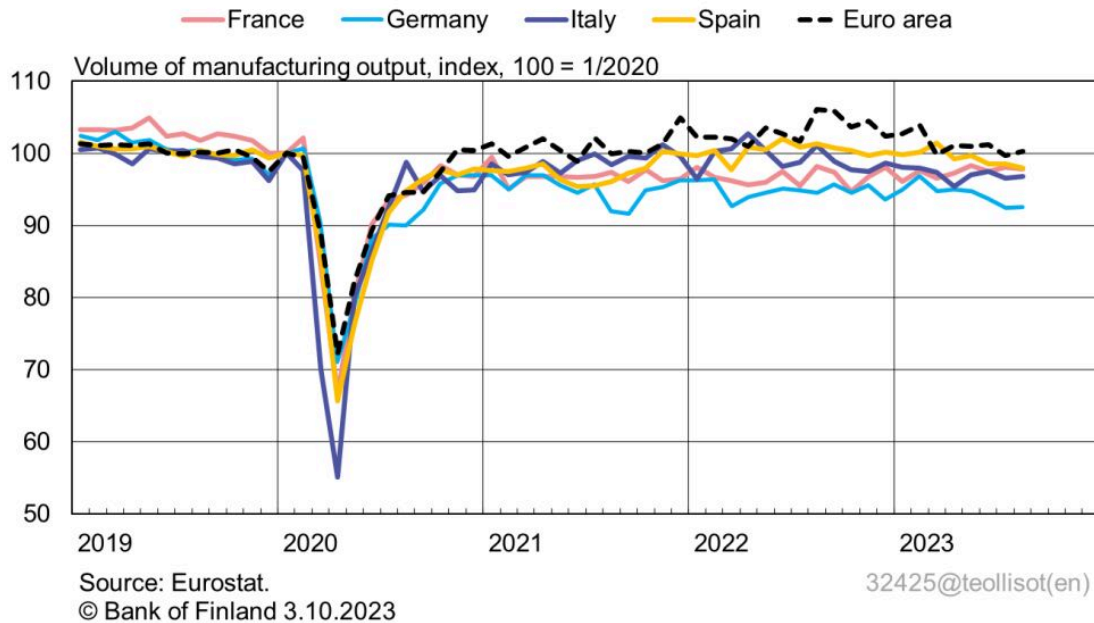


Euro area confidence indicators and Purchasing Managers' Index (PMI).  
 Sources: European Commission and IHS Markit. 32425@luottamusPMI(ETen)  
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In the major euro area economies, industrial production has displayed little vitality since the post-pandemic recovery, and its direction has been unclear. In these same economies, expectations regarding export orders have fallen below pre-pandemic levels in recent months. In Germany, industrial production has fallen since the start of 2023 (Chart 9). The German vehicle manufacturing industry has suffered from the gradual demand shift to electric vehicles, the resulting tougher competition with China and other producers, and a shortage of components. At the same time, Germany's heavy industry, such as steel production and the chemical industry, has had to deal with the effects of the energy crisis and increased production costs. However, corporate fixed investment has increased slightly in Germany, and private consumption has remained almost at last year's level.

Chart 9.

## Volume of manufacturing output in Germany and other major euro area economies



Retail trade in the euro area has also been declining gradually since the 2021 pandemic recovery, and even the easing of the energy crisis has not reversed this trend. This is eroding confidence within the sector because of expanding inventories and weaker demand. Although the construction sector's confidence has also weakened due to shrinking order books, the employment expectations in the sector continue to be relatively strong.

Consumer confidence has been weak in the euro area for a long time. Although it has recovered from last year's dip, it was still low in August. Consumers' concerns about inflation and its effect on purchasing power could weaken the consumption outlook and create uncertainty about the economic situation, even without significant levels of unemployment or the threat of such. In addition, global geopolitical tensions and the uncertainty created by them could be reflected in consumer sentiment. Moreover, the rise in interest rates has been reflected in households' willingness to save, and their expectations about future saving have increased gradually since the spring. This could also contribute to weakening the outlook for consumer spending.

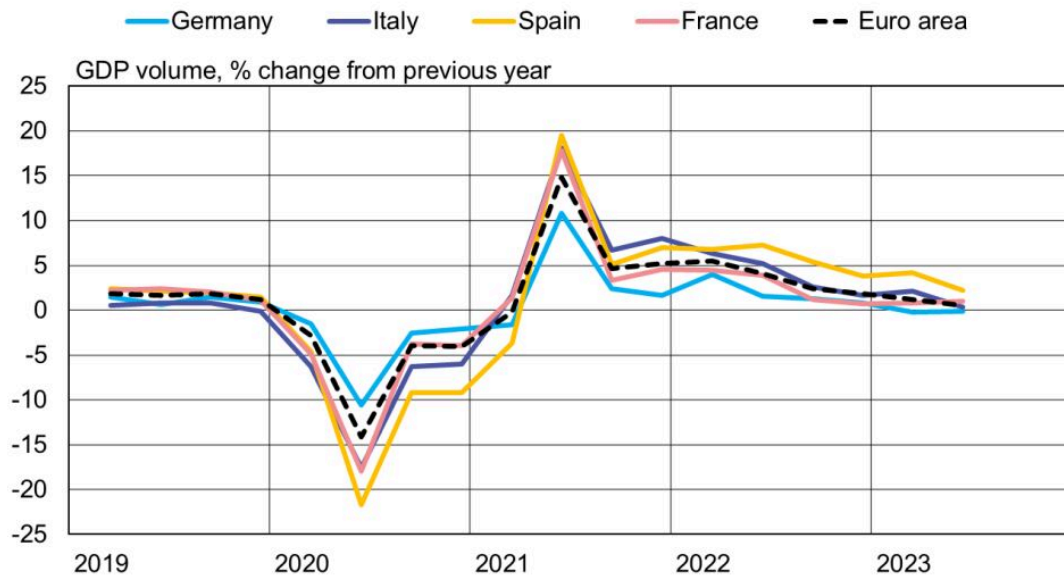
## Forecasts of euro area economic growth revised slightly downwards

Real GDP in the euro area reached its pre-pandemic level at the end of 2021 and has since exceeded this level. However, it is unlikely that its growth will rise to the pre-pandemic trend line.

Among the largest euro area countries, the French economy has displayed the strongest growth this year (measured as quarter-on-quarter growth), and the German economy the weakest. Growth in the Italian and Spanish economies this year has been slightly weaker than the French economy.

Chart 10.

### GDP growth in the four major euro area economies



Source: Eurostat.  
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32425@BKTisot%

According to the ECB’s projections, euro area GDP growth will be supported in the coming quarters by a slight strengthening of private consumption. Investments, on the other hand, will only gradually have a more favourable impact on growth, partly assisted by Next Generation EU (NGEU) funds. Real income is projected to grow in the latter half of this year as inflation slows and wages increase due to the still robust labour market. However, the household savings rate will remain higher than before the pandemic, as higher interest rates encourage people to save. In the coming quarters, both residential and non-residential investment are expected to suffer from the tighter financing conditions – especially from higher interest rates, and less from tighter lending conditions. In the future, exports from the euro area will be supported by the gradual recovery of foreign demand and the absence of production bottlenecks. At the same time, imports to the euro area are expected to be weak due to reduced energy imports and modest domestic demand.

Correspondingly, estimates of euro area GDP growth for this year and 2024 have been revised downwards in the ECB’s September forecast (Table 3). According to the ECB’s projections, the

euro area economy will grow by 0.7% over the full year 2023 and by 1.0% in 2024. In its June 2023 projections, the ECB was still forecasting euro area growth to be 0.9% in 2023 and 1.5% in 2024. In September, Consensus Economics revised its 2023 forecast downwards to just 0.5%, from 0.6% in August, and its 2024 forecast to 0.7%, from 0.8%. This is an aggregate of forecasts from professional forecasters and investment banks.

Growth forecasts for the euro area					
Euro area real GDP growth, %	Date	2022	2023	2024	2025
ECB	09/2023 (06/2023)	3.4 (3.5)	0.7 (0.9)	1.0 (1.5)	1.5 (1.6)
European Commission	09/2023 (05/2023)	3.3 (3.5)	0.8 (1.1)	1.3 (1.6)	-
IMF	07/2023 (04/2023)	3.5 (3.5)	0.9 (0.8)	1.5 (1.4)	(1.9)
OECD	09/2023 (06/2023)	3.4 (3.5)	0.6 (0.9)	1.1 (1.5)	-
Consensus	09/2023 (08/2023)	3.4 (3.4)	0.5 (0.6)	0.7 (0.8)	-
Previous forecast in brackets.					

*Sources: Consensus Economics, International Monetary Fund, Organisation for Economic Co-operation and Development, European Central Bank/Eurosystem and European Commission.*

## Euro area labour market remains strong despite slowing growth

The labour market has been a bright spot for the euro area economy. The unemployment rate has remained historically low in recent months, at 6.4%, and the employment rate seems to have developed better than predicted. Companies may be unwilling to hastily reduce their staff amid a deteriorating economic outlook because, when the economy recovers again, hiring and retraining employees can be costly and time consuming.

When the employment rate is up and the unemployment rate is down, it means that an increasing number of people are actively participating in the labour market. One other factor contributing to the increase in labour input has been the change in the age structure of the population, as people of working age have moved to euro area countries because of the war in Ukraine, for example.

However, in addition to the employment rate, the number of hours worked also affects the labour input. In recent years, working weeks and days have shortened in many euro area countries due to factors such as more flexible working hours and the proliferation of part-time work. The reduction in the number of hours worked in relation to the employment rate is partly a consequence of jobs having been created in the public sector especially, where the average number of working hours is usually lower than in the entire economy.<sup>12</sup>

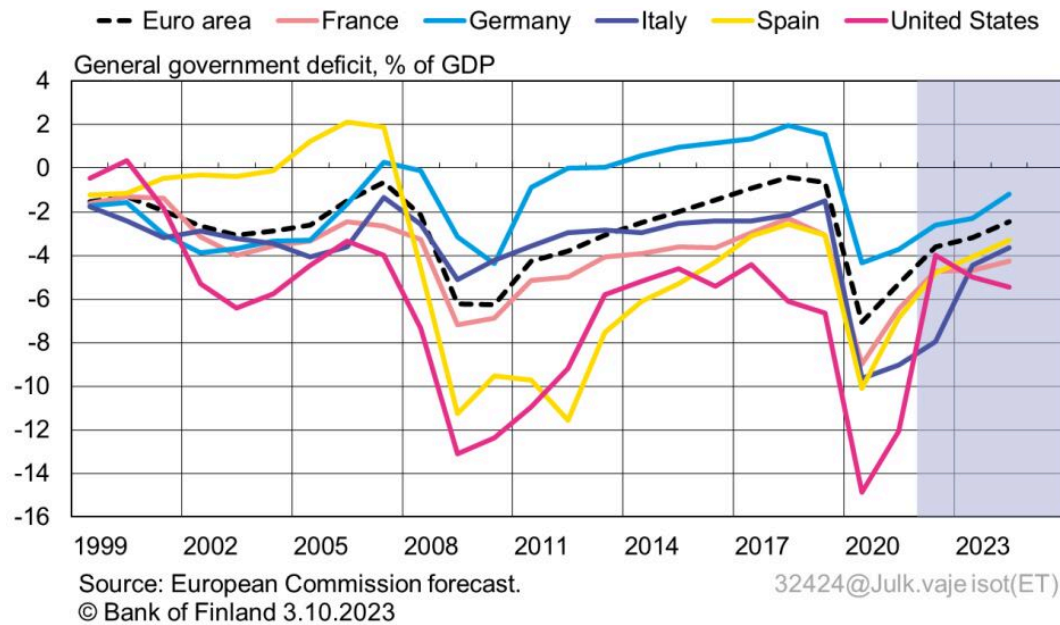
## Fiscal policy in euro area only slightly tighter than before

The fiscal balance in the euro area has deteriorated significantly due to the COVID-19 and energy crises, because many euro area countries have used public finances to support companies and consumers. The support measures for addressing concerns over high energy bills have alleviated the financial situations of households and businesses. However, they have also sustained expansionary fiscal policy at a time when monetary policy has been contractionary (see feature article '[Quantitative tightening will curb price pressures](#)' (in Finnish)).

This year, the 2023–2024 outlook for the fiscal deficit and general government debt in the euro area has improved somewhat. Contractionary fiscal policy will reduce the deficits. In its Spring Economic Forecast, the European Commission estimated that the fiscal deficit in the euro area would decrease by 0.4 percentage points this year, to 3.2% of GDP, and by 0.8 percentage points next year, to 2.4% of GDP (Chart 11).

Chart 11.

## Slightly contractionary fiscal policy will reduce fiscal deficits in euro area in 2023–2024



A structural deficit refers to the portion of the budget that is independent of cyclical fluctuations and transient factors. It indicates whether general government finances are sound or not. In its Spring Economic Forecast, the Commission estimated that the structural deficit would still be high in 2024 in France, Italy and Spain, meaning that there is a significant need for longer term additional adjustment especially in these countries.

## Euro area growth falling short of growth potential

Despite the strong labour market, growth in euro area productivity has not met expectations. Weak productivity growth is a long-term problem which undermines the euro area's competitiveness and growth outlook. Ineffective capacity, antiquated technology and low investment in innovation are possible reasons for the economic stagnation. The GDP outcome in the euro area appears to have fallen slightly short of the potential output. This output gap could contribute to the subduing of inflation, as demand is not growing quickly enough to meet the supply. Investment and productivity-boosting structural reforms will be needed to secure favourable conditions for growth.

## Risks associated with the euro area economy

The key risks in the euro area growth outlook are rising inflation expectations and prolonged inflation, combined with the increasing possibility of a recession in the real economy. Although monetary policy is currently contractionary and has lowered inflation from last year's peak figures, inflation expectations could be raised if there are geopolitical supply shocks, for example. Such shocks could in turn increase the likelihood of larger pay demands and the emergence of a wage-price spiral. A new disruption in the energy market could also prolong inflation. The increased frequency and strength of extreme weather events as a consequence of climate change and of El Niño, both in Europe and globally, is contributing to risks associated with rising food prices, in particular. Although the chance of very rapid inflation has decreased according to the market consensus, its likelihood, based on the same assessments, remains higher than before the energy crisis.

On the other hand, inflation might also provide a surprise in the opposite direction if, for example, tighter monetary policy has a delayed, and stronger than expected, impact on inflation. If the euro area economy enters into a recession at the same time, the weakening of demand could further limit price increases. For the time being though, it is unlikely that euro area inflation would slow to below the ECB's 2% inflation target during the next few years.

Although in market forecasts the inflation risk is on the upside, from a theoretical point of view the symmetry of the inflation risk is not clear. While interest rate policy can, in principle, be tightened limitlessly, easing has its limits. On the other hand, there is no theoretical limit to quantitative easing, while quantitative tightening is limited by the zero lower bound.

The transmission of monetary policy is also subject to uncertainty. In addition, experiences of unconventional monetary policy only go back a few years, and in the case of quantitative tightening, just a few months. It is possible, for instance, that quantitative easing and quantitative tightening will have an asymmetric effect on the financial markets. According to the feature article '[Quantitative tightening will curb price pressures](#)' (in Finnish), if risks materialise, quantitative tightening may lead to a sudden need for liquidity and to an increase in short-term money market rates. The interest rates on bonds with medium-term maturities could also leap up if market liquidity weakens substantially. The effects depend both on the state of the financial market and potential structural inefficiencies, such as segmentation.

The financial market could also be subject to other disruptions and unpredictable elements from within the euro area and outside it. The risk is reduced to some extent by the fact that, since the summer, the ECB has had at its disposal the Transmission Protection Instrument (TPI), a new instrument that secures the effective transmission of monetary policy in the event of disruptions.

There are also risks that growth in the real economy of the euro area will be either higher or lower than previously projected. The downside risks are associated with international trade, Chinese import demand and, within the euro area, especially the weakly performing German manufacturing industry. When economic uncertainty is elevated, this can impinge on the effectiveness of monetary policy. Contractionary monetary policy is usually conducted when the economy is expanding. The current situation in the euro area is problematic because inflation is high despite economic growth being weak. This can present specific risks to the housing market and indebted households.

Risks could also include possible problems in the interaction between monetary and fiscal policy in the euro area. Some of the support granted to companies and households in the euro area during the pandemic and the energy crisis will not end until 2024 and 2025. This might have served to prolong inflation at a time when its root cause – the supply shock in the energy market – had already gradually receded. The feature article ‘[Fiscal policy stance and impact of energy support measures on euro area price pressures](#)’ (in Finnish) discusses to what extent the measures carried out added to price pressures or promoted economic activity in the euro area.

Although fiscal policy has been tightened somewhat in many euro countries, it can still be described as expansionary. This is especially so in view of the area’s structural deficit still being estimated as greater than before the pandemic – at the same time as monetary policy is striving to tighten financing conditions. In a situation of fiscal dominance, fiscal policy is unable to stabilise public debt, which will impair the effectiveness of monetary policy and its ability to achieve its objectives.<sup>13</sup> If fiscal policy works in tandem with tightening monetary policy, this will reduce demand and ease inflationary pressures. In such a situation, the central bank will have a reduced need to raise interest rates as much in order to achieve the inflation target, and the necessary duration of high interest rates will be shorter than if fiscal policy is pulling in a different direction. This, in turn, will support private consumption and investment. Correspondingly, the restrictive effect of tighter fiscal policy on economic growth is smaller the further the distance from the zero lower bound of monetary policy (and when the output gap is close to zero).

Fiscal policy can also be used to support the objectives of monetary policy by adapting the fiscal policy structure to make it more growth friendly, such as by focusing not on public consumption but on public investments that improve potential economic output. In this case, the acceleration of potential output growth would ease inflationary pressures. Measures that promote productivity in the economy as a whole also support growth and contribute to curbing inflationary pressures.

## Shocks affecting supply and inflation

In her presentation at the annual meeting of central bankers at Jackson Hole, ECB President Christine Lagarde said, "In the pre-pandemic world, we typically thought of the economy as advancing along a steadily expanding path of potential output, with fluctuations mainly being driven by swings in private demand. But this may no longer be an appropriate model."<sup>14</sup> The concern is that we will increasingly face changes and shocks that originate directly from the supply side of the economy.

Profound changes are discernible in the post-pandemic labour market. The labour market is tight in many developed economies. The digital revolution has accelerated the growth in remote working, and with the increasing use of artificial intelligence (AI) certain jobs will be at risk in the future, but at the same time new jobs will be created. Although automation presents great opportunities, studies by the ECB show that the growing use of AI by companies will not necessarily lead to a reduced employment rate in Europe.

In addition, with climate change and the energy transition, the global energy markets have undergone major upheavals especially in Europe. Changes in fossil fuel supply and the increasing demand for renewable energy sources are central factors in the green transition. This could increase exposure to energy supply shocks as oil and gas become less elastic, and the production of renewable energy sources could be prone to interruptions and storage challenges.

Similarly, rising geopolitical tensions and the changing nature of globalisation – with the prospect of economies dividing into competing blocs – are now increasingly evident risks. 'Reshoring' and 'friendshoring' of production could introduce new supply chain bottlenecks. This could happen especially if the fragmentation of global trade gathers pace before the domestic supply base has been rebuilt.

The permanence of these changes and the magnitude of their impacts in the coming years remain subject to considerable uncertainty. However, it is clear that in many cases, their impacts will be more permanent than originally expected. There is also great uncertainty over how these changes and shocks would pass through to the euro area economy and the impact they would have. During the period of low inflation seen in recent decades,

companies that had to deal with the challenges of relative price increases generally avoided raising their prices and losing market share. However, this changed during the pandemic, when companies experienced major shocks shared by all, which acted as an indirect coordination mechanism between businesses. Companies introduced bigger price changes and, in particular, adjusted prices more frequently than they had before when facing similar market shocks.<sup>15</sup> In some sectors in the euro area, the frequency of price changes has nearly doubled over the past two years compared with the period before 2022. Moreover, the new environment in which we might face supply-side changes and shocks more frequently could create a risk of larger relative price shocks than before the pandemic.

These trends could also be just temporary. In fact, in the euro area we are already seeing companies adjusting prices less frequently in an environment of decreasing energy and production input prices. It is also possible that, over time, digitalisation will lead to an increased labour supply, and that the labour market will become less tight.

Nevertheless, there is a risk that global supply – including labour supply – will become less flexible, and global competition will decrease, in which case prices could play a bigger role in the adjustment process. Also if we face greater and more frequent shocks – including energy shocks and geopolitical shocks – we could see companies transferring elevated costs to prices more systematically. In such an environment, the ECB must be very vigilant in ensuring that greater fluctuations in relative prices are not transferred unnoticed to medium-term inflation. If companies also incorporate anticipated wage increases into their pricing decisions, inflation could become more persistent than indicated in the ECB projections.

## Notes

1. For example, Fabio Panetta, a member of the Governing Council of the European Central Bank, has asserted that key interest rates are at a level that restricts economic activity. See Panetta (2023), 'Getting disinflation right', speech at Bocconi University, 3 August 2023. ↑
2. Lane (2023) highlights the exceptional nature of the current policy rate tightening cycle in terms of its speed, global simultaneity, and the structural shifts in the economy. According to Lane, in regard to the financial markets, households and companies have moved more in the direction of variable interest rates and short-term loans, the role

banks have had in lending to companies has diminished in importance, and the banks are more resilient than before. See Lane (2023), 'The euro area hiking cycle: an interim assessment', speech at a National Institute of Economic and Social Research event, London, 16 February 2023. ↑

3. See the ECB's press release 21 July 2022. ↑
4. During the pandemic, public expenditure increased strongly and private demand for particular goods recovered quickly. As the economy opened up, the demand for services recovered quickly in 2022. For more details concerning the changes in demand, see De Santis, R.A. and Stoevsky, G. (2023), 'The role of supply and demand in the post-pandemic recovery in the euro area', ECB Economic Bulletin, 4/2023. ↑
5. The real rate of interest has been defined in a variety of ways. Most relevant, particularly for the investment decisions of companies and households, is the expected real rate of interest, and therefore we have used a forward-looking indicator of the real rate of interest (i.e. a measure that includes inflation expectations). The real rate of interest can also be calculated for different maturities. In addition to the short-term real interest rate, often a long-term real interest rate – such as for a 10-year horizon – is presented. This indicator too, points to a slightly positive real rate of interest. It is now close to 0.3 percentage points, its highest level since autumn 2011. ↑
6. To contain bank runs, the Federal Reserve System announced on 12 March 2023 the establishment of the Bank Term Funding Program (BTFP) under which credit institutions were offered loans for up to one year against eligible collateral at par value without a haircut, at an overnight index swap (OIS) rate plus 10 basis points. The purpose of the programme is to ensure that banks have the ability to finance a possible outflow of deposits. The total outstanding amount of all advances under the BTFP is approximately USD 119 billion. The Federal Deposit Insurance Corporation (FDIC) of the United States also fully protected the depositors of the banks that collapsed in March 2023. ↑
7. See Hukkinen and Viren, 'How long will inflation persist?', Bank of Finland Bulletin, 6 July 2023, <https://www.eurojatalous.fi/fi/2023/artikkelit/miten-kauan-inflaatio-kestaa/>. ↑
8. See Lagarde, 'Policymaking in an age of shifts and breaks', speech at the Jackson Hole Symposium, 25 August 2023, <https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230825~77711105fe.en.html>. ↑
9. One barrel is 159 litres. ↑
10. According to the International Energy Agency (IEA), global demand for crude oil will reach over 102 million barrels per day in 2023 and 103 million barrels per day in 2024. ↑
11. The economic impacts of fiscal policy measures are assessed in the feature article 'Fiscal policy stance and impact of energy support measures on euro area price pressures' (in Finnish). ↑

12. See Obstbaum, Oinonen, Pönkä, Vanhala and Vilmi, 'Transmission of recent shocks in a labour-DSGE model with wage rigidity', BoF Economics Review, 1/2023, which examines how recent shocks explain inflation and the economic recovery in the euro area and Finland, with an emphasis on factors – especially preference shocks on working hours – which are critical to explaining the current tight labour market, <https://publications.bof.fi/handle/10024/52726>. ↑
13. See Kilponen and Kontulainen, 'Is inflation a monetary or a fiscal phenomenon?' (in Finnish), The Finnish Economic Journal, 3/2021, [https://www.taloustieteellinenyhdistys.fi/wp-content/uploads/2021/10/KAK\\_3\\_2021\\_WEB-34-52.pdf](https://www.taloustieteellinenyhdistys.fi/wp-content/uploads/2021/10/KAK_3_2021_WEB-34-52.pdf). ↑
14. See Lagarde, 'Policymaking in an age of shifts and breaks', speech at the Economic Policy Symposium at Jackson Hole, 25 August 2023, <https://www.ecb.europa.eu/press/key/date/2023/html/ecb.sp230825~77711105fe.en.html>. ↑
15. See Hukkinen and Viren, 'How does changing pricing behavior affect inflation? Evidence from Euro Area microdata', SUERF Policy Brief No 677, September 2023, <https://www.suerf.org/suerf-policy-brief/74217/how-does-changing-pricing-behavior-affect-inflation-evidence-from-euro-area-microdata>. ↑

## Key words

euro area, inflation, international economy, monetary policy