EUROPEAN CENTRAL BANK

EUROSYSTEM

Annual Report

2023

Contents

The year at a glance

In 2023 the ECB consolidated progress in its fight against inflation in the euro area. The year began with headline inflation still close to record highs. The negative effects of earlier supply and demand shocks, while easing, were still driving up prices. But two key developments paved the way for inflation to decline sharply during the year.

First, the effects of the past shocks began to fade. Energy prices, which had spiked as a consequence of Russia's unjustified war against Ukraine, fell steeply, and global supply bottlenecks further eased. The drop in energy prices, in particular, accounted for half of the decline in inflation in 2023. Second, the ECB continued to tighten monetary policy, which helped to lower inflation further by dampening demand. Altogether, from January to September, we raised interest rates by an additional 200 basis points.

In doing so, we continued to follow a data-dependent approach to rate decisions given the highly uncertain environment. To calibrate accurately how far rates needed to rise, we introduced three criteria: the inflation outlook, the dynamics of underlying inflation and the strength of monetary policy transmission. By September, we saw the inflation outlook improving and monetary policy being transmitted forcefully. But underlying inflation remained elevated and domestic price pressures were strong.

We decided on this basis that the key ECB interest rates had reached levels that, if maintained for a sufficiently long duration, would make a substantial contribution to the timely return of inflation to our target. At the same time, we committed to holding rates at these levels for as long as necessary, while continuing to follow a data-dependent approach, based on the same criteria, to determine the appropriate level and duration of restriction.

In parallel, we advanced the normalisation of the Eurosystem balance sheet to ensure it remained consistent with our overall stance. It fell by over €1 trillion in 2023, with a large part of this decline due to maturing and early repayments under our targeted longer-term refinancing operations. We also concluded reinvestments under our asset purchase programme as the year progressed. And, in December, we announced the gradual phasing-out of reinvestments under the pandemic emergency purchase programme.

While we were consolidating progress in the fight against inflation, we advanced our work on taking account of climate-related risks within our tasks. In March we published the first climate-related financial disclosures of the Eurosystem's corporate sector holdings. The carbon intensity of our corporate asset reinvestments fell by around two-thirds in the 12 months from October 2022 when we had started tilting them towards issuers with a better climate performance.

In 2023 we saw considerable progress in another area crucial for our work: payments. We launched our new T2 wholesale payment system in March. T2 contributes to the harmonisation and efficiency of Europe's financial markets, introducing a new real-time gross settlement system – which replaces the TARGET2 system that had been in operation since 2007 – and streamlining liquidity management of central bank money.

We also launched the preparation phase of the digital euro project. This phase started in November after a fruitful two-year investigation phase, and will lay the foundations for the potential issuance of a digital euro. A digital euro would complement cash, not replace it. Cash remains the most frequently used means of payment among euro area citizens, and a clear majority consider it important to have the ability to pay in cash.

This is in part why the ECB is preparing a new series of euro banknotes – the most tangible, visible symbol of European unity. The Governing Council selected "European culture" and "Rivers and birds" as two potential themes for this new series, based on the outcome of two public surveys carried out in the summer of 2023. Looking ahead, European citizens will have the chance to express their preferences on a shortlist of possible designs, with the ECB expected to decide on the final designs in 2026.

In a year that marked the 25th anniversary of the ECB, we celebrated the arrival of Croatia in the euro area. Croatia's adoption of the euro in January brought the number of countries in the euro area to 20 – almost double the number when the single currency was first launched. The euro area's expansion reflects the continued attractiveness of our monetary union in an increasingly unpredictable world. In 2023 people's support for the euro remained close to record high levels.

All this could not have been done without the hard work and the dedication of ECB staff to our mission: maintaining price stability for the people of the euro area. It is an honour to lead them and this institution.

Frankfurt am Main, April 2024

Christine Lagarde

President

Year in figures

The euro area labour market was resilient

6.5%

The euro area unemployment rate averaged 6.5% in 2023, falling from 6.6% in January to 6.5% in March and remaining broadly stable for the remainder of the year.

Inflation in the euro area declined sharply

-6.3 percentage points

Headline inflation in the euro area was 2.9% in December 2023, down from 9.2% in December 2022. The decline was increasingly broad-based across components.

The ECB raised its key interest rates further

+200 basis points

The ECB raised its key interest rates by a further 200 basis points over 2023, bringing the deposit facility rate to 4%. The tightening of monetary policy was transmitted forcefully to the economy.

Euro area bank resilience strengthened further

15.6%

The Common Equity Tier 1 ratio of euro area banks stood at 15.6% in the third quarter. This was close to its highest level since the start of European banking supervision and reflected the higher profitability and de-risking of bank portfolios.

Payment preferences

60%

60% of euro area citizens consider having the option to pay in cash important. At the same time, just over half of euro area consumers prefer to pay by card or other electronic payment methods.

New ECB statistical indicators on climate change

3 sets of indicators

The ECB published three new sets of statistical indicators on sustainable finance, carbon emissions and physical risks as part of its broader climate action plan.

25th anniversary of the European Central Bank

25 years

In 2023 the ECB celebrated its 25th anniversary with the message “The Value of Unity”, allowing the ECB to highlight the success of the single currency and its benefits for the people of Europe.

Corporate sector portfolio decarbonisation

-65%

The carbon intensity of reinvestments decreased by more than 65% in the 12 months that followed the start of tilted reinvestments in October 2022.

1 Inflation declines sharply as the ECB's monetary policy tightening continues to be transmitted strongly

The global economy fared better in 2023 than initially expected, continuing to expand at a moderate pace. The expansion was driven mainly by economic growth in emerging market economies and the United States, while most other advanced economies were more strongly affected by tight financing conditions and considerable geopolitical uncertainty. Global inflation declined markedly as energy commodity prices fell, while underlying price pressures remained elevated. The euro strengthened in nominal effective terms and against the US dollar.

In the euro area economic growth weakened in 2023. The industrial sector was particularly affected by tighter financing conditions, high input costs and weak global demand, whereas the services sector was initially still supported by lingering effects from the post-pandemic reopening of the economy. While the ECB's interest rate tightening was transmitted forcefully to economic activity, the labour market remained fairly resilient. Euro area governments continued to wind down support measures adopted in response to the pandemic, energy price and inflation shocks, reversing part of the previous fiscal loosening. Headline inflation declined sharply in the euro area, helped particularly by energy inflation dropping into negative territory as the strong energy price surges of 2022 unwound. Underlying inflation also started to moderate, underpinning a general disinflationary process and reflecting the fading impact of past shocks and the increasing effects of tighter monetary policy. However, domestic price pressures replaced external pressures as the most important inflation drivers, as the labour market supported strong nominal wage developments, with workers seeking compensation for past inflation-induced losses in purchasing power.

1.1 Global economic activity expanded at a moderate pace as headline inflation declined

Global economic growth was moderate in the face of monetary policy tightening and high uncertainty

The global economy continued to expand at a moderate pace in 2023, with growth remaining broadly unchanged from 2022 at 3.5% (Chart 1.1).[1] Although subdued in a historical comparison, growth was higher than expected at the start of the year, supported by strong labour markets and buoyant demand for services despite continued monetary policy tightening.[2] The global economy was driven mainly by activity in emerging market economies and the United States, while in most other advanced economies tight financing conditions and the prolonged effects of geopolitical factors on energy prices weighed more materially on demand. In the

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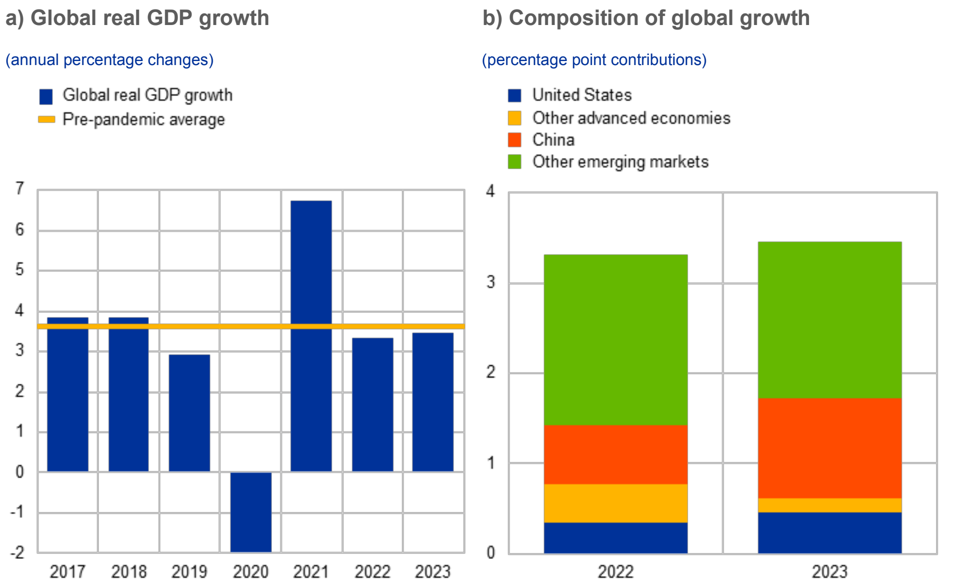
[1] The global economy as referred to in this section of the Annual Report excludes the euro area.

[2] The Eurosystem staff macroeconomic projections in December 2022 projected global growth to slow to 2.6% in 2023.

United States, the economy was more resilient than expected, on the back of robust domestic demand and a strong labour market. Turmoil in the US financial sector at the beginning of the year did not have a significant macroeconomic impact. In China, an economic rebound at the beginning of the year, following the relaxation of highly restrictive pandemic-related measures in December 2022, was ended by a renewed slump in the housing sector as well as weak domestic and external demand. The Chinese economy nonetheless achieved the government's stated growth target of around 5%.

Chart 1.1
Global GDP and its composition



Sources: ECB, ECB staff calculations and ECB staff macroeconomic projections, March 2024
Notes: "Global GDP" excludes the euro area. The pre-pandemic average is for the period from 2012 to 2019. Values for 2023 are estimates based on available data and the March 2024 ECB staff macroeconomic projections.

Global trade momentum weakened as consumption patterns normalised after the pandemic

Global trade was weak in 2023, as import growth slowed to 1.2%, well below the previous year's growth rate of 5.5% and the pre-pandemic average of 3.1%.[3] The slowdown reflected three major trends. First, global demand moved back from goods towards services as pandemic-related restrictions were fully phased out. Second, the share of consumption, which is generally less trade-intensive than investment, in domestic demand increased. Finally, emerging market economies, where trade responds less to changes in economic activity, made a larger contribution to global activity in 2023. Despite increasing trade barriers and business survey results suggesting possible value chain relocation, evidence of fragmentation in aggregate trade flows has so far remained limited.

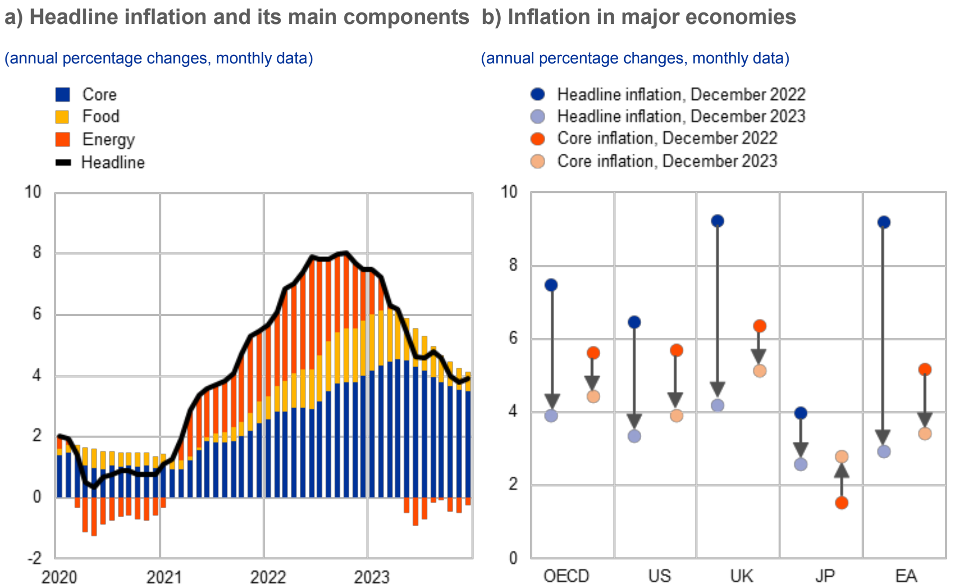
Inflation declined but underlying price pressures remained elevated

Annual headline consumer price index (CPI) inflation across OECD member countries excluding Türkiye declined from high levels during 2023, brought down by lower energy prices. It fell to 3.9% in December, and for the whole of 2023 stood at 5.3%, compared with 7.3% in 2022 (Chart 1.2, panel a). Inflation excluding energy and food also declined, but to a much lesser extent, indicating that underlying price

3 The pre-pandemic average is measured over the period from 2012 to 2019.

pressures remained strong and broad-based. This was particularly evident in advanced economies, where tight labour markets contributed to high wage growth rates, making services price inflation more persistent (Chart 1.2, panel b).

Chart 1.2
OECD headline and core inflation rates



Sources: National sources via Haver Analytics, OECD and ECB staff calculations.
Notes: EA: euro area. OECD inflation excludes Türkiye and is computed on the basis of national CPIs and annual private final consumption expenditure weights expressed in purchasing power parity terms. Core inflation excludes energy and food. The latest observations are for December 2023.

Energy commodity prices declined as low demand outweighed supply constraints

Energy commodity prices declined throughout 2023 as a result of lower demand. Oil prices fell by 4%, as weak demand for oil from advanced economies outweighed the increase in demand that followed the relaxation of lockdown measures in China. Low oil demand also more than offset the effects of supply cuts by the OPEC+ group as well as the risks to supply from geopolitical factors including the sanctions on Russia and the conflict in the Middle East. The fall in European gas prices was substantially larger, as gas prices continued the decline that started towards the end of 2022 and were reduced by another 58% in the course of 2023. European gas consumption remained below historical norms as a result of lower industrial demand, reduced gas consumption among households and mild weather in the winter months. The stable supply of liquified natural gas (LNG) also allowed European countries to start the heating season with full gas storage. Despite greater stability in the European gas market compared with the previous year, supply risks, such as strikes at Australian LNG terminals, continued to cause periods of high price volatility, illustrating the sensitivity of the European gas market during the transition away from Russian gas imports.

The euro strengthened in nominal effective terms and against the US dollar

The euro strengthened in nominal effective terms (+3.9%) and against the US dollar (+3.4%) on the basis of year-end data, amid notable intra-year fluctuations. The exchange rate dynamics were primarily influenced by evolving market expectations resulting from shifts in monetary policies and volatile economic outlooks. Initially bolstered in the first half of the year by improved macroeconomic conditions in the euro area and a faster pace of monetary policy tightening, the euro started to depreciate against the US dollar in mid-July. The strengthening of the dollar, which was broad-based, was attributed to positive economic data surprises and market expectations of a tighter-for-longer monetary policy stance in the United States. A reassessment of the stance towards the end of the year amid declining inflation rates resulted in a renewed appreciation of the euro. Across major trading partners' currencies, the euro strengthened significantly against the Turkish lira, the Russian rouble, the Japanese yen and the Norwegian krone. However, it weakened against the pound sterling, the Swiss franc and the Polish zloty.

The major risks to the outlook for global economic growth at the end of 2023 included a further escalation of geopolitical tensions, a stronger slowdown in the Chinese economy and more persistent inflationary pressures that would require tighter monetary policy than anticipated. The materialisation of such risks would reduce global economic activity. Moreover, global commodity markets remained very sensitive to supply risks, which in turn could fuel inflation and weigh on global growth in the year ahead.

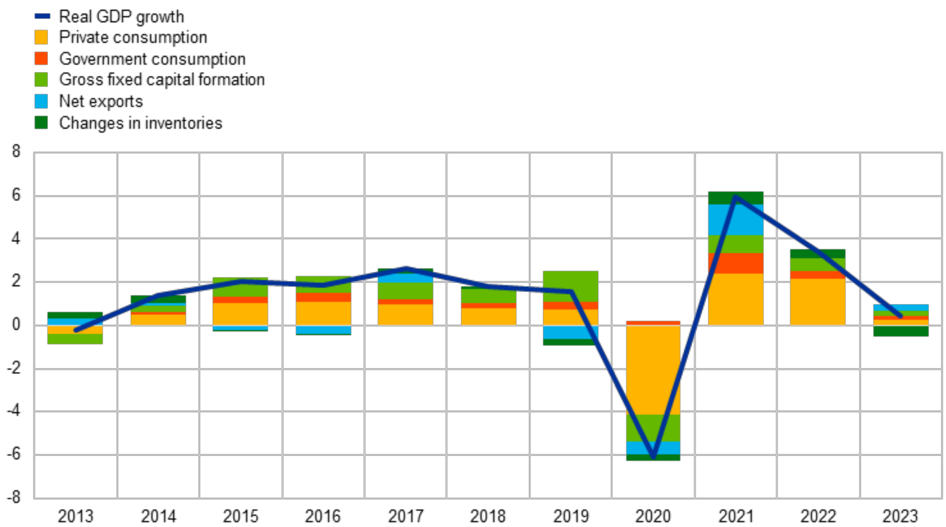
1.2 Economic activity stagnates in the euro area

Euro area growth weakened as the effects of higher interest rates broadened

Euro area real GDP rose by 0.4% in 2023, having grown by 3.4% in 2022 (Chart 1.3). Growth reflected positive contributions from domestic demand and net trade. Changes in inventories had a dampening impact. By the end of the year output in the euro area was 3.0% above its pre-pandemic level (in the final quarter of 2019) and 1.4% above its level in the first quarter of 2022, when Russia invaded Ukraine. The slowdown in growth in 2023 was largely attributable to the economic repercussions of the war, which had varying effects across countries, reflecting their different economic structures. While the industrial sector was particularly affected by tighter monetary policy, high energy prices and weakening global demand, the services sector held up relatively well, still benefiting from post-pandemic reopening effects. However, towards the end of the year the weakness in growth dynamics broadened as the impact of higher interest rates spread across the various sectors, alongside spillover effects from the weak industrial sector to services.

Chart 1.3
Euro area real GDP

(annual percentage changes; percentage point contributions)



Source: Eurostat.
Note: The latest observations are for 2023.

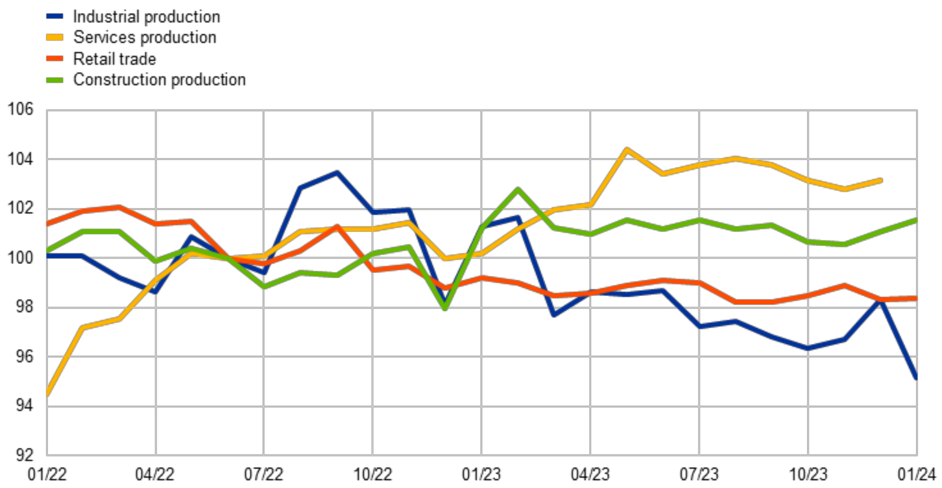
Consumer spending was geared more towards services than goods

Private consumption growth weakened considerably in 2023. It stagnated in the first half of the year as the continued drop in spending on goods, as captured by retail trade volumes (Chart 1.4), offset the still positive demand for services. In the third quarter private consumption increased, driven by households' consumption of services, which was boosted by lingering reopening effects, and the rebound in spending on durable goods. Overall spending on goods (including semi-durable and non-durable goods) continued to contract amid tighter financing conditions. Overall, household spending increased by 0.5% in 2023. Real disposable income supported household spending to some extent in 2023 as nominal wage growth increased, inflation slowed down gradually and employment growth remained resilient. Nevertheless, the transmission of tighter financing conditions to the real economy seems to have weighed on household spending, as savings remained elevated.

Chart 1.4

Euro area production and retail trade

(index: June 2022 = 100)



Sources: Eurostat and ECB calculations.
Notes: Retail trade is shown in real terms. The latest observations are for December 2023 for services production, otherwise for January 2024.

Investment was dampened by tighter financing conditions

Non-construction investment growth (a proxy for private non-housing investment) slowed throughout 2023.[4] While the first quarter of the year saw robust growth on the back of easing supply bottlenecks, the quarterly rates of increase gradually declined and investment fell in the fourth quarter, as both domestic and foreign demand weakened, backlogs dissolved, corporate profits slowed and financing conditions tightened. Uncertainty stemming from Russia's war against Ukraine and the conflict in the Middle East among other factors likely also reduced investment incentives for firms. Nevertheless, abundant profits, ample cash reserves and a decline in indebtedness have on average strengthened corporate balance sheets over past years and contributed – along with funds from the Next Generation EU (NGEU) programme supporting digitalisation and climate-related investment – to some resilience of investment compared with other expenditure components. Overall, non-construction investment grew by 2.9% in 2023.

Construction investment broadly continued to weaken over the course of 2023. The main reason for this was the decline in residential construction investment due to high construction costs, the continued rise in mortgage interest rates and the tightening of bank lending standards, which made it more difficult for households to access finance and dampened demand for residential property. Other areas of construction, such as civil engineering, remained more resilient, supported by public infrastructure investments. At the end of 2023 construction investment was 2.1% above its pre-pandemic level, having fallen by 0.6% overall in 2023.

The euro area goods trade balance returned to surplus in 2023 amid lower prices for imported energy. Export growth remained subdued in a context of weak foreign demand. Manufacturing exports were supported by the easing of supply bottlenecks,

4 See the box entitled "Intangible assets of multinational enterprises in Ireland and their impact on euro area GDP", *Economic Bulletin*, Issue 3, ECB, 2023.

while lingering effects from the energy supply shock and the appreciation of the euro in effective terms contributed to export weakness. The subdued export performance extended to services exports in the second half of the year, as support from pent-up demand after the reopening of the global economy was fading. As domestic demand cooled, euro area imports also declined, driven by decreasing intermediate goods imports as firms destocked and energy imports fell. Overall, the contribution from trade to euro area GDP growth was slightly positive in 2023.

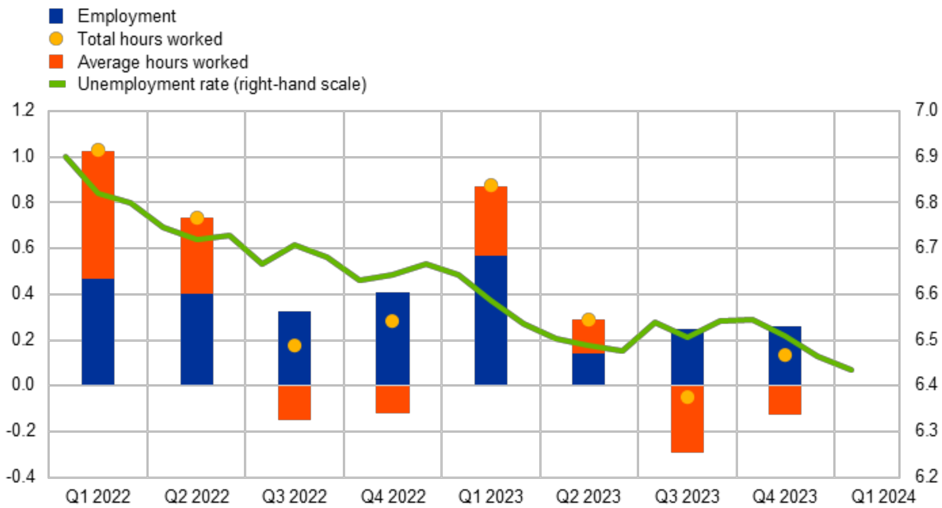
Labour market

The euro area labour market remained resilient overall

The euro area labour market remained resilient overall in 2023, although labour market developments and survey indicators at the end of the year pointed towards a cooling down. The unemployment rate averaged 6.5% in 2023; it declined from 6.6% in January to 6.5% in March and remained broadly stable at that level for the rest of the year (Chart 1.5). Total employment and total hours worked held up well amid a stagnating economy, rising in 2023 by 1.4% and 1.6% respectively. Average hours worked increased by only 0.2% in 2023, and in the last quarter of 2023 stood 1.3% below the pre-pandemic level, likely driven by factors such as labour hoarding (i.e. companies holding on to more workers than necessary in downturns) and an increase in sick leave. The labour force participation rate in the age group 15-74 years increased to a level of 65.7% in the fourth quarter of 2023, 1.1 percentage points above its pre-pandemic level. In the second half of the year, labour demand showed some signs of softening, with the job vacancy rate still high but gradually receding from the peak reached in the second quarter of 2022. Overall, while the ECB’s interest rate increases continued to be transmitted forcefully to the economy, total employment and the euro area labour market, which is among the European Union’s objectives to which the ECB can contribute, if this is without prejudice to maintaining price stability, remained relatively resilient.

Chart 1.5
Labour market

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



Sources: Eurostat and ECB calculations.
Note: The latest observations are for January 2024 for the unemployment rate, and for the fourth quarter of 2023 for employment and hours worked.

1.3 Fiscal policy measures in a challenging macroeconomic environment

The euro area budget deficit ratio decreased as governments started to wind down discretionary support measures

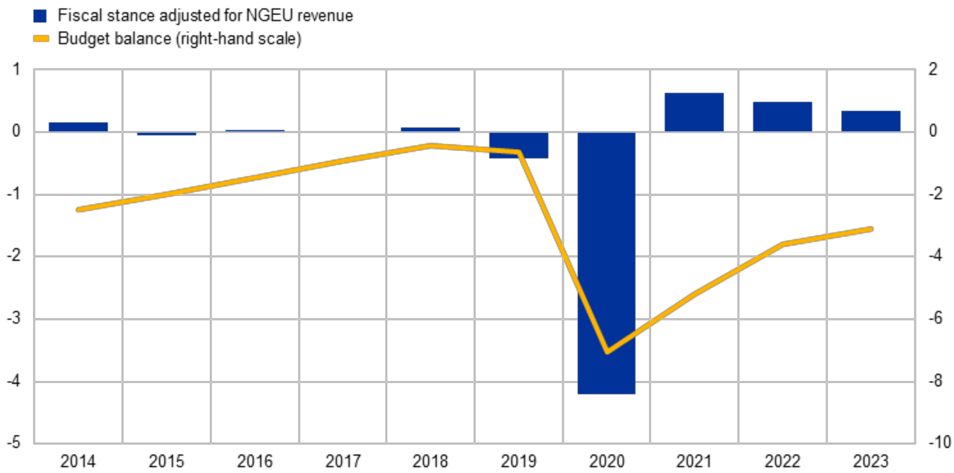
The euro area general government deficit ratio continued to decrease in 2023, following a path started at the height of the pandemic (Chart 1.6).[5] The gradual tightening of fiscal policy is also reflected in the fiscal stance, which tightened moderately in 2023 for the third year in a row.[6] However, only slightly over a third of the loosening in 2020 has so far been reversed (Chart 1.6). This means that the cyclically adjusted budget balance remains well below its pre-pandemic level, owing to lasting measures adopted in the context of the pandemic in 2020 and the energy-related support provided from 2022 onwards.

5 After the cut-off date for this report, official fiscal outcomes for 2023 were released which, in specific countries, point to significantly higher budget deficits than previously estimated.

6 The fiscal stance reflects the direction and size of the stimulus from fiscal policies to the economy beyond the automatic reaction of public finances to the business cycle. For more details on this concept, see the article entitled "The euro area fiscal stance", *Economic Bulletin*, Issue 4, ECB, 2016.

Chart 1.6

Euro area general government balance and fiscal stance



Sources: Eurosystem staff macroeconomic projections for the euro area, December 2023 and ECB calculations.
Note: The measure of the fiscal stance is adjusted on the revenue side from 2021 by netting out grants from the NGEU Recovery and Resilience Facility as these revenues do not have macroeconomic tightening effects.

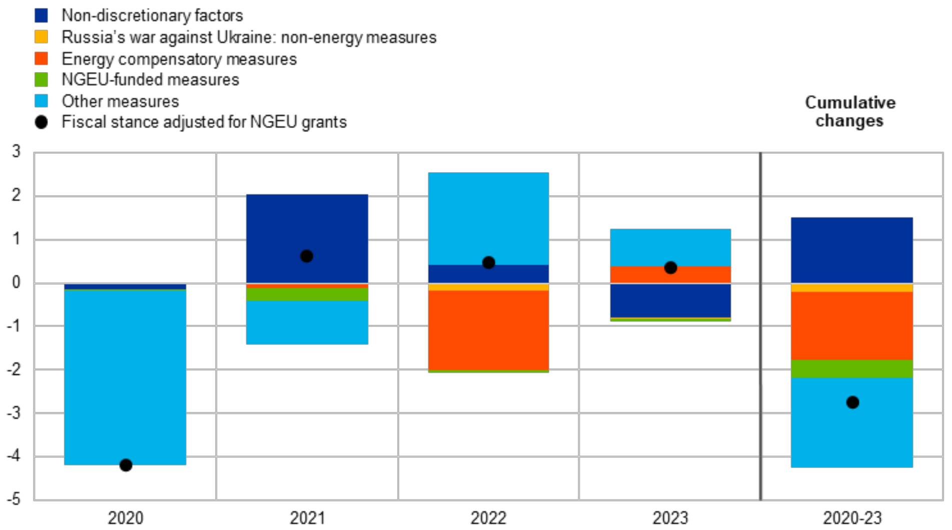
A further tightening of the fiscal stance would be appropriate

Seen from the end-2023 perspective, a challenge for fiscal authorities will be how best to reverse this cumulative expansion of the last four years (Chart 1.7) and to reduce debt ratios, particularly given that demographic developments, the green and digital transitions as well as the geopolitical environment will require fiscal room for manoeuvre in the future. The 2024 government budgets pointed towards a continuation of the fiscal tightening cycle at the euro area level. This largely reflected an unwinding of discretionary fiscal measures that had been adopted in response to the energy and inflation shocks. Such measures were estimated to have amounted to over 1% of GDP in 2023, yet only a small part of this was expected to remain in place in 2024. Notably, however, some of the expansionary measures adopted by governments during the pandemic seemed to be of a more long-lasting nature and, on the basis of the 2024 budgets, were not set to expire in the short run. This was the case for increased transfers and subsidies but to some extent also tax reductions.

Chart 1.7

Decomposition of the euro area fiscal stance and discretionary measures

(percentages of GDP)



Sources: Eurosystem staff macroeconomic projections for the euro area, December 2023 and ECB calculations.
Notes: The measure of the fiscal stance is adjusted on the revenue side from 2021 by netting out grants from the NGEU Recovery and Resilience Facility as these revenues do not have macroeconomic tightening effects. "Other measures" mainly relates to measures adopted during the pandemic and their subsequent unwinding.

A further tightening of the fiscal stance also appears appropriate from the viewpoint of monetary policy. As the energy crisis has now largely faded, governments should continue to roll back the related support measures, which is essential to avoid driving up medium-term inflationary pressures. This would otherwise call for tighter monetary policy. Besides rolling back the pandemic and energy-related measures, governments should more generally make progress towards sounder fiscal positions to ensure that public finances are on a sustainable path.

The EU needs a robust and credible framework for economic and fiscal policy coordination

A robust EU framework for economic and fiscal policy coordination and surveillance remains crucial. After extensive discussions, the Council of the European Union agreed in 2023 on a reform of the EU's economic governance framework, which opened the way for a trilogue between the European Commission, the EU Council and the European Parliament. 2024 will be an important year to transit towards its implementation.[7]

[7] In an opinion issued in July 2023, the ECB welcomed the European Commission's reform proposals and offered some technical observations and suggestions to further enhance the new framework and ensure it will be more transparent and predictable. See Opinion of the European Central Bank of 5 July 2023 on a proposal for economic governance reform in the Union (CON/2023/20) (OJ C 290, 18.8.2023, p. 17).

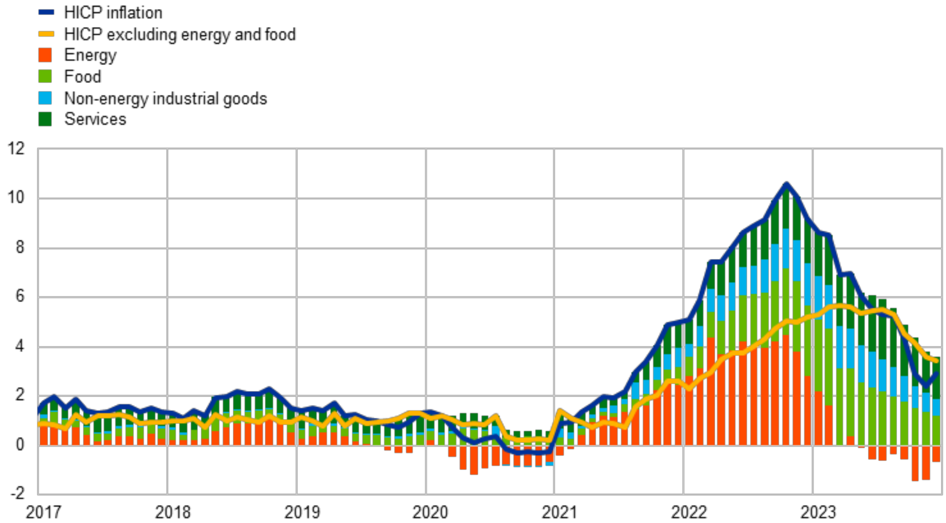
1.4 Headline inflation saw a steep decline throughout the year

Headline inflation fell by 6.3 percentage points between December 2022 and December 2023

Headline inflation in the euro area as measured by the Harmonised Index of Consumer Prices (HICP) was 2.9% in December 2023, a decline of 6.3 percentage points from its level in December 2022. It fell steadily throughout the year, with the disinflationary process also showing up in underlying inflation as the year progressed. In November headline inflation reached a temporary trough of 2.4%, the lowest level in more than two years (sharply down from the peak of 10.6% in October 2022) (Chart 1.8). However, inflation moved slightly higher again in December, owing to the downward effects of energy-related fiscal measures on price levels a year earlier. All major components of inflation saw declines in year-on-year inflation rates over the second half of 2023, reflecting the fading impact of previous cost shocks and weaker demand amid tighter monetary policy. However, year-on-year inflation rates (other than for energy prices) were at year-end still significantly above their longer-term averages, while annualised quarter-on-quarter rates had already moved much closer to such benchmarks. Price dynamics for goods decelerated more swiftly than those for services, as easing supply bottlenecks and input costs took considerable pressure off. Services price inflation rose until mid-year, owing to still strong post-pandemic demand, increasing labour costs, and temporary factors related to fiscal measures. With the reduction in energy and food inflation, the disparities in inflation rates across euro area countries also diminished substantially.

Chart 1.8
Headline inflation and its main components

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations.
Note: The latest observations are for December 2023.

Energy inflation dropped sharply while food inflation moderated

Developments in energy prices accounted for more than half of the drop in headline inflation between December 2022 and December 2023. Energy inflation was still high in January 2023, but by year-end had declined by 25.6 percentage points into negative territory. This reflected the unwinding of the strong surges in wholesale energy prices that had taken place in 2022. However, energy inflation remained somewhat volatile, as wholesale energy markets were sensitive to events such as the conflict in the Middle East. Meanwhile, food inflation peaked at 15.5% in March 2023. It then declined substantially throughout the rest of the year, although was still over 6% towards year-end owing to the persistent impact of earlier cost shocks stemming from energy and other inputs, and to higher pressures from unit profits and labour costs.

Underlying inflation started to moderate but remained elevated at year-end

Core inflation – as measured by HICP inflation excluding the volatile components energy and food – continued to increase into the first quarter of the year, but then moderated from a peak of 5.7% to stand at 3.4% in December. This decline was initially driven by non-energy industrial goods inflation, as demand for goods weakened amid tighter financing conditions (see Section 1.2) and accumulated pressures from past supply bottlenecks and high energy costs started to dissipate. Meanwhile, services inflation hovered at high levels until August as a result of still strong demand after the reopening of the economy (for contact-intensive services sectors such as recreation and holidays) as well as rising labour costs, especially given the larger labour share in the cost structure of the services sector compared with manufacturing. Towards the end of the year, however, services inflation also fell somewhat and confirmed the general disinflationary process. Moreover the lagged dynamics in services inflation reflected the fact that many services components typically lag headline inflation (e.g. housing, postal and medical services). All other indicators of underlying inflation also moderated significantly during the year, reflecting the fading impact of past shocks and the increasing impact of tighter monetary policy, yet they continued to span a wide range and most indicators still clearly exceeded pre-pandemic levels.[8]

Labour costs became the most important contributor to domestic inflation later in the year

Growth in the GDP deflator (a reliable measure of domestic price pressures) was on average 6.0% in 2023. This compared with average import price inflation of -2.9%, reflecting the shift from external to domestic drivers of inflation. While profits had still played a prominent role in domestic price pressures at the turn of the year 2022/2023 (see Box 2), labour costs gradually became the dominant factor, given strong wage developments and a reduction in labour productivity (Chart 1.9). Annual growth in compensation per employee increased to 5.1% on average in 2023 from 4.5% in 2022, rates substantially above the pre-pandemic (2015-19) average of 1.7%, which was facilitated by still tight labour markets (see Section 1.2). The further strengthening reflected in part workers seeking compensation for past inflation-induced losses in the purchasing power of nominal wages. Growth in negotiated wages rose to 4.5% on average in 2023; the difference compared with actual wage growth implies a still sizeable wage drift component, though lower than in 2021-22.[9] Growth in both compensation per employee and negotiated wages started to edge down towards the end of the year, but their growth levels remained elevated and

8 For more information on underlying inflation, see the box entitled "Underlying inflation measures: an analytical guide for the euro area", *Economic Bulletin*, Issue 5, ECB, 2023.

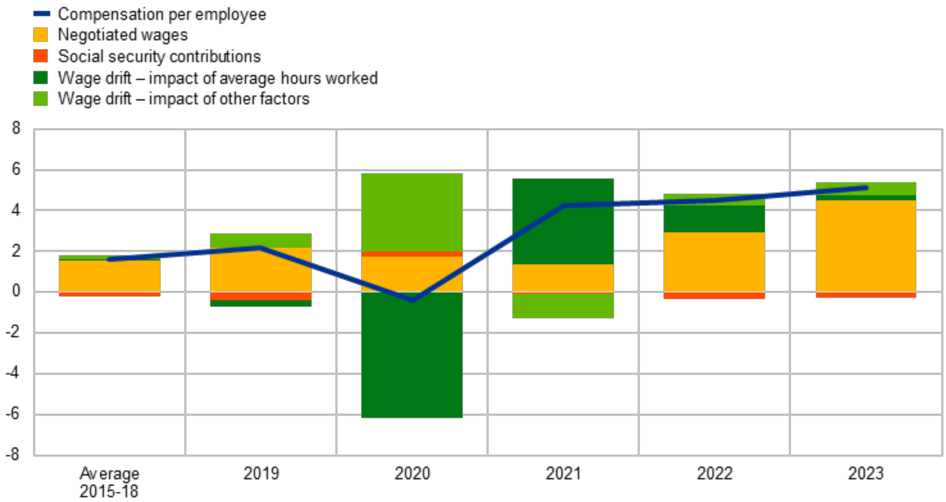
9 Wage drift measures deviations of developments in actual wages from developments in negotiated wages, reflecting changes in overtime, bonuses, tight labour markets and other factors.

signalled still high nominal wage pressures going into 2024. This reflected a recovery of real wages rather than evidence of destabilising wage-price dynamics.

Chart 1.9

Euro area compensation per employee

(annual percentage changes; percentage point contributions)



Sources: Eurostat, ECB and ECB calculations.

Longer-term inflation expectations declined slightly, remaining anchored around the ECB's 2% target

Average longer-term inflation expectations of professional forecasters, which had stood at 2.2% in late 2022, edged down to 2.1% in 2023. Other survey data, such as from the ECB Survey of Monetary Analysts and Consensus Economics, also suggested that longer-term inflation expectations were well anchored around the ECB's 2% target. A market-based measure of longer-term inflation compensation (the five-year forward inflation-linked swap rate five years ahead) rose to a peak of 2.7% in August, but decreased to 2.3% in late December amid news of lower than anticipated headline inflation and a subdued economic growth outlook (see Section 1.2). In any case market-based measures corrected for risk premia implied "genuine" expectations very close to 2%. On the consumer side, median inflation expectations for three years ahead remained slightly above this at 2.5% in December, possibly reflecting high uncertainty, negative economic sentiment and still high price levels relative to wages.[10]

[10] For more on consumer inflation perceptions and uncertainty, see the box entitled "A closer look at consumers' inflation expectations – evidence from the ECB's Consumer Expectations Survey", *Economic Bulletin*, Issue 7, ECB, 2022. For recent results of the Consumer Expectations Survey on economic growth expectations, see "Economic growth and labour markets", ECB, 2024. For more information on consumers' perceptions of the relationship between inflation and economic conditions, see Candia, B., Coibion, O. and Gorodnichenko, Y., "Communication and the Beliefs of Economic Agents", *NBER Working Paper Series*, No 27800, National Bureau of Economic Research, 2020.

1.5 Credit and financing conditions tightened strongly as policy rates increased

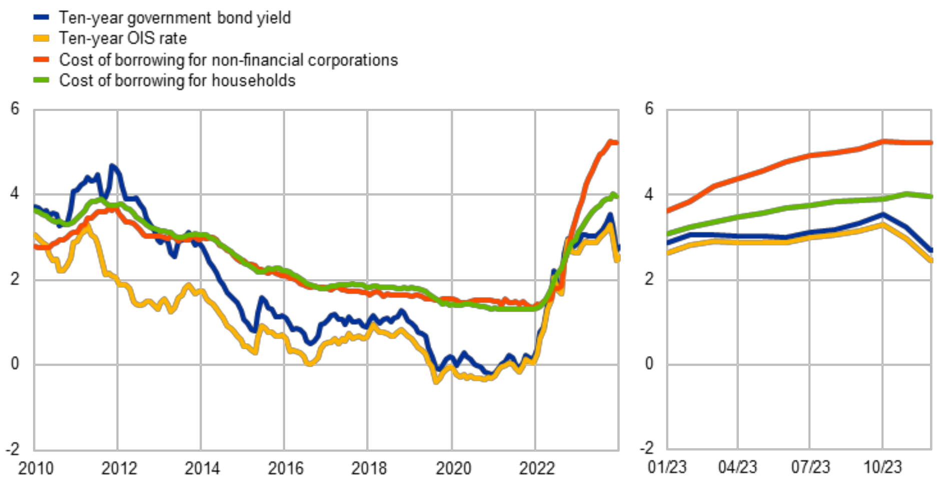
Lower bond yields despite monetary policy tightening, reflecting a change in expectations towards the end of the year

With inflationary pressures remaining elevated and persistent throughout 2023 (see Section 1.4), the ECB continued to tighten monetary policy decisively until September, and subsequently maintained the key ECB interest rates at restrictive levels, to ensure that inflation returns to the 2% target over the medium term (see Section 2.1). The – risk-free – ten-year overnight index swap (OIS) rate hovered around 3% through most of the year, reaching a peak of 3.3% in October before declining to an average 2.5% in December (Chart 1.10). The decline in the ten-year OIS rate towards the end of the year was due to a sharp drop in financial market interest rate expectations, mostly after inflation came in lower than expected. The drop in expectations was only partially compensated by an increase in the term premium. Long-term government bond yields followed developments in the OIS rate very closely. Their spreads were not significantly affected by the process of normalising the Eurosystem balance sheet (see Section 2.1) and at year-end were virtually the same as in December 2022. The euro area GDP-weighted average of ten-year nominal government bond yields averaged 2.7% in December 2023, 10 basis points below its level a year earlier.

Chart 1.10

Long-term interest rates, and the cost of borrowing for firms and for households for house purchase

(percentages per annum)



Sources: Bloomberg, LSEG and ECB calculations.
Notes: Monthly observations. The euro area ten-year government bond yield is a GDP-weighted average. The indicators for the cost of borrowing are calculated by aggregating short-term and long-term bank lending rates using a 24-month moving average of new business volumes. The latest observations are for December 2023.

Equity markets were supported by lower risk premia

Stock prices increased in 2023, in both the non-financial sector and, particularly, the banking sector. A decline in equity risk premia supported equity prices amid low and falling volatility despite heightened geopolitical tensions. The index of euro area bank stocks was boosted further by expectations of an increase in bank earnings in both the long and short term, with the March banking sector market turbulence in the United States and Switzerland having a sizeable but temporary negative impact. The broad indices of euro area non-financial corporation and bank equity prices ended

2023 around 12% and 23% above their respective end-2022 levels. Corporate bond yields declined and stood, on average, at lower levels in December 2023 than in December 2022 in both the investment grade and high-yield segments, owing to lower risk-free rates combined with a compression of corporate bond spreads.

Broad money and bank intermediation reflected the tightening of monetary policy

Broad money (M3) stagnated, mainly reflecting the tightening of monetary policy. Its annual rate of change was only 0.1% in December, having declined significantly during 2023 and even temporarily reaching negative rates for the first time since the inception of Monetary Union (Chart 1.11). The decline was driven by subdued credit creation, high opportunity costs of holding liquid assets and the reduction in the Eurosystem balance sheet. While bank balance sheets remained robust overall, repayments of funds borrowed under the third series of targeted longer-term refinancing operations and a contraction in the Eurosystem asset portfolios reduced excess liquidity. Bank funding costs increased steeply, although by less than policy rates, as banks turned to more expensive market funding sources and competed more actively for customer deposits by offering higher interest on them.

Bank lending rates increased steeply for firms and households as monetary policy tightened

The transmission of the monetary policy tightening to broader financing conditions remained strong in 2023. As indicated by the euro area bank lending survey, banks tightened their credit standards (i.e. internal guidelines or loan approval criteria) for loans to households and firms substantially further. This was confirmed by the survey on the access to finance of enterprises for firms and the Consumer Expectations Survey for households. Nominal bank lending rates increased steeply again in 2023, reaching their highest levels in almost 15 years. The composite bank lending rate for loans to households for house purchase stood at 4.0% at the end of the year, up by about 100 basis points compared with the end of 2022, and the equivalent rate for non-financial corporations increased by 180 basis points to 5.2%, a rise of almost twice the increase seen for households (Chart 1.10). The increases in lending rates were more rapid and larger than in previous episodes of monetary policy tightening, mostly reflecting the faster and larger policy rate hikes since July 2022. The disparity in lending rates across countries remained contained, indicating that changes in the ECB's monetary policy were being transmitted to lending rates smoothly across the euro area.

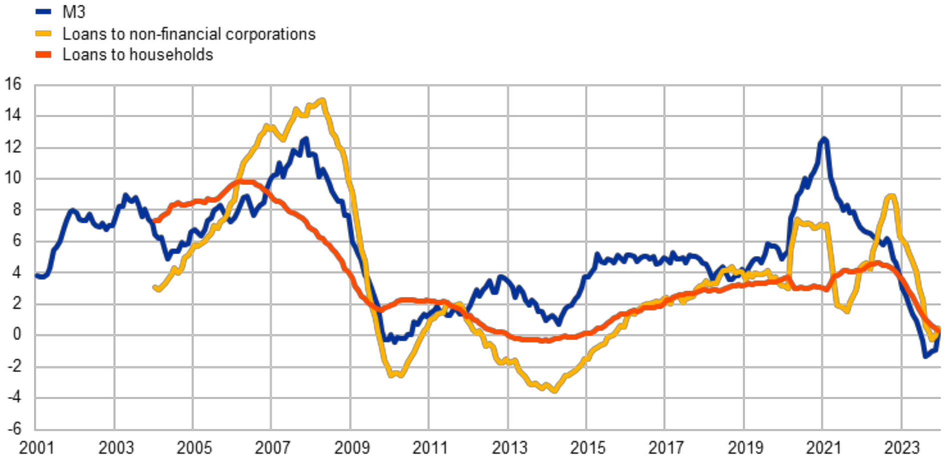
Bank lending to households and firms weakened markedly

Bank lending to households and firms weakened markedly in 2023, on the back of tighter credit conditions (Chart 1.11). Net monthly flows of loans were almost zero in the last three quarters of the year. The annual growth rate of bank loans to households declined, standing at 0.3% in December, mostly reflecting the slowdown in mortgages amid falling house prices for the first year since 2014. The annual growth rate of bank loans to firms also fell, reaching 0.4% in December, and the net flows of overall external financing to firms were at historical lows (Chart 1.12).

Chart 1.11

M3 growth and the growth of credit to firms and households

(annual percentage changes)

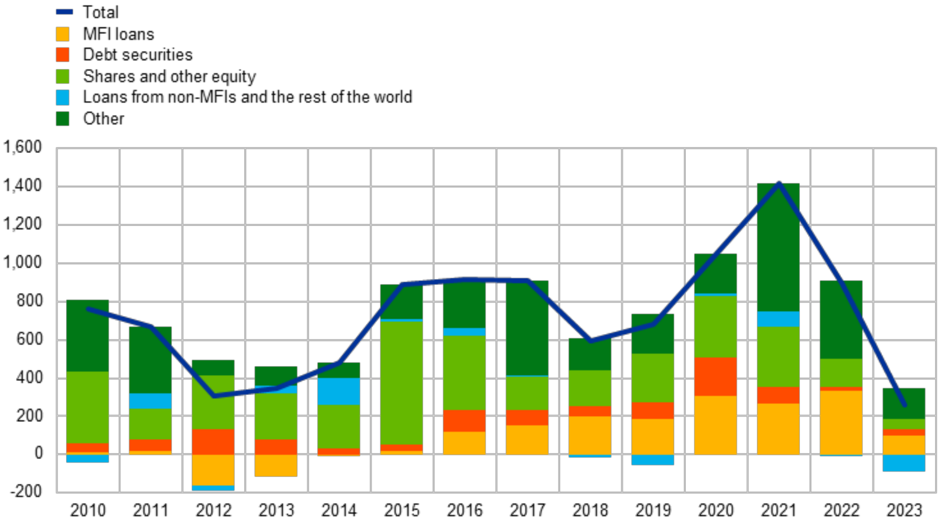


Source: ECB.
Notes: Firms are non-financial corporations. The latest observations are for December 2023.

Chart 1.12

Net flows of external financing to firms

(annual flows in EUR billions)



Sources: ECB and Eurostat.
Notes: Firms are non-financial corporations. MFI: monetary financial institution. In “loans from non-MFIs and the rest of the world”, non-monetary financial institutions consist of other financial intermediaries, pension funds and insurance corporations. “MFI loans” and “loans from non-MFIs and the rest of the world” are corrected for loan sales and securitisation. “Other” is the difference between the total and the instruments included in the chart and consists mostly of inter-company loans and trade credit. The latest observations are for the third quarter of 2023. The annual flow for 2023 is computed as a four-quarter sum of flows from the fourth quarter of 2022 to the third quarter of 2023.

Box 1
The macroeconomic implications of climate change

The ECB is working to better understand the macroeconomic consequences of climate change and policies to mitigate its impact, in line with commitments made following the 2020-21 monetary policy