



Transforming for
competitiveness



Chapter 1
The macroeconomic environment

EUROPEAN INVESTMENT BANK INVESTMENT REPORT
2023/2024

Transforming for competitiveness

Part I Sustaining investment
in challenging times

Chapter 1 **The macroeconomic environment**



European
Investment Bank

Investment Report 2023/2024: Transforming for competitiveness.

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About the report

The annual EIB report on investment and investment finance is a product of the EIB Economics Department. The report provides a comprehensive overview of the developments and drivers of investment and investment finance in the European Union. It combines an analysis and understanding of key market trends and developments, with a thematic focus explored in greater depth. This year, the focus is on Europe's transition to an innovative and green future. The report draws extensively on the results of the annual EIB Investment Survey (EIBIS) and the EIB Municipality Survey, combining internal EIB analysis with contributions from leading experts in the field.

About the Economics Department of the EIB

The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and to help define its positioning, strategy and policy. The director of Economics Department, Debora Revoltella, heads a team of 40 economists.

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Chapter 1

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Table of contents

Preface	vii
Key findings	1
Part I Sustaining investment in challenging times	
1. The macroeconomic environment	25
2. Government investment	55
3. Corporate investment	93
Part II Accelerating transformation for competitiveness	
4. Innovation in the global context	143
5. Investing in green transformation	187
Data annex	223
Glossary of terms and acronyms	229

Chapter 1

The macroeconomic environment

Macroeconomic conditions for investment deteriorated in 2022 and 2023. Largely sparked by Russia's invasion of Ukraine, the food and energy price shocks of 2022 transferred wealth away from EU households and governments and triggered widespread inflation. When central banks raised interest rates rapidly, corporate funding costs rose. After putting in place measures to offset the impact of higher energy prices on households and businesses, governments gradually started to consolidate their finances. Demand from countries outside the European Union slowed, in part because the Chinese economy softened.

Nevertheless, public and corporate investment remained robust, at least until the first half of 2023. Total investment grew by 1.6% during the first half of 2023, relative to a year earlier. In the second quarter of 2023, 14% of EU firms surveyed in the EIB Investment Survey (EIBIS) said they intended to increase investment in 2023 compared with 2022 – a figure only slightly smaller than a year earlier.

During 2023, the factors that initially supported investment began to fade. Domestic demand at first remained quite strong because households were willing to dip into their savings to maintain consumption, unemployment remained low, and fiscal policy offset some of the shock of inflation on their income. While demand was still strong, firms passed on much of the increase in costs to clients. But none of these factors are likely to persist. Tighter financial conditions are feeding through into corporate and household funding costs, job vacancies are shrinking and fiscal policy is set to consolidate. The outlook for foreign demand is the only bright spot.

Higher geopolitical tensions and energy prices are likely to have structural consequences for the EU economy. Although energy prices have come down substantially from their peak, they remain higher than before the energy crisis, which is unsurprising because fossil fuel imports from Russia had to be replaced with more expensive substitutes. Energy-intensive industries appear to have been affected already, recording substantial declines in production. Higher and more volatile costs are likely to remain a drag for the competitiveness of EU firms. This is particularly true in Eastern Europe, where inflation was exceptionally high and in most countries not offset by currency depreciation. Meanwhile, EU and national policies continue to drive the green transition, which is needed to combat climate change and reduce Europe's dependence on fossil fuels. Europe's strategic autonomy became a key concern as global supply chains for materials, services and goods linked to the energy and green transition were increasingly exposed to geopolitical tensions.

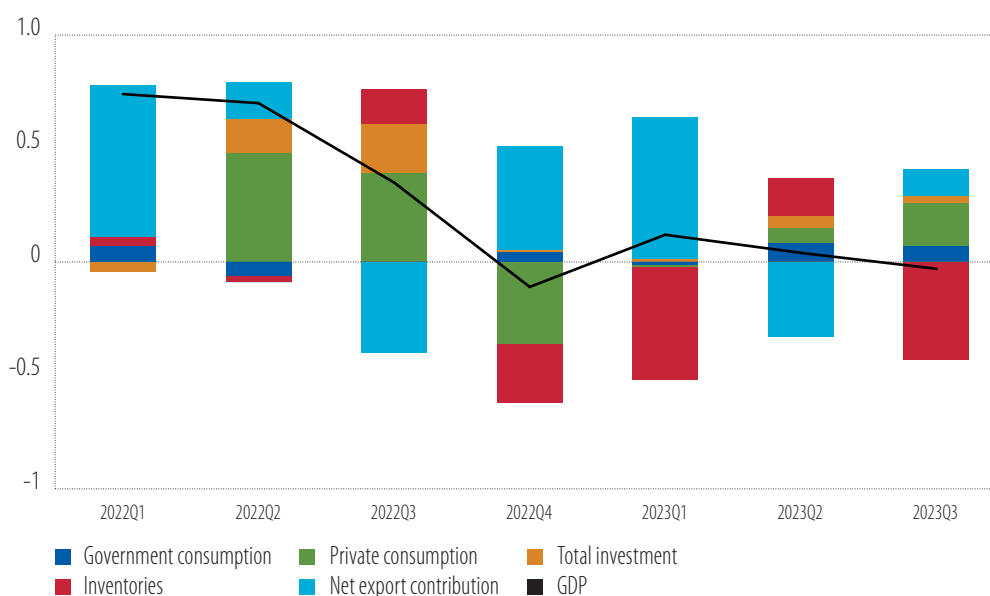
Introduction

This chapter discusses the macroeconomic backdrop to investment. After briefly overviewing the macroeconomic situation, it covers the inflationary and disinflationary periods of 2022 and 2023, the impact of tighter monetary policy, the resilience of domestic demand, fiscal policy and the consequences of fiscal consolidation, and the temporary weakness of external demand. The main message is that the factors that initially supported investment are starting to fade, weakening the outlook. Two boxes discuss why inflation rose much more in some EU members than in others, and recent trends in trade patterns with key countries.

A bird's eye view of the economy

Growth sputtered towards the end of 2022, but the economy continued to expand despite numerous headwinds. After brisk progress in the first three quarters of 2022, gross domestic product (GDP) growth slowed, becoming virtually stagnant from the fourth quarter on, but recording an overall result of 3.4% for the year (for the European Union and the euro area). Meanwhile, accelerating inflation prompted central banks to raise interest rates. Domestic demand was initially resilient, but weakened once households had drawn down savings accumulated during the pandemic and job prospects dimmed. Net exports remained strong until the first quarter of 2023 despite the slowdown in global trade and demand, and government spending's contribution to growth vanished in the second quarter of 2022. By the third quarter of 2023, EU GDP was stable compared to the previous quarter, with inventories weighing on output.

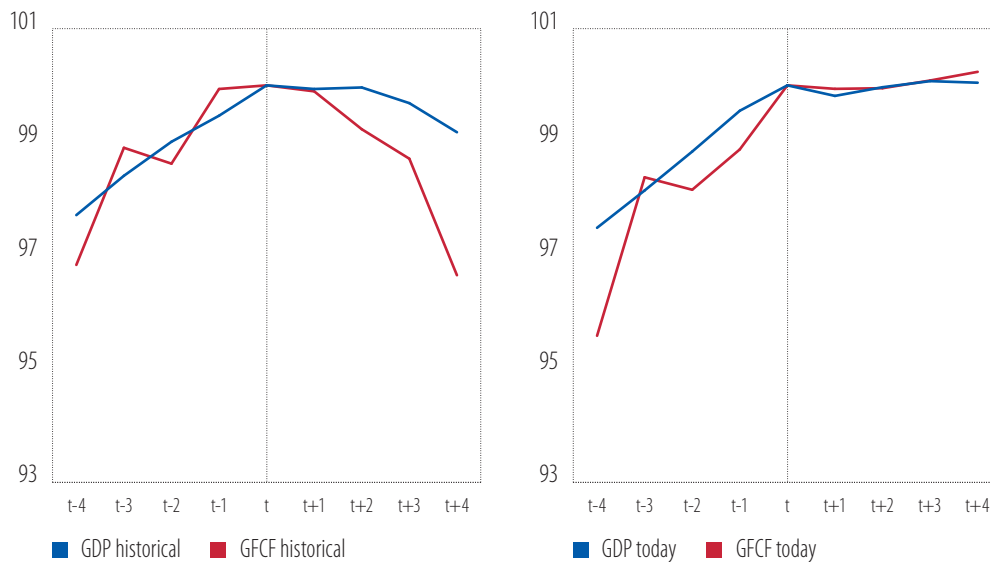
Figure 1
EU GDP and the components of demand (% GDP), adjusted for season and calendar day



Source: Eurostat, EIB staff calculations.

Investment has not slowed as much as other components of aggregate demand. As interest rates skyrocketed and global demand faltered, investment showed surprising resilience, with gross fixed capital formation being the only component to contribute to EU growth in the first half of 2023. Investment has been stronger than it usually is in comparable phases of the business cycle (Figure 2), confirming the evidence from EIBIS 2023. Investment is also examined in other parts of this report (Chapter 3).

Figure 2
Investment and GDP during recent business cycles (an index)



Source: Eurostat, EIB staff calculations.

Note: On both graphs t indicates the quarter corresponding to the slowest growth or the peak of the expansion and is fixed at 100, $t-n$ indicates the previous quarters and $t+n$ the following ones. The left panel is calculated by averaging the quarter before and after the latest period of slowdown or recession in the European Union (2001-Q2, 2008-Q1, 2011-Q3, 2016-Q4, with the quarters in 2008 and 2011 corresponding to actual recessions), while the right panel represents the current cycle with t fixed at 2022-Q3. GFCF refers to gross fixed capital formation, a measure of investment.

Investment in machinery and equipment, intellectual property and commercial buildings fared better (+2.9%) than residential investment (-3.8%) over the year leading into the second quarter of 2023. Productive investments – those excluding residential investment – were particularly strong in Central and Eastern European countries (Slovakia, Romania, Lithuania, Estonia and Bulgaria, but not Hungary). Those investments were also stronger in the Netherlands, France and Italy than in Germany and Spain. Residential investment grew at almost 50% annually in Greece, returning to the level reached in 2013 for the first time, while it declined by around 10% in Sweden, Denmark, Italy and Luxembourg.

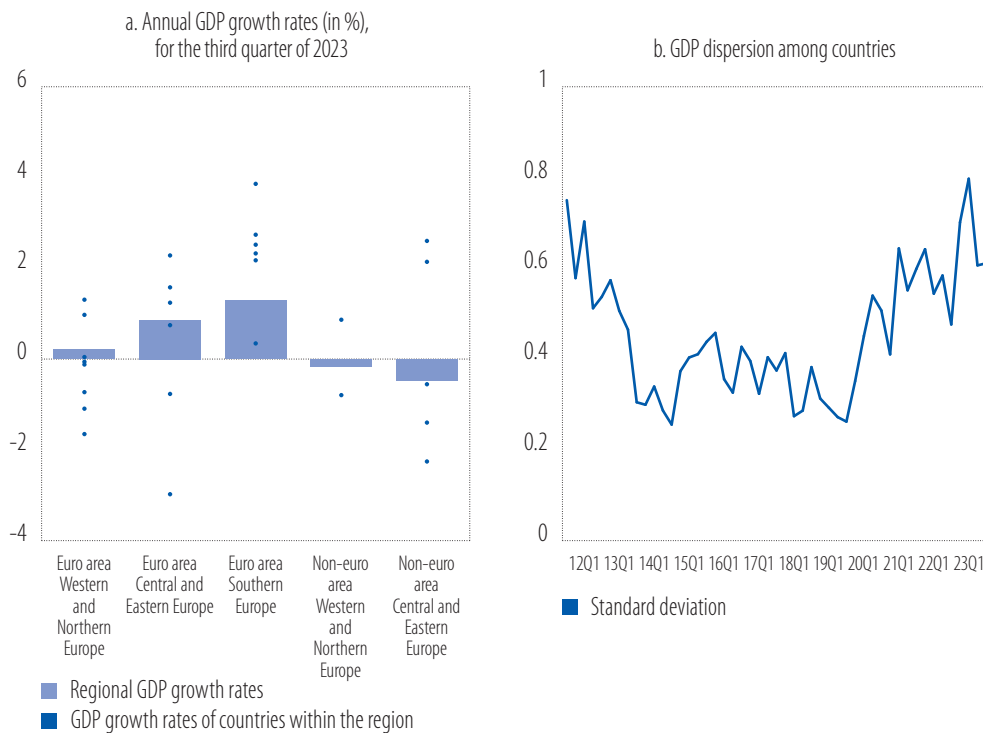
Firms planned to continue increasing investment despite tighter monetary policy. Based on information collected by the EIBIS during the second quarter of 2023, firms planned to increase their investment spending in 2023 compared to the previous year. Manufacturing firms in Western and Northern Europe were the most likely to say they planned to invest. Investment intentions were weakest in the construction sector in Central and Eastern Europe, where a rise in interest rates brought an abrupt halt to a long real estate market boom.

Industry led the slowdown in production, while services were more resilient. Surveys support this evidence, with the manufacturing purchasing manager’s index (PMI) for the euro area declining to below 50 (the threshold between contraction and expansion) in mid-2022 and then dipping to a low point of 42.7 in July 2023, despite an uptick at the beginning of the year. In November, it was still at a weak 44.2. The services PMI fell below 50 in August 2023 (and was still at 48.7 in November). Data on industrial production confirm this picture, as EU figures for the third quarter of 2023 suggest a 1.1% drop compared to the preceding quarter and a 4.2% fall with respect to the previous year. By September, industrial production had declined 5.7% from the peak reached in the same month a year before.

The situation in EU countries varies, depending on firms’ specialisation and position in production chains, along with their sensitivity to rising interest rates. The energy shock has abated but not vanished, with oil prices volatile and rising towards USD 100 per barrel when the conflict between Israel

and Hamas broke out in October 2023. At the same time, the sudden rapid increase in interest rates is feeding through into the EU economy. These shocks are having varying effects on the 27 EU members, as is made clear in the widening gap in GDP growth rates – even within groups of countries that otherwise tend to move in tandem (Figure 3). The standard deviation of growth rates is almost as high as during the beginning of the European sovereign debt crisis in 2009-2010. Private consumption shows a similar dynamic, contracting in 14 of 27 EU members in mid-2023.

Figure 3
Growth and dispersion in growth



Source: Eurostat.
Note: Regional averages are weighted by GDP.

Source: Eurostat.
Note: Growth rates have been standardised at the country level to avoid having growth rates influence the level of dispersion.

Firms initially remained profitable despite rising energy and wage costs and tighter funding conditions

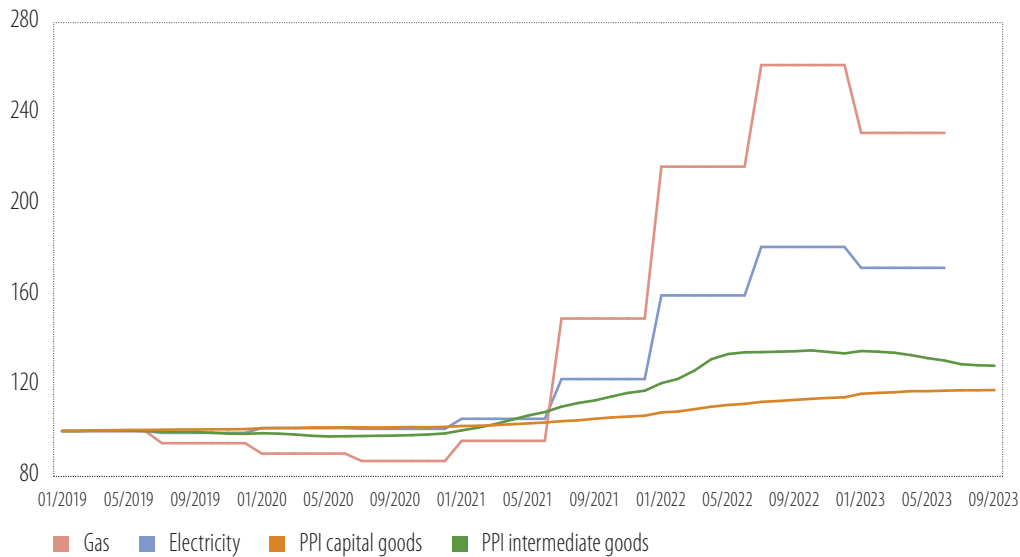
Despite the major increase in production costs and monetary tightening, firms have on average remained profitable (encouraging them to invest), while energy prices have fallen somewhat from their peak in mid-2022. This section argues that firms in energy-intensive sectors may nevertheless struggle to recover from the shock, and that countries in which inflation was particularly high (such as those in Central and Eastern Europe) may not find it easy to regain their competitiveness within the European Union. Box A discusses why inflation was so much higher in Central and Eastern Europe.

Firms preserved their profitability in the face of rising energy and wage costs

Energy prices have receded since their peak in late 2022, but cost pressures persist. High energy prices pushed up firms' input costs and eventually the prices of intermediate and capital goods (Figure 4). Gas prices peaked in the second half of 2022, hitting levels about 2.5 times higher than at the start of 2021.

They have fallen back since then, but only partially, and are reflected in a slight reduction in the costs of intermediate goods. In contrast, the prices of capital goods have not yet started to decline.

Figure 4
EU electricity and gas prices and selected producer prices (January 2019=100)



Source: Eurostat.

Note: Gas and electricity prices are simple averages over all consumption bands for non-household consumers at six-month intervals. The latest data available are for September 2023. PPI stands for the producer price index.

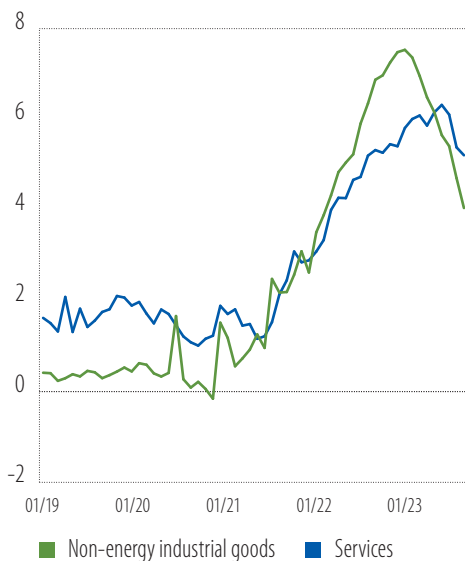
The pressures affecting costs were different for industrial and service-sector firms. The extent of competition, the importance of wages in production costs and a post-pandemic catch-up in demand for services help explain why prices moved at different paces in services and industry (Figure 5). Energy prices rose a lot more in the European Union than in non-EU countries, making it harder for manufacturers of goods traded globally to raise prices. In addition, wages count for a larger share of production costs in services than in industry, meaning that service prices followed the gradual increase in wages more closely. Finally, once businesses reopened following the pandemic, demand for services increased sharply while supply had in many cases been cut (in hospitality and transport, for example). Supply has taken time to ramp back up, leading to a more sustained increase in labour costs and prices in the services sectors (Figure 6).

Despite the increase in costs, firms generally remained profitable. Firms responded to the rising energy prices by trying to save energy, renegotiating energy contracts, changing their sources of energy, and, in the case of energy-intensive firms, lowering production (see the survey evidence discussed in Chapters 3 and 5). But over half of EU firms also passed on energy costs to their customers, eventually leading to the gradual spread of higher energy prices through the economy. This strategy allowed most firms to stay profitable. The share of national income coming from their gross profits remained almost unchanged despite the increase in costs, at just above 40%.

The widespread nature of the energy crisis and the economic context made it easier for firms to pass on higher costs. Rises in energy and food prices affected firms and their competitors similarly, making it easier justify price increases. After losing money during the pandemic, firms may also have been particularly eager to preserve profitability (Bank for International Settlements (BIS), 2023). Consumer demand remained fairly strong because fiscal policy had offset much of the pandemic's shock to incomes while health concerns constrained spending on services. In aggregate terms, consumers had built up savings, which they were ready to spend once economies reopened (see below). At that point, firms did not have enough qualified staff to raise output quickly, and firms outside Southern Europe struggled to

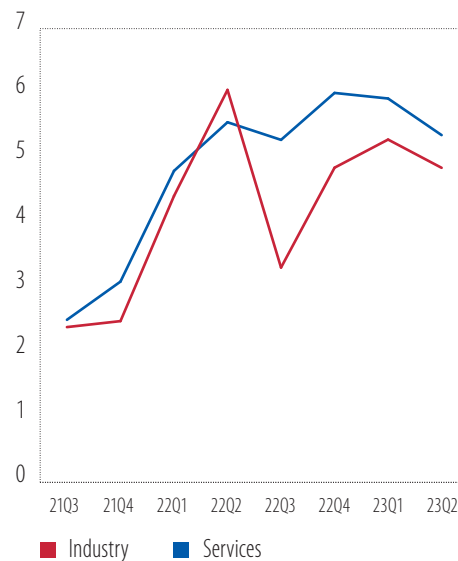
fill vacancies. In addition, sectors such as the car industry were unable to secure the supplies they needed, mostly because of transport bottlenecks for imports from Asia, but also because Russia's invasion of Ukraine had hindered production there. Firms could then sell lower production volumes at a higher price.

Figure 5
EU inflation for different goods (% change from the previous year), by sector



Source: Eurostat.
Note: Shown are components of the Harmonised Index of Consumer Prices (HICP).

Figure 6
Labour costs (% change from the previous year), by sector



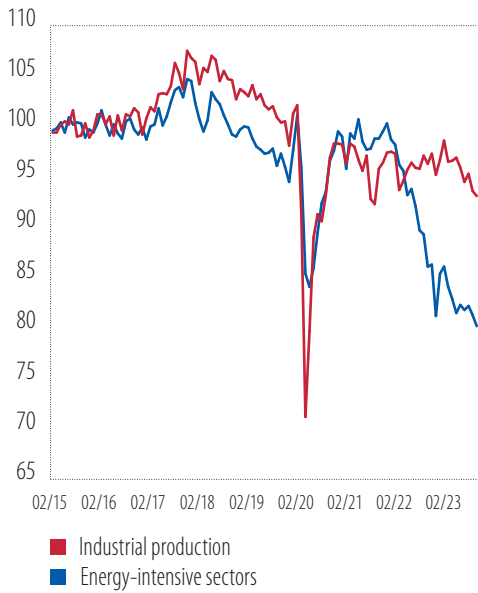
Source: Eurostat.
Note: Industry excludes construction.

The increase in energy and wage costs may have longer-term consequences

Energy-intensive firms in the European Union have largely opted to reduce production. Chapter 5 discusses their outlook in detail. In Germany alone, production in energy-intensive sectors declined by one-fifth with respect to their peak in December 2021 (Figure 7). That said, energy-intensive firms appear to be waiting to see how the business environment evolves and have not (yet) started to shed labour. Applications for short-term work benefits in the sector had not increased significantly by October 2023.

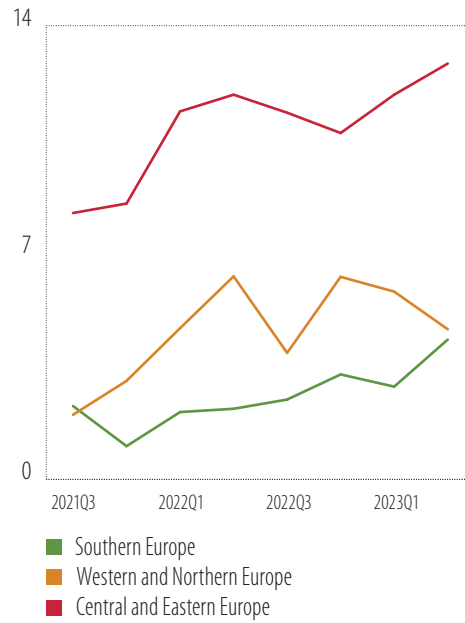
Unit labour costs rose far more in Eastern European countries, harming their competitiveness. Although high energy prices hit all EU countries, they stoked costs and inflation far more in Central and Eastern Europe (Figure 8). (Box A offers a few explanations.) As a result, the region's competitiveness could suffer. Figure 9 illustrates this with a measure of competitiveness that is based on each country's labour costs and the productivity of employees relative to those of its trading partners: the real effective exchange rate of unit labour costs. For each country, this measure of competitiveness takes the increase in labour costs relative to its trading partners as a starting point, subtracts any increase in labour productivity to arrive at the increase in labour costs per unit of output, and subtracts any depreciation of the country's nominal exchange rate vis-à-vis its trading partners. The larger the value, the greater the loss in the country's competitiveness relative to its trading partners. Most of the countries with large losses in competitiveness are located in Central and Eastern Europe. In the past, appreciations in the rate have been associated with lower exports (Figure 10). Central and Eastern European economies – particularly those inside the euro area – will have to rely on improving productivity or limiting wage growth to regain their previous level of competitiveness. Programmes that stimulate investment, such as the [Cohesion Fund](#), the [European Regional Development Fund](#) and the [Recovery and Resilience Facility](#), are designed to help.

Figure 7
Industrial output in Germany, overall economy and energy-intensive sectors (2015=100)



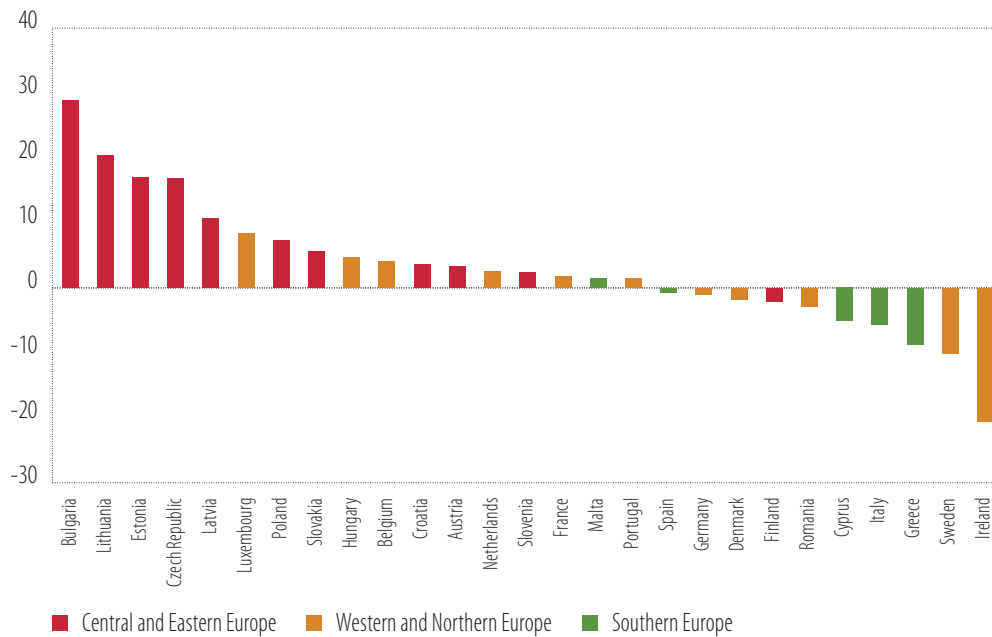
Source: Federal Statistical Office of Germany.
Note: The index reflects production in the overall economy and in energy intensive sectors separately.

Figure 8
Labour costs (% change from the previous year), by region



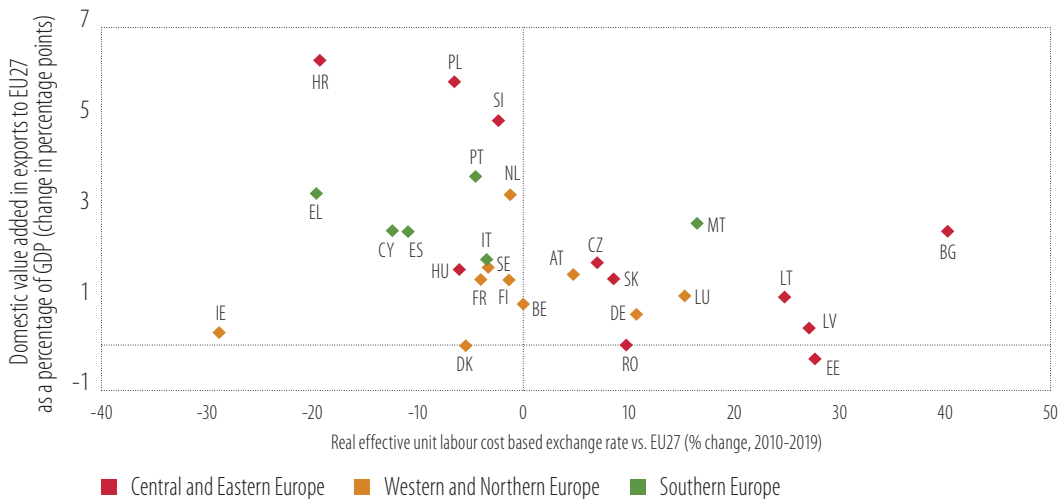
Source: Eurostat.
Note: Indices of national labour costs have been aggregated using weights for 2022 GDP.

Figure 9
Real effective unit labour costs vs. EU trading partners (in %), second quarter 2019 compared to second quarter 2023



Source: Eurostat.

Figure 10
Appreciation in the real exchange rate vs. domestic value added in exports



Source: Eurostat.

Note: The real effective unit labour cost based exchange rate measures a country's cost of producing manufactured goods relative to the countries exported to in the European Union. Domestic value added in exports measures the extent to which exported goods have been produced in the country under consideration, net of imports of intermediate goods that were used to produce the exported goods.

Box A

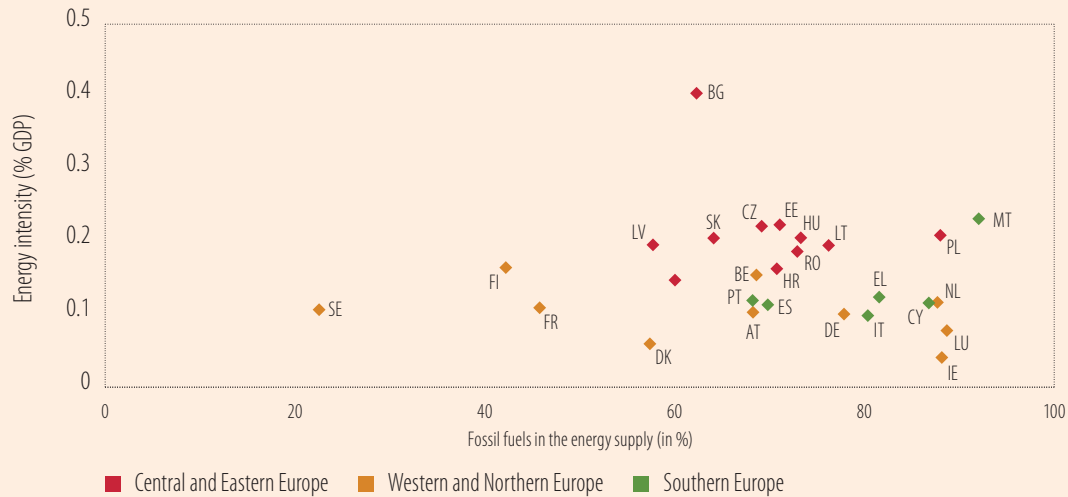
Why did inflation rise so much more in Eastern Europe?

The spike in global energy prices may have hit all EU countries, but it stoked inflation far more in Central and Eastern Europe. Different positions in the business cycle and structural vulnerabilities to energy shocks help explain this divergence. One structural reason is that households in these countries tend to be poorer and spend a greater share of their income on food, transport and energy than their Western European peers (see Müller, 2023). Another is that these countries rely more on fossil fuels to generate energy and their economies use more energy to produce goods and services (Figure A.1).

Central and Eastern European economies also appeared to be operating closer to capacity when the food and energy shocks hit, making it easier for firms to pass on price increases (see, for example, Bank of Lithuania, 2022). Most economies in the region had emerged faster from the pandemic than those in the rest of the European Union, with real GDP levels in many countries actually several percentage points higher in 2021 than in 2019. In contrast, most Southern European countries had not yet recovered. Business surveys support this explanation. The share of firms reporting labour shortages in the fourth quarter of 2021 tended to be higher in Central and Eastern European countries than in Southern European ones (Figure A.2). Unsurprisingly, economies running at a higher capacity and a more pronounced shortage of labour caused wages in some industries in Central and Eastern Europe to rise more than twice as fast as elsewhere in the European Union.

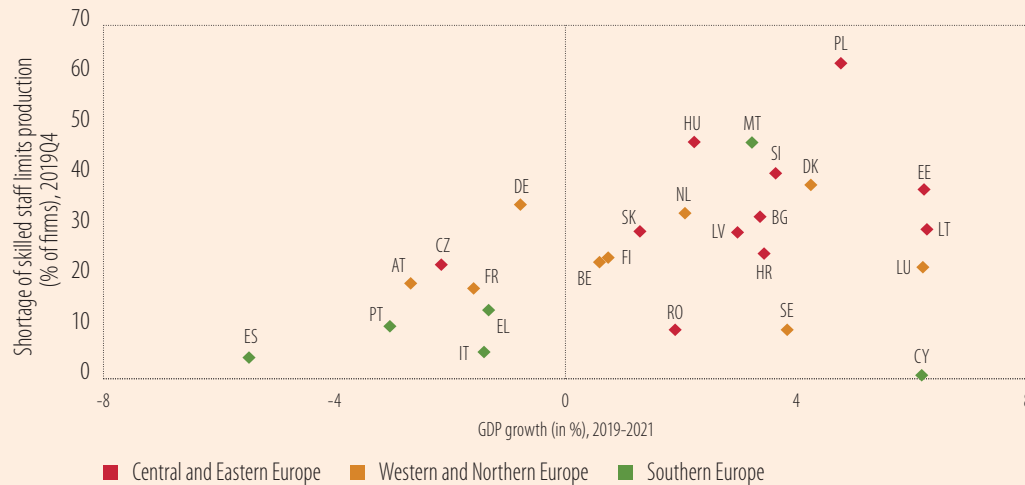
Finally, idiosyncratic factors explain some of the differences in inflation between countries. For example, energy prices in some countries had been so low that the shock resulted in a disproportionate increase (Estonia), while in others, retail energy prices were subsidised to keep consumer price inflation low (Hungary). In some economies, variable energy price contracts were more prevalent, meaning that the rise in wholesale energy prices were passed on to retail prices more quickly (the Baltic region), while elsewhere agreements to limit energy price rises smoothed out inflation but prolonged its duration (Slovakia).

Figure A.1
Energy intensity vs. share of fossil fuels in the energy supply



Source: Eurostat.

Figure A.2
GDP growth during the pandemic vs. shortages of skilled staff



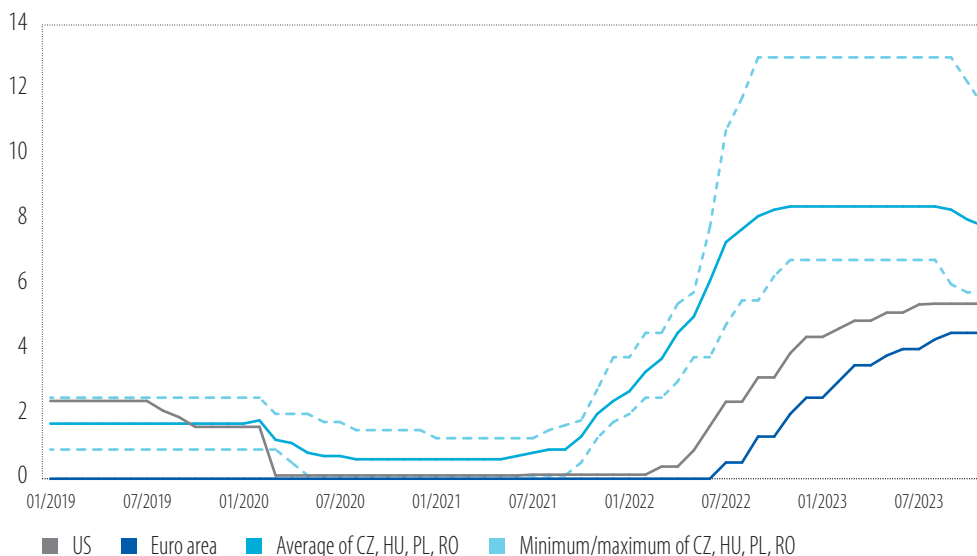
Source: Eurostat and the European Commission (Directorate-General for Economic and Financial Affairs).

Tighter monetary policy gradually raised firms' funding costs without provoking wider financial instability

As inflation soared above targets, central banks tightened monetary policy. Most central banks outside the euro area had already begun raising rates in late 2021, and a few in Central and Eastern Europe have already started to cut rates. The European Central Bank (ECB) started later (in mid-2022) and, in just over a year, raised its key policy rate from zero to 4.5% (Figure 11). In July 2022, the central bank also stopped buying bonds (Figure 12). It continued to reinvest assets purchased under the Pandemic Emergency Purchase Programme, which it began at the outset of the pandemic to counter risks to the monetary

policy transmission mechanism and the outlook for the euro area. However, reinvestments under its Asset Purchase Programme, which was initiated in October 2014 to reduce longer-term interest rates, ended in July 2023. Winding down bond buying is likely to have pushed up longer-term interest rates (Schnabel, 2023).

Figure 11
EU central bank policy rates (in %)



Source: Bank for International Settlements.

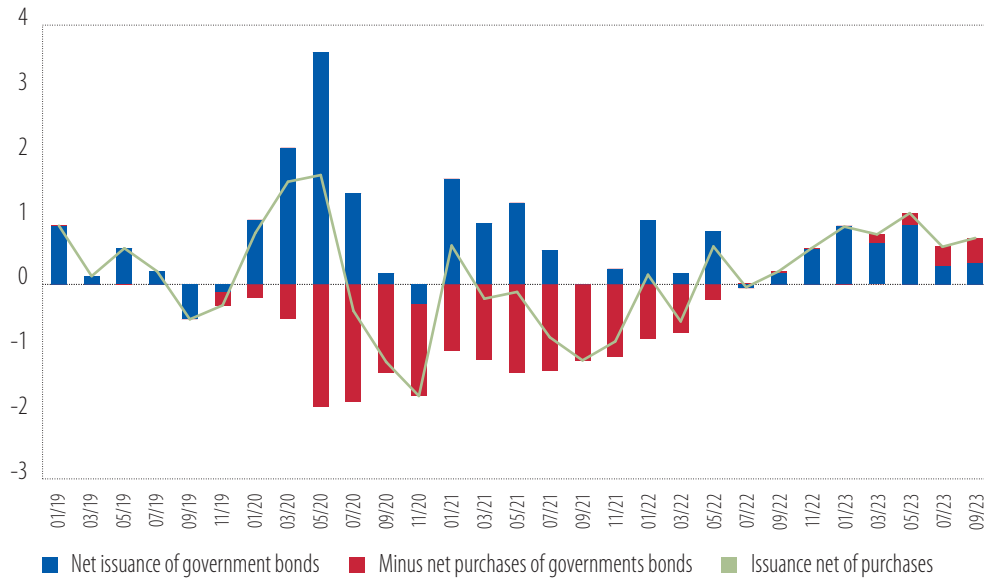
Note: The blue lines indicate the range of policy rates for four Central and Eastern European countries, the Czech Republic, Hungary, Poland and Romania. The maximum is given by Hungary during the recent tightening and corresponds to the base rate set by the country's central bank. However, this underestimates the degree to which the central bank tightened monetary policy from October 2022 to September 2023, when the overnight loan rate exceeded the base rate by up to 12 percentage points.

Banks benefited from higher interest rates while non-performing loans remained at record lows. Banks raised the interest rates charged on loans considerably faster than those paid on deposits, meaning that their net interest rate margins widened and profits increased (Figure 13). Meanwhile, the quality of their assets remained good, as unemployment remained low and non-financial firms' profits high. By mid-2023, banks' average capital ratios had not changed substantially, the ratio of non-performing loans was lower than at the start of the pandemic, and there was no sign that the share of loans overdue between 30 and 90 days was starting to increase.

Banks raised the interest rates on loans and applied higher credit standards as the economic outlook darkened. Banks curtailed lending to the corporate sector in response to greater uncertainty, lower risk tolerance and higher funding costs. Not only did they raise interest rates for loans to the corporate sector, but they also tightened credit standards. Surveys suggest that the credit supply contracted more in Eastern and Southern Europe than in Western and Northern European countries (Figure 14).

Corporate borrowing costs, particularly for new loans, increased accordingly, rising more quickly in some Southern and Eastern European countries. On average, around 80% of bank loans to non-financial corporations in the euro area have an interest rate that is fixed for less than a year, meaning that changes in policy interest rates feed through quickly to borrowing rates. However, the average loan tenor varies depending on the country, resulting in different speeds of transmission. Interest rates for existing loans increased much less than the cost of new lending in Germany, whereas both changed by about the same amount in the Baltics (Figure 15).

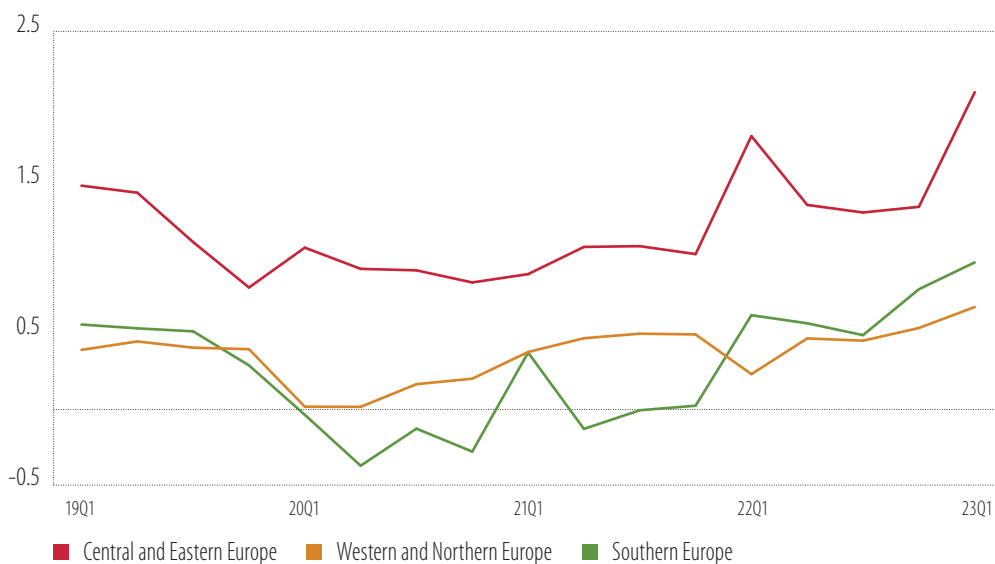
Figure 12
Issuance net of purchases of euro area government bonds (% GDP)



Source: Eurostat, ECB, EIB staff calculations.

Note: Asset purchases are the sum of purchases under the ECB's Public Sector Purchase Programme and the Pandemic Emergency Purchase Programme. Data are aggregated every two months. Estimates for GDP for 2023 are taken from the European Commission's annual macro-economic database (AMECO), which reflects the spring forecast.

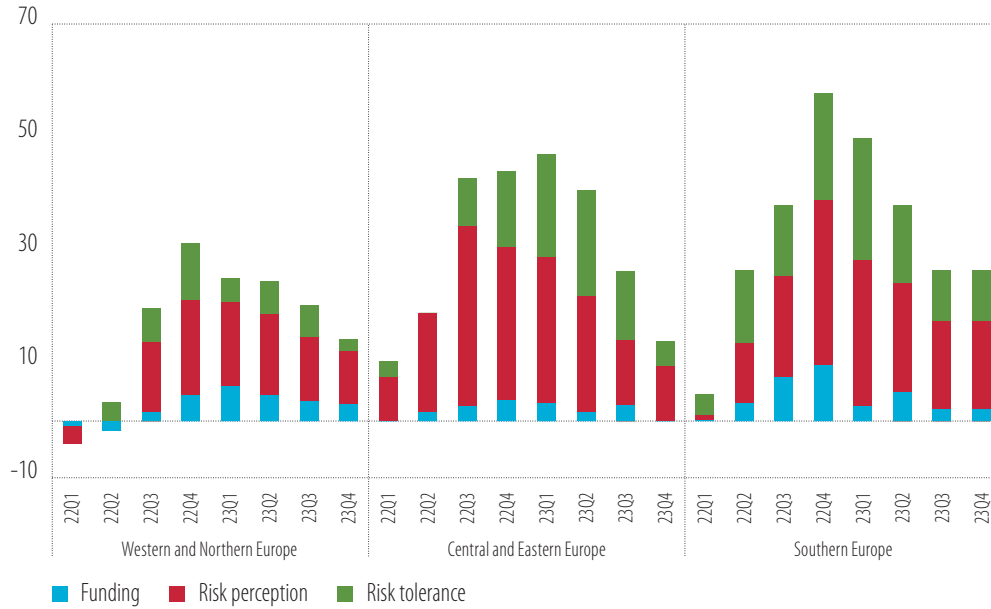
Figure 13
Bank profits as a share of total assets (in %), by region



Source: ECB.

Note: The line for each region represents the simple averages of countries using the euro.

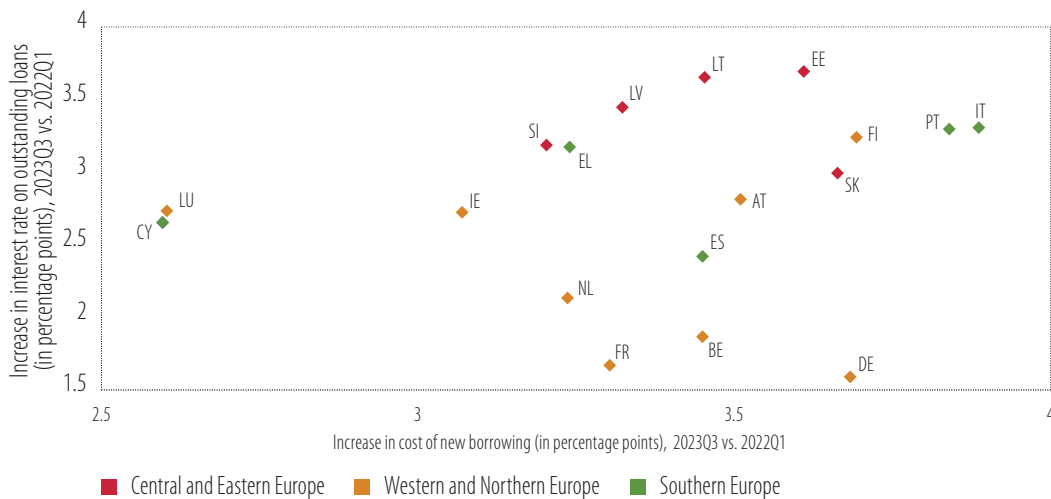
Figure 14
Factors contributing to tighter credit conditions for non-financial firms (net balance of respondents, in %), euro area countries only



Source: ECB Bank Lending Survey.

Note: The bars for each region represent the simple averages of countries using the euro.

Figure 15
Cost of new borrowing and interest rates on outstanding loans in the euro area



Source: ECB.

Note: Cost of new borrowing includes overdrafts.

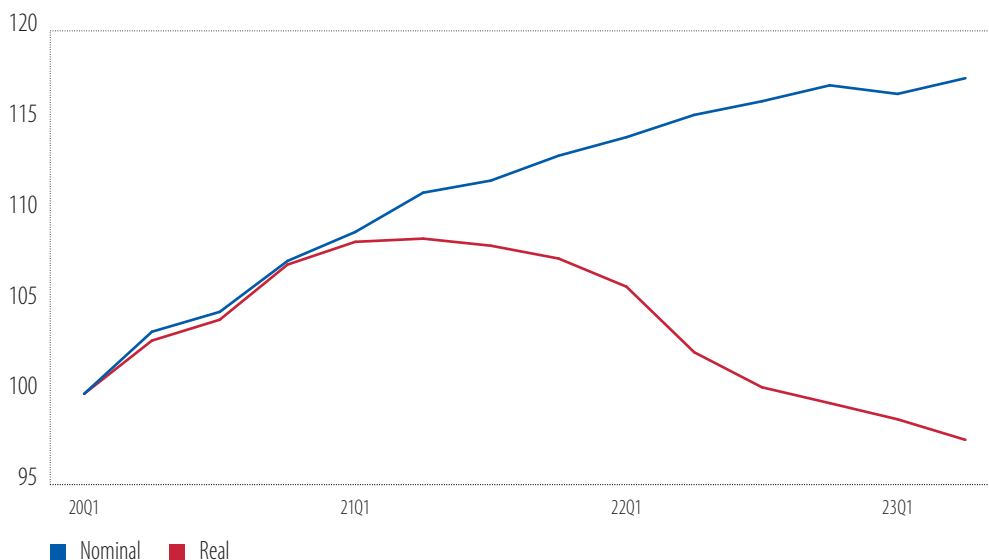
Domestic demand supported investment but started to fade

Domestic demand proved surprisingly resilient given the rapid rise in inflation and monetary tightening. The following section discusses three reasons. First, households were willing to draw down savings accumulated during the pandemic. Second, the labour market remained tight, and firms were reluctant to let staff go while profits were abundant. Third, fiscal policy offset some of the inflationary shock to households' income. That said, none of these factors are likely to persist.

Households tapped their savings to pay for increased spending, but those savings now appear to be exhausted

Consumption grew rapidly right after the pandemic, then gradually weakened. The energy crisis peaked in the winter of 2022-2023, and until then EU households continued to increase their consumption despite declining real incomes. Consumption only dipped earlier in Central and Eastern European countries (where inflation had risen faster), particularly in those outside the euro area (where central banks had tightened monetary policy earlier than the European Central Bank). One reason was that fiscal policies had limited the impact of surging energy prices on household budgets. Another reason was that households were willing to use the excess savings accumulated during the pandemic to pay for their increased spending, which was primarily on services. Excess savings were probably wound down by the end of 2022. By that time, inflation had eroded their real value. Figure 16 illustrates households' holdings of deposits and cash to moving zero as a proxy for the most liquid part of their savings, which is most likely intended to be used for consumption (Figure 16).

Figure 16
Euro area households' nominal and real holdings of cash and deposits (2020Q1=100)

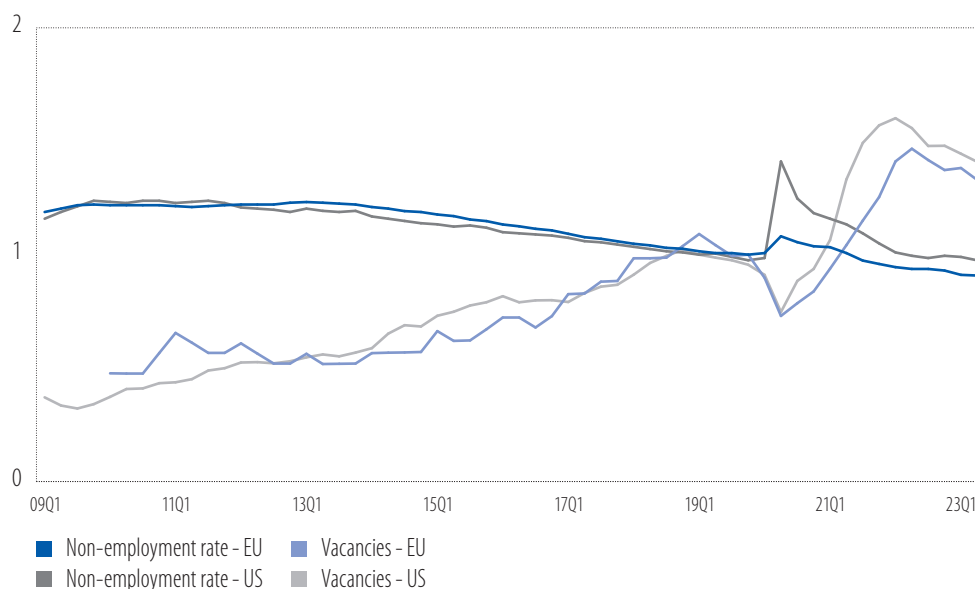


Source: ECB.

Unemployment remains low but job openings are starting to dry up

In most EU countries, tight labour markets supported domestic demand by providing a reliable source of income and encouraging inactive households to take up employment. During the pandemic, policies designed to prop up the economy had enabled EU firms to keep employees even though hours worked per employee declined. The opposite was true in the United States, where firms laid off staff but kept hours worked per employee constant. When growth picked up in 2021, labour markets recovered quickly. Job openings rose to record levels in the United States and the European Union, and the share of the population not in employment continued to decline (Figure 17). EU employment rates increased, particularly for women and older employees (Figure 18). Within the European Union, unemployment fell most sharply in Southern European countries, where it remained. However, it was about twice as high as in the rest of the European Union.

Figure 17
Vacancies and share of population not in employment (an index, 2019Q4=100),
European Union vs. United States



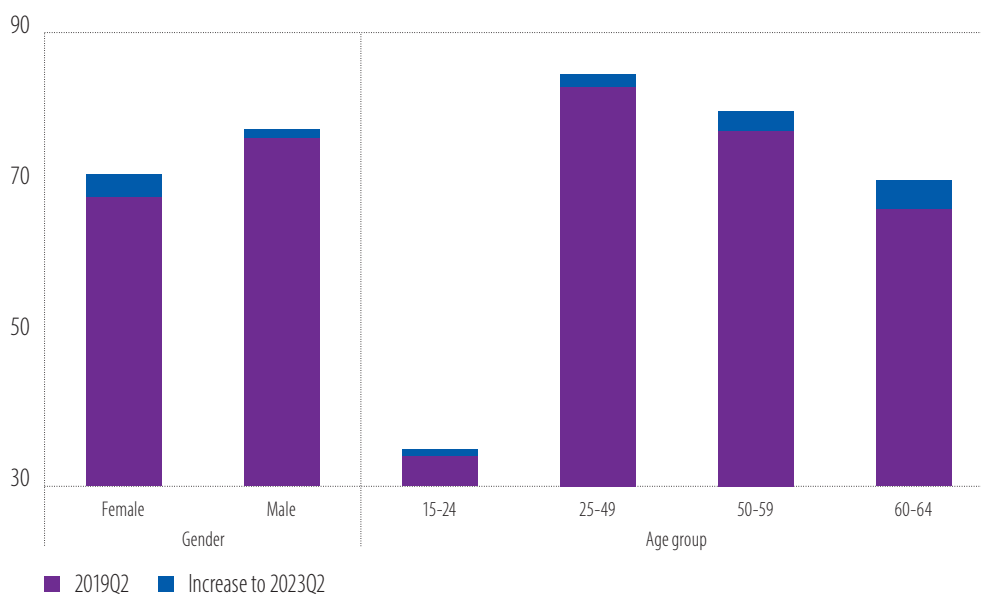
Source: Eurostat and the Federal Reserve Bank of St. Louis.

A widespread shortage of skilled employees encouraged firms to hold on to staff even as the economic outlook darkened. Investment by EU firms had been constrained for years by their inability to find employees with the right skills (Figure 19), partly because of cyclical economic conditions (Germany) but also for structural reasons in countries like Bulgaria and Croatia, where emigration had caused a sharp decline in the labour force. Shortages were particularly high in industries related to the green and digital transition, and they delayed public investment programmes (see Chapter 2). Staff shortages are likely to persist, given the projected decline in the European Union's working-age population (Figure 20) (Stemmer, forthcoming). The supply of skilled labour would benefit from creating better conditions for part-time and remote work and from improving labour market access for immigrants.

Immigration (particularly from Ukraine) has started to alleviate labour shortages in some EU countries over the past year. Since the Russian invasion of Ukraine, most new immigrants coming from beyond the European Union are Ukrainian citizens. In contrast to refugees from other non-EU countries, Ukrainians were able to join the EU labour market because the temporary protection scheme allowed them to

choose where in the European Union they wished to live and work (European Commission, 2022).¹ Most opted for countries with a Ukrainian diaspora (International Organization for Migration (IOM), 2023a) and tight labour markets, namely Germany, Poland and the Czech Republic. Working-age Ukrainians increased the labour force by 2.5% in Central and Eastern Europe, 1% in Western and Northern Europe and 0.5% in Southern Europe.² Ukrainian immigrants often face language barriers inhibiting their ability to integrate into labour markets (IOM, 2023b and 2023c). Since surveys point to migrant employment rates of about one-third (IOM, 2023b), Ukrainian refugees are likely to have contributed about 0.5% to the GDP of Central and Eastern European countries in the short term, and proportionately less in the rest of the European Union.³ The longer these refugees stay and the better the policies facilitating their integration, the more of them will take up employment and the higher their contribution to GDP will be.

Figure 18
EU employment rates (% of population)



Source: Eurostat.

1 See https://home-affairs.ec.europa.eu/policies/migration-and-asylum/common-european-asylum-system/temporary-protection_en
 2 Approximated using the share of 18-65 year old Ukrainians having sought temporary protection relative to the active population aged 20-65.
 3 Calculated assuming a Cobb-Douglas production function: GDP growth = employment growth * 2/3 elasticity with respect to labour. For an overview of the literature on the economic impact of migration, see Chapter 3 in OECD (2016).

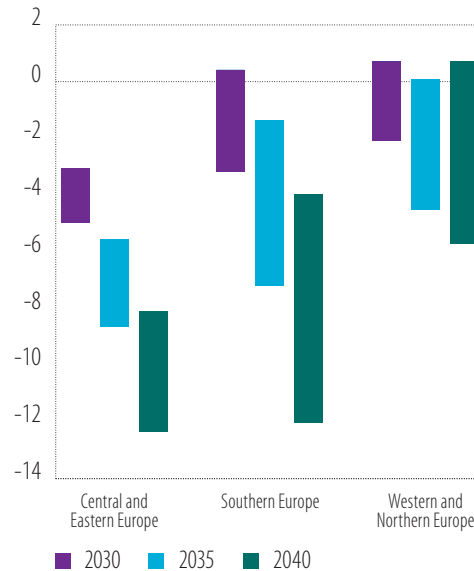
Figure 19
Share of EU firms reporting that a lack of qualified staff is a major investment obstacle (net balance, in %)



Source: EIBIS 2016-2023.

Question: Thinking about your investment activities, to what extent is the availability of staff with the right skills an obstacle?

Figure 20
Forecast decline in the working-age population by 2030, 2035 and 2040 (% change relative to 2022)



Source: Eurostat.

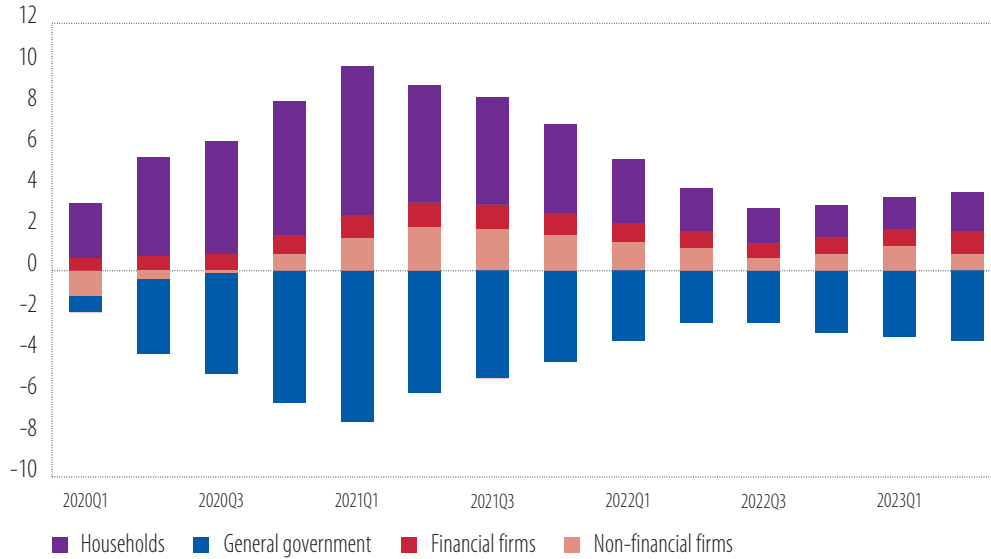
Note: The scenarios on migration vary immigration from non-EU countries by +/- 33%; this corresponds to the upper and lower ends of the vertical bars. See [Population projections in the EU - methodology - Statistics Explained \(europa.eu\)](#).

Public spending softened the energy shock, but EU members are now cutting back

Expansive government and EU fiscal policies helped to buoy the economy during recent crises. The activation of the general escape clause of the European Union's [Stability and Growth Pact](#) in 2020, which provides EU members a temporary reprieve from normal budgetary requirements in the event of a severe economic downturn, gave governments the fiscal freedom they needed to shield household incomes from the economic consequences of the COVID-19 crisis. Governments intervened again during the energy crisis, and debt bloomed, prompting fiscal consolidation and monetary tightening. As interest rates increased, the net savings of financial institutions rose in line with the higher interest they were earning on average on their assets (Figure 21).

The jump in inflation in 2022 lowered the value of debt relative to GDP, providing some fiscal leeway despite governments' efforts to support firms and households. Governments moderately tightened budgets, and the European Union announced the deactivation of the general escape clause from 2024. Figure 22 shows the dynamics of the structural primary balance, which shows what the government's budget balance would be if the economy were operating at its full potential for the European Union (and in the broader regions). It measures the first difference (the value at time t minus the value at time t-1). This is the easiest way to measure the fiscal policy stance. If the balance adjusted for the cycle and one-off measures (the structural balance) worsen, the difference will be negative, meaning that the fiscal stance is expansionary compared to the previous year.

Figure 21
EU domestic net savings (% GDP, four quarter moving average), by institutional sector



Source: Eurostat.
Note: The latest data available are for the second quarter of 2023.

Figure 22
Changes in the structural primary balance according to stability and convergence programmes (% GDP)



Source: Eurostat.
Note: The latest data available are for 2022. Figures from 2023 onwards are forecasts.

As Figure 22 clearly shows, fiscal policy was dramatically expansionary in 2020. It remained expansionary in 2021 and became slightly contractionary in 2022. The picture for 2023 is varied. EU countries' stability and convergence programmes⁴ describe a return to a slightly expansionary stance for Northern and Western Europe. In Central and Eastern Europe, and particularly in Southern Europe, fiscal policy is consolidating. These differences are expected to fade from 2024 on, when the general EU stance should be only slightly contractionary.

The degree of support fiscal policy can provide to the economy depends on the reform of the EU fiscal framework and the evolution of the interest rates countries pay to refinance their debt. The European Union was already debating the appropriateness of its fiscal framework before the current crises hit (Thygesen et al., 2018; Eyraud et al., 2015; Andrieu et al., 2015). The European Commission opened a public consultation on reforming fiscal governance at the beginning of 2020 (before the pandemic) and resumed it in 2022. Recent events have added urgency to the debate. The sharp rise in public debt and the activation and deactivation of the general escape clause provides an opportunity to re-open the debate. After the public consultation, the European Commission formulated a proposal that aims to replace the rule-based approach with one using debt sustainability analysis (see Chapter 2).

The debate around a new EU fiscal framework frequently referred to two topics: establishing a central fiscal capacity and increasing the provision of EU public goods⁵. A central fiscal capacity calls for creating a stable, centralised mechanism to determine the fiscal stance to be taken when addressing a generalised economic shock that affects EU countries differently, as well as idiosyncratic shocks. The EU instrument known as [Support to Mitigate Unemployment Risks in an Emergency \(SURE\)](#) was modelled on these grounds. So was NextGenerationEU. The provision of EU public goods is based on the idea that there is an increasing need for investment that is better sourced, financed, produced and distributed at the EU level rather than by individual countries. These needs are related to defence and security, to achieving industrial security (or strategic autonomy) and to the common infrastructure related to energy.

The Recovery and Resilience Facility is helping to protect public investment (as shown in Chapter 2), but there are reasons to believe that EU investment needs are growing. The eighth wave of the EIBIS shows that the share of firms saying climate change is already affecting their business has jumped 7 percentage points in a year, with 64% of firms now facing physical risks associated with global warming. Tightening credit conditions are also threatening innovation. Innovative firms seeking to scale up are facing a strong contraction in funding available from venture capital firms. While EU businesses have accelerated investment in advanced digital technologies, they still have to maximise the return on this investment. Energy costs are a concern for 83% of EU firms, with 68% of them experiencing a significant increase (of more than 25%) in energy costs, compared with only 30% of firms in the United States. Companies also continue to say that regulatory barriers are blocking investment. As shown in Chapter 2 of this report, synergies between public and private investment are significant and growing, particularly for the green transition. Addressing these issues requires policy coordination and often justifies major and coordinated public investment.⁶

Meanwhile, sovereign refinancing costs are gradually increasing. Higher policy interest rates and the gradual unwinding of asset purchases have pushed up governments' refinancing costs. That said, the effect of ending asset purchasing appears to have been relatively benign. The spreads between the sovereign bonds of different EU countries reacted when fiscal forecasts were adjusted or changed, such as in the case of Italy, but did not rise in response to the general tightening of financial conditions, despite substantial uncertainty about the impact of changes in monetary policy and geopolitical developments

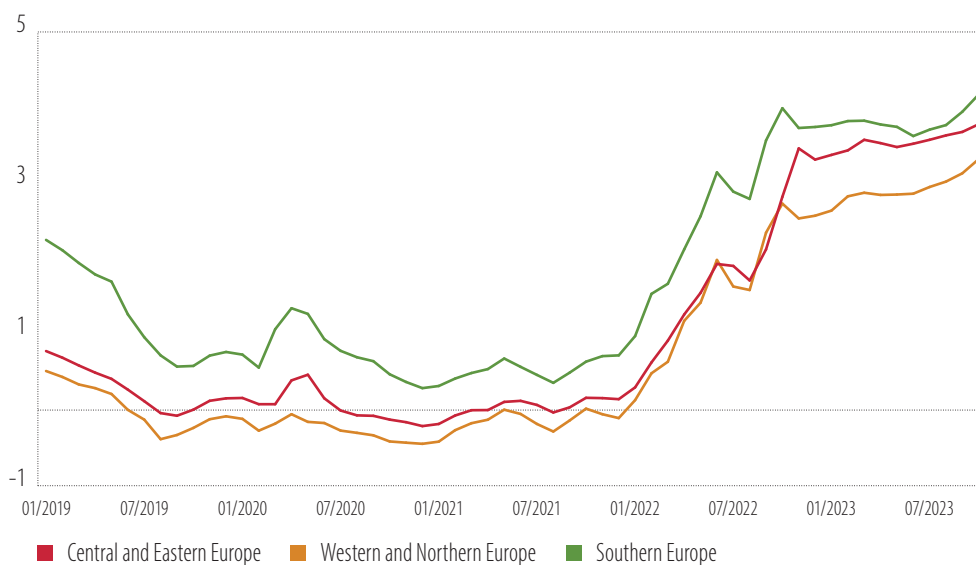
4 The Stability and Growth Pact requires EU countries to submit in April each year their macroeconomic policy and fiscal plans for at least the next three years. EU members that use the euro submit plans known as Stability Programmes, while members not yet using the euro submit Convergence Programmes.

5 See for example Fuest, C., & Pisani-Ferry, J. (2019). A Primer on Developing European Public Goods and Beetsma, R., Cimadomo, J., & Spronsen, J. (2022). One scheme fits all: a central fiscal capacity for the EMU targeting eurozone, national and regional shocks.

6 The case for EU central fiscal capacity was strongly made by Panetta (2023) in one of his last speeches as an ECB board member: "A European fiscal capacity is essential to finance the common investments that are key to maintaining and expanding Europe's economic potential. Without it, we will not be able to meet the financing needs, reap the economies of scale and trigger the private investment needed to drive Europe's energy transition, digital transformation and security architecture. We need to start thinking now about what comes after NextGenerationEU, or risk taking a step back instead of forward."

(Figure 23). One reason may be that many governments had increased the maturity of their debt while interest rates were very low. Another may be that inflation eroded the real value of public debt, so that relative to GDP, public debt did not increase despite deep budget deficits. For euro area countries, yet another reason may be that the ECB created an instrument, the Transmission Protection Instrument, to smooth the process of monetary tightening, which allows it to purchase bonds on markets where risk spreads appear to be out of sync with fundamentals. That said, tighter financial conditions will gradually feed into higher interest rates for government debt and further reduce the ability of governments in highly indebted economies to spend.

Figure 23
Euro area sovereign bond yields (in %), by region



Source: Eurostat.
Note: The latest data available are for the second quarter of 2023.

A lesson recently learned is that even a global or common shock will play out differently across the European Union. Fiscal discipline is necessary to maintain equilibrium and justice among EU members and generations, and it cannot be abandoned. However, the need for more intensive policy coordination is clear, as is the heightened role of EU public goods (common infrastructure for energy, skills, a unified capital markets union and coordinated innovation policies). That does not mean that policies have to be the same in all countries. One size does not fit all and a coordinated approach to economic policy is of essence. Private sector investment needs are growing as economies need to transition to greener energy sources and, in the European Union, tackle the competitive challenges arising from the energy shock by Russia’s invasion of Ukraine. Public investments (or capital transfers) can be used effectively to catalyse private investment.

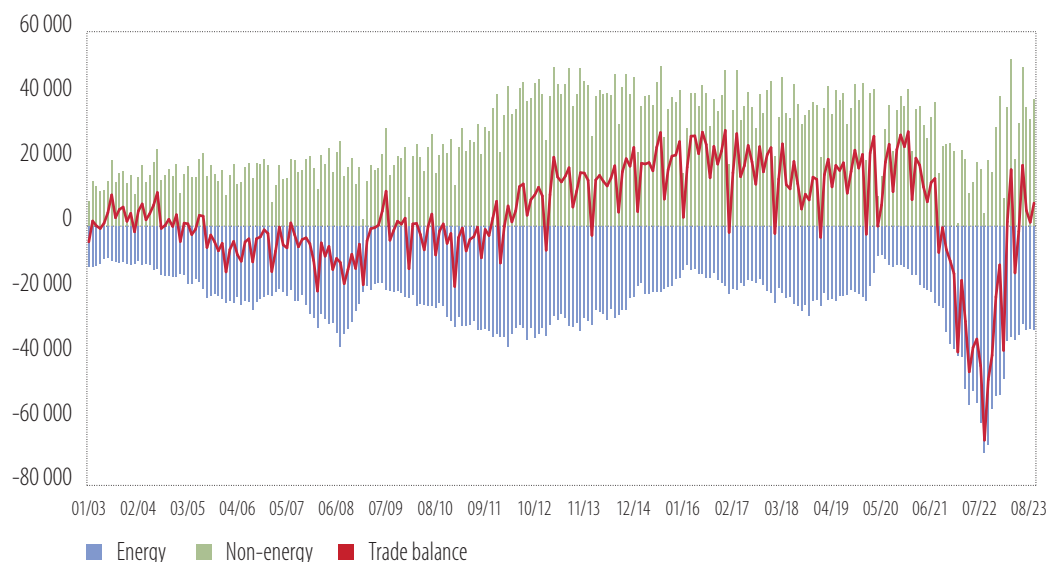
External demand has stalled, but may recover soon

The 2022 shock was unique in that it had two simultaneous implications for EU external demand: eroded terms of trade and reduced global demand. The first was a shock to the terms of trade caused by a spike in the price of energy that the European Union imports. The second was a generalised shock on global demand caused by higher prices for primary goods such as food and energy. The below section focuses on how this shock unfolded. Chapter 4 discusses EU firms’ exposure to their trading partners and their attempts to manage risks in their supply chains.

Although higher energy prices initially tipped the European Union into a trade deficit, the situation stabilised and trade eventually returned to a surplus (Figure 24). Broadly speaking, the trade balance went through three distinct periods over the last two decades. The EU trade balance was marginally negative from 2003 to 2011 (by around EUR 3 billion per month, or EUR 36 billion per year), but then moved clearly towards a large surplus (EUR 14.2 billion on average per month, EUR 170 billion per year, from January 2012 to December 2021). After the Russian invasion of Ukraine, the trade balance moved into a deficit, which stood at EUR 420 billion for 2022. In 2023, the prices of many commodities declined with respect to the peaks hit in 2022. In the first nine months of 2023 the trade balance was still negative, but only marginally (EUR 0.6 billion per month, on average). It is still unclear whether the coming months will be more comparable to 2003-2011 or 2012-2021. However, a quick look at export and import figures confirms that the economic shock is still being felt.

Figure 24

Energy and non-energy trade balance with countries beyond the European Union (% GDP)



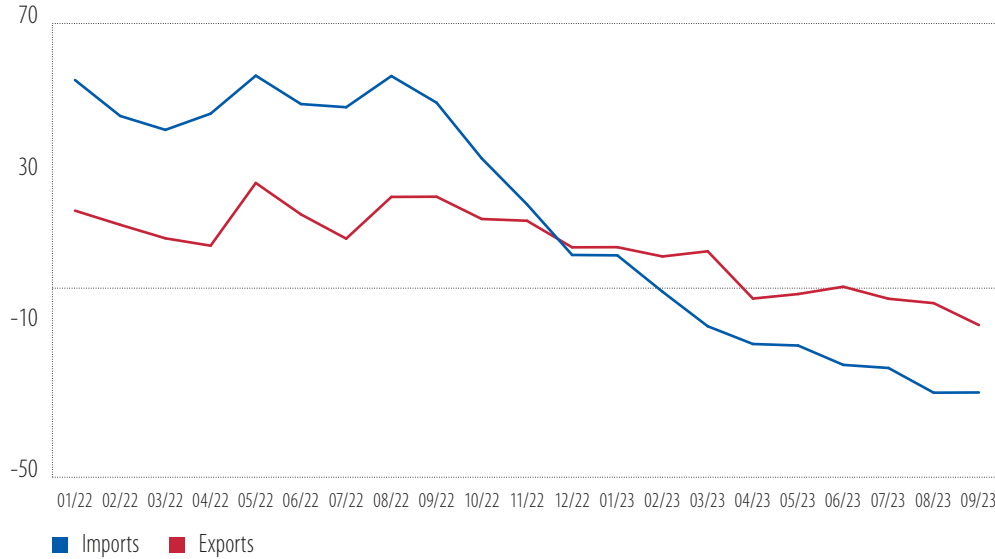
Source: Eurostat.

While imports are declining quickly – mainly due to falling commodities prices – exports are slowing in line with decelerating world trade volumes. A cursory glance at an import-export graph confirms that the share of global demand normally flowing to EU firms has suffered (Figure 25). The volume of worldwide trade in goods in fact declined by 1.9% in the first eight months of 2023, according to Netherlands Bureau for Economic Policy Analysis data. EU exports did better and continued to rise, but they are now declining. According to Eurostat, EU exports grew 0.7% in the first nine months of the year, but declined a hefty 9.8% in September compared to a year ago.

According to IMF forecasts, global demand should soon normalise. Figure 26 shows that growth in world trade has tapered off in recent years, compared to the steep increases that characterised the first decade of the 2000s. According to data from the International Monetary Fund's World Economic Outlook database, growth in world trade (measured in the volume of goods and services) exceeded world GDP growth by 1.3% from 2001 to 2010 and 0.5% from 2011 to 2017, while it was about equal from 2018 to 2023. IMF projections suggest that the growth in world trade volumes will be in line with GDP growth from 2024 onwards. Even though the euro has appreciated in real terms⁷ since mid-2022, EU exports performed slightly better than the world trade, but the situation among EU members varies considerably (Figure 27).

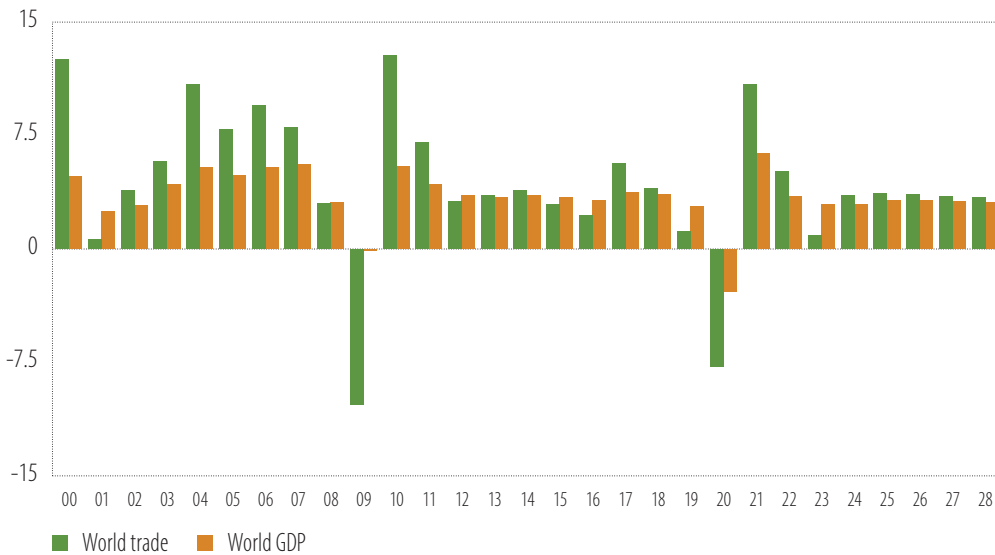
⁷ This uses a nominal effective exchange rate vs. a broad group of 42 countries, deflated with the harmonised index of consumer prices.

Figure 25
EU imports and exports with countries beyond the European Union (% change from the previous year)



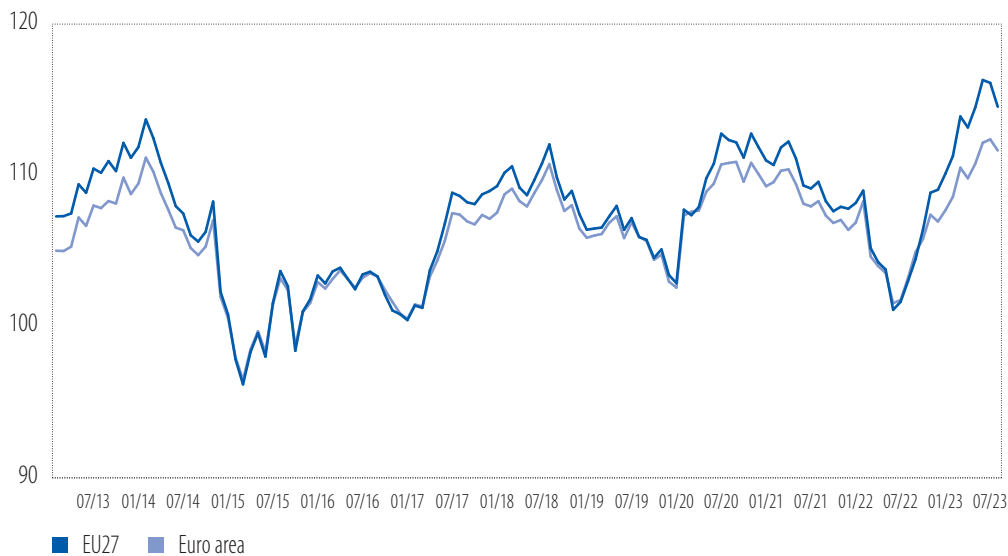
Source: Eurostat.

Figure 26
World trade volume (goods and services) and world GDP (% change from the previous year)



Source: The IMF's World Economic Outlook for October 2023.

Figure 27
EU exports vs. a broad group of countries (an index), real effective exchange rate



Source: European Commission price and cost competitiveness indicators.

Note: The numbers are adjusted for differences in inflation based on HICP figures.

Looking more closely, the most natural explanation for the varied international trade performance of EU countries is the competitive pressures being felt by producers of energy-intensive products.⁸ Table 1 presents the four-digit NACE⁹ sectors where production has fallen or risen the most in the last year. The sectors losing at least 10% of their production are all energy intensive.

Table 1
Changes in industrial output for specific manufacturing sectors

	January-August 2023 vs. same period 2019	September-February 2023 vs. same period 2022	January-August 2023 vs. same period 2022
Manufacture of other ceramic products	-29.5	-33.0	-23.9
Manufacture of other organic basic chemicals	-21.1	-26.1	-20.8
Manufacture of dyes and pigments	-16.1	-23.2	-18.0
Manufacture of synthetic rubber in primary forms	-19.1	-20.1	-17.8
Manufacture of plastics in primary forms	-16.9	-20.4	-17.4
Manufacture of paper and paperboard	-20.4	-14.6	-17.4
Manufacture of paper stationery	-33.1	-12.7	-15.5
Manufacture of bricks, tiles and construction products, in baked clay	-12.7	-5.8	-15.0
Manufacture of ceramic tiles and flags	-11.3	-13.1	-14.3
Other printing	-26.2	-13.7	-13.3
Aluminium production	-15.0	-12.9	-12.5

⁸ See Figure 7 on energy-intensive production in Germany.

⁹ Nomenclature of Economic Activities (NACE) is the European statistical classification of economic activities.

	January-August 2023 vs. same period 2019	September-February 2023 vs. same period 2022	January-August 2023 vs. same period 2022
Manufacture of knitted and crocheted fabrics	-21.0	-9.4	-12.4
Manufacture of plastic plates, sheets, tubes and profiles	-13.5	-11.7	-11.9
Production of abrasive products	-20.4	-13.7	-11.8
Cold rolling of narrow strip	-23.7	-13.7	-11.7
Manufacture of soap and detergents, cleaning and polishing preparations	-12.6	-10.2	-10.8
Manufacture of steel drums and similar containers	-12.3	-12.8	-10.6
Manufacture of non-wovens and articles made from non-wovens, except apparel	-8.2	-11.8	-10.5
Manufacture of electric domestic appliances	-9.1	-5.2	-10.2
Printing of newspapers	-35.4	-10.3	-10.1

Source: Eurostat.

Note: Classifications are based on four-digit categories under NACE.

These are also the sectors for which the trade balance worsened substantially after the shock, as shown in Table 2.

Table 2
Trade balance for specific trade categories (EUR billion)

	January-August 2023 vs. same period 2019	September-February 2023 vs. same period 2022	January-August 2023 vs. same period 2022
Organic chemicals	-2 810	-39 402	-16 051
Inorganic chemicals	830.90	-7 551	-2 893
Plastics in primary forms	11 664	7 180	3 707
Iron and steel	947	-17 891	-51 90
Non-ferrous metals	-3 393	-28 449	-13 537

Source: Eurostat.

Note: Based on the SITC, standard international trade classification. Figures include the first eight months of 2023.

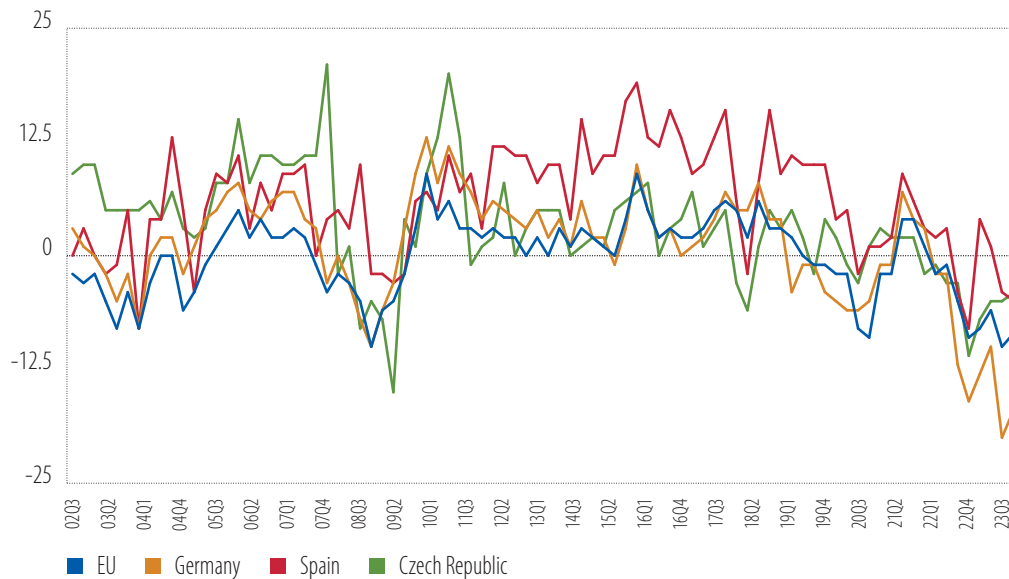
A question in the European Commission's business survey of manufacturing asks firms to summarise their competitive position outside the European Union. As Figure 28 shows, these perceptions worsened noticeably after 2022 and remain at a very low level, comparable to the global financial crisis. For Germany, the reading sunk to its lowest level since 2002 in the third quarter of 2023 before recovering slightly in the fourth quarter.

In conclusion, external demand for EU products and services is still suffering, weakened by exceptionally high energy costs on one side, and by the drag on global demand stemming from higher energy and food prices on the other. The slowdown in global demand should vanish progressively, and demand should normalise in 2024. The impact on energy-intensive production and trade may be more structural and could continue to affect the European Union for a long time.

The impact of these two shocks on investment by EU firms is not clear. Global demand could soon normalise, providing some comfort for European producers. High energy prices may push businesses to invest in energy efficiency measures and transform (in a best-case scenario). At the same time, higher costs hurt EU competitiveness and reduced globalisation could push EU firms to substitute domestic

production with imports from countries with cheaper energy costs (a worst-case scenario). Public policies might be able to help with investments in energy efficiency, but as Box B shows, it may be more difficult to use policy to address the structure of global value chains.

Figure 28
Firms' perception of their competitiveness beyond the European Union (net balance of respondents, in %)



Source: European Commission's industrial survey.

Question: How has your competitive position on foreign markets outside the EU developed over the past three months? Has it improved (+) remained unchanged (=) or deteriorated (-)?

Box B

Trade reallocations: appearance and reality

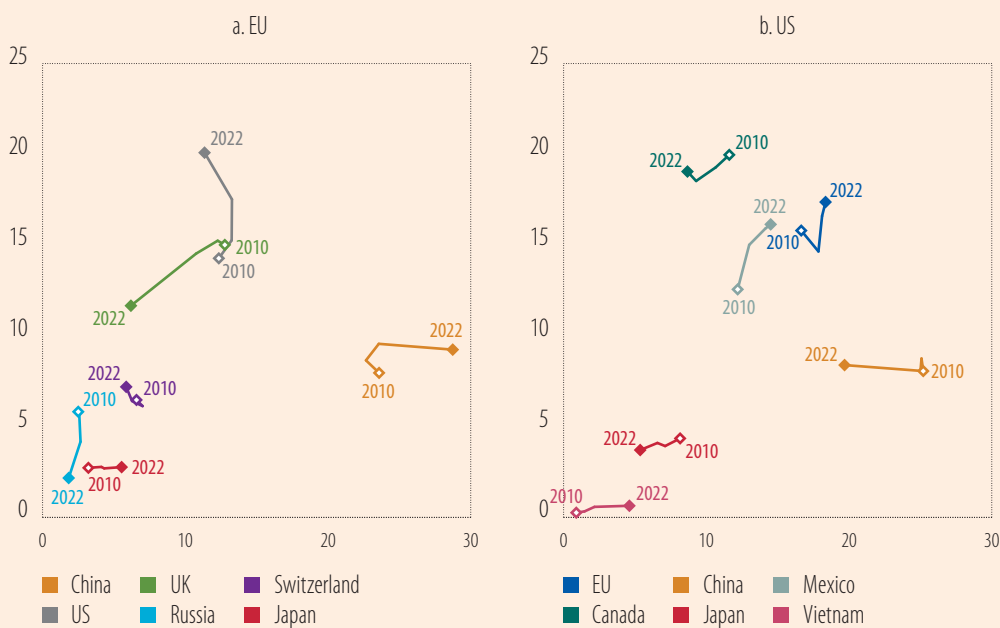
Recent decades have seen structural changes in international trade. The role of China in international trade increased rapidly after it joined the World Trade Organization in 2001 and as the Chinese economy grew. It has become an important supplier to many economies, including the United States and the European Union.

The share of Chinese manufacturing goods and raw materials in the total goods imported by the 27 EU members rose significantly from 2018 to 2022, as shown in the left-hand panel of Figure B.1. The share of other countries (notably that of the United Kingdom, Japan and Russia) declined over the same period. The large concentration of Chinese goods, along with supply chain disruptions after the pandemic, led EU policymakers to focus on enhancing Europe's self-reliance, otherwise known as strategic autonomy. In addition, access to materials that are key to the green transition has been placed at the heart of trade policy considerations in the Critical Raw Materials Act, a set of actions that ensure the European Union has access to the raw materials needed for the energy transition and for strategic industries such as aerospace and healthcare.

At the same time, in 2018 the United States introduced several waves of tariff increases on specific products and trading partner countries, including China. As a response, the share of Chinese exports to the United States started to decline and trade shifted towards other exporting countries, such as Mexico and Vietnam. This shift is visible in the right-hand panel of Figure B.1. Fajgelbaum et al. (2020) and Alfaro and Chor (2023) explore other developments in US trade.

The increase in Chinese exports to the European Union and their simultaneous fall in the United States can be seen at the level of individual products. As Figure B.2 shows, China's share of EU27 imports has increased by more than 5% for several goods. The highest increase was for products such as road vehicles, electric machinery and chemicals. China's share of organic chemical imports increased by more than 20% in recent years. In the United States, the Chinese share in imports of these products has grown only slightly, while most products show large declines (see also Organisation for Economic Co-operation and Development (OECD), 2023).

Figure B.1
Change in the share of imports held by the top EU and US trading partners (in %), 2010-2022



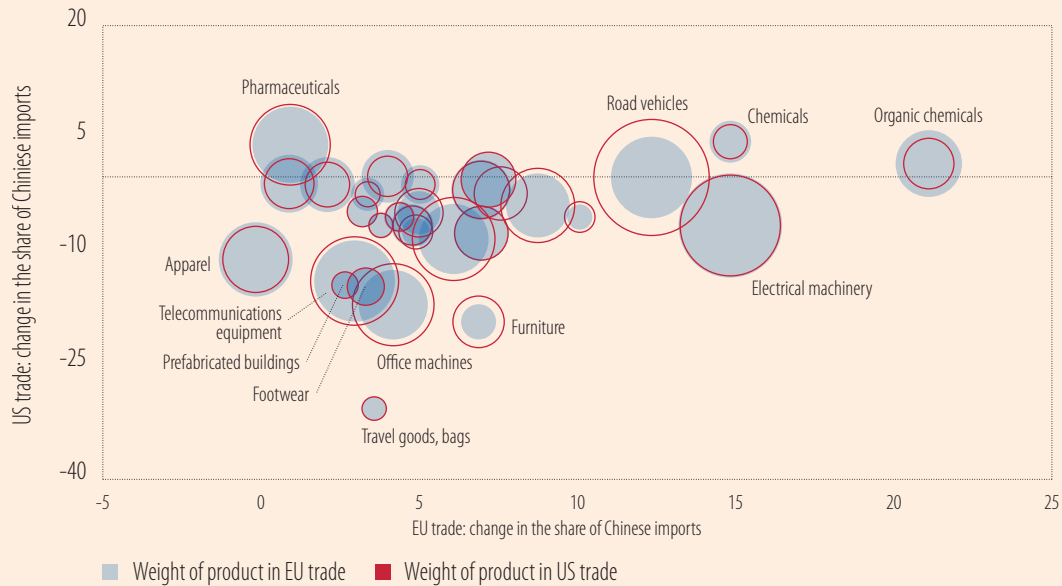
Source: EIB staff calculations based on Eurostat (Comext) and Census Bureau data.

Note: Export and import figures are shown for the six major trading partners for 2010, 2014, 2018 and 2022 for the European Union (left) and the United States (right). Only trade in goods of SITC 10 to 89 are considered, excluding gas and petroleum trade (SITC 33, 34).

The share of US imports of Chinese manufacturing products has declined in several areas. These include not only lower-tech industries such as apparel, footwear and accessory production, but also goods produced by high-tech industries, such as office machines and telecommunications equipment. The Chinese share of EU imports of all of these products has increased.

The rebalancing of US imports in strategically important industries may not have decreased dependence on China. Countries whose share of US imports increased (such as Vietnam, Thailand and South Korea) in turn increased their imports from China. As Figure B.3 shows, there is a positive association between countries increasing their share of the US import basket and their contribution to the export growth of China over the same period. For example, the increase in Chinese exports to Vietnam contributed 6% to all Chinese export growth in the period, while Vietnam is also the country that increased its share of US imports the most. This phenomenon of Chinese products and value added flowing into the United States via a third country is also corroborated by the analysis of Freund et al. (2023), who find evidence that countries that saw faster growth in exports to the United States in strategic sectors also had more intense intra-industry trade with China in those same sectors. These complex, indirect changes in trade patterns suggest that implementing an EU plan to reduce dependence on China may prove difficult to achieve.

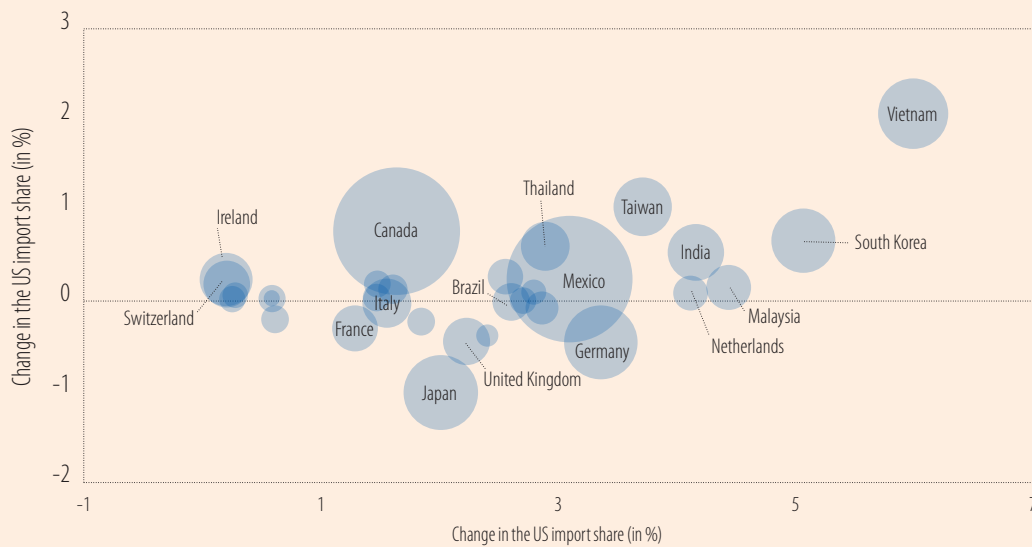
Figure B.2
The share of Chinese imports in selected products, (change in %), European Union vs. United States



Source: EIB staff calculations based on Eurostat (Comext) and Census Bureau data.

Note: Exports and import share figures are shown for the six major trade partners for 2010, 2014, 2018 and 2022 for the European Union (left) and the United States (right). Only trade in goods of SITC 10 to 89 are considered, excluding gas and petroleum trade (SITC 33, 34).

Figure B.3
Changes in US imports vs. Chinese export growth (in %), 2018-2022



Source: EIB staff calculations based on Eurostat (Comext) and Census Bureau data.

Note: Export and import figures are shown for the six major trade partners for 2010, 2014, 2018 and 2022 for the European Union (left) and the United States (right). Only trade in goods of SITC 10 to 89 are considered, excluding gas and petroleum trade (SITC 33, 34).

Conclusion and policy implications

Macroeconomic conditions for private investment deteriorated across the European Union during 2023. Factors that initially supported public investment are starting to fade, and the investment outlook has turned rather bleak. Tighter monetary policy is feeding through to the real economy and slowing the growth of domestic demand. Firms are gradually spending more on servicing their debt and credit is less accessible. The savings households built up during the pandemic now look depleted. A shortage of skilled labour is weighing on firms' investments, but job vacancy rates appear to have peaked. Governments will have to tighten fiscal policy.

The challenges for Europe's cohesion policy have increased. The impact of the energy shock varied depending on a country's position in the business cycle and the structural issues facing its economy. Countries in Southern and Central and Eastern Europe appear to have been more affected. Southern Europe is dealing with a higher increase in financing costs. Central and Eastern Europe, however, is facing a loss of competitiveness, partly because its economies are energy intensive and therefore highly exposed to the rise in energy prices. This loss of competitiveness risks slowing these countries' economies or preventing them from reaching living standards on a par with the rest of the European Union.

The asymmetric nature of recent shocks highlights the need for EU members to coordinate fiscal policies within a common fiscal framework. Southern European countries are struggling with high levels of debt, which limits their ability to invest to transform and modernise their economies. But even countries with greater means, such as Germany, are struggling to find sufficient resources for green investments within their current fiscal frameworks.

Faced with the rapid ageing of the population, the European Union sorely needs policies that increase the supply of labour, which will enable firms to grow and to create the resources needed for the green and digital transition. The shortage of skilled staff has an ambiguous impact on investment. When investment in machinery or technology could reduce the demand for staff, it might have encouraged firms to invest. But skills shortages were also one of the main obstacles to investment, particularly when companies had difficulties finding the skilled personnel needed to install or operate the new machinery or technology. The supply of skilled labour could benefit from creating better conditions for part-time and remote work and from easing access to the labour market for non-EU immigrants.

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